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AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON JUNE 8, 2000

REGISTRATION NO. 333-33086

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SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

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AMENDMENT NO. 4 TO

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

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MARVELL TECHNOLOGY GROUP LTD.

(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

BERMUDA

(STATE OR OTHER JURISDICTION OF

INCORPORATION OR ORGANIZATION)

3674

(PRIMARY STANDARD INDUSTRIAL

CLASSIFICATION CODE NUMBER)

77-0481679

(I.R.S. EMPLOYER

IDENTIFICATION NUMBER)

RICHMOND HOUSE,

3RD FLOOR

12 PAR LA VILLE ROAD

HAMILTON, HM DX

BERMUDA

(441) 296-6395

(ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF

REGISTRANT'S PRINCIPAL EXECUTIVE OFFICES)

------------------------

THOR BUELL

GENERAL COUNSEL

MARVELL SEMICONDUCTOR, INC.

645 ALMANOR AVENUE

SUNNYVALE, CALIFORNIA 94086

(408) 222-2500

(NAME, ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE,

OF AGENT FOR SERVICE)

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COPIES TO:

|  |  |  |
| --- | --- | --- |
| KENNETH R. LAMB | JOHN L. | SAVVA |
| JOHN E. STONER | SULLIVAN & | CROMWELL |
| MICHELLE A. HODGES | 1888 CENTURY | PARK EAST |
| GIBSON, DUNN & CRUTCHER LLP | LOS ANGELES, CALIFORNIA 90067 | |
| ONE MONTGOMERY STREET | (310) 712-6600 | |
| SAN FRANCISCO, CALIFORNIA 94104 |  |  |
| (415) 393-8200 |  |  |

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APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. [ ]

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act of 1933, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ] \_\_\_\_\_\_\_\_

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act of 1933, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ] \_\_\_\_\_\_\_\_

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act of 1933, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ] \_\_\_\_\_\_\_\_

If delivery of the prospectus is expected to be made pursuant to Rule 434,

please check the following box. [ ]

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CALCULATION OF REGISTRATION FEE

* --------------------------------------------------------------------------------------------------------------------------
* --------------------------------------------------------------------------------------------------------------------------

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | PROPOSED MAXIMUM | PROPOSED MAXIMUM |  |
| TITLE OF EACH CLASS | AMOUNT TO BE | OFFERING PRICE PER | AGGREGATE | AMOUNT OF |
| OF SECURITIES TO BE REGISTERED | REGISTERED | SHARE(1) | OFFERING PRICE(1) | REGISTRATION FEE(2) |

- --------------------------------------------------------------------------------------------------------------------------

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Common Stock, $0.002 par value.... | 6,900,000 | $11.00 | $75,900,000 | $20,037.60 |

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1. Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933.
2. $19,800 previously paid.

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THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

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2

THE INFORMATION IN THIS PRELIMINARY PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THESE SECURITIES MAY NOT BE SOLD UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PRELIMINARY PROSPECTUS IS NOT AN OFFER TO SELL NOR DOES IT SEEK AN OFFER TO BUY THESE SECURITIES IN ANY JURISDICTION WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION. DATED JUNE 8, 2000.

6,000,000 Shares

LOGO

MARVELL TECHNOLOGY GROUP LTD.

Common Stock

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This is an initial public offering of shares of common stock of Marvell Technology Group Ltd. All of the 6,000,000 shares of common stock are being sold by Marvell.

Prior to this offering, there has been no public market for the common stock. Marvell estimates that the initial public offering price per share will be between $9.00 and $11.00. Marvell's common stock has been approved for quotation on the Nasdaq National Market under the symbol "MRVL".

See "Risk Factors" beginning on page 7 to read about factors you should consider before buying shares of the common stock.

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NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY OTHER REGULATORY BODY HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

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Per Share

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Total

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Initial public offering price...............................

Underwriting discount.......................................

Proceeds, before expenses, to Marvell.......................

$

$

$

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$

$

To the extent that the underwriters sell more than 6,000,000 shares of common stock, the underwriters have the option to purchase up to an additional 900,000 shares from Marvell at the initial public offering price less the underwriting discount.

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The underwriters expect to deliver the shares against payment in New York,

New York on , 2000.

GOLDMAN, SACHS & CO.

LEHMAN BROTHERS

J.P. MORGAN & CO.

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Prospectus dated June 8, 2000.

3

Inside Front Cover:

The inside front cover contains graphics. The upper third of the page contains the following words in white letters on dark blue background: "SILICON SOLUTIONS FOR BROADBAND COMMUNICATIONS." Under the caption is a picture of one of our integrated circuits containing the Marvell logo set on a blue background of blurred, digital data, i.e., 1's and 0's. Down and to the left of the picture is a black Marvell logo with the name "MARVELL" underneath in red type. Down and to the right of the picture is the Marvell trademark "MOVING FORWARD FASTER." The words "MOVING FORWARD" are set in black type, and the word "FASTER" is set in red type. The word "FASTER" is slightly larger than the other words in the trademark.

Front Cover Gatefold

The inside front cover gatefold contains two pages of graphics. The top 1/10th of the two pages contains the following words in white letters on dark blue background: "A BROAD PERSPECTIVE ON APPLICATIONS FOR OUR TECHNOLOGY." On the right hand side of the gatefold, beginning underneath the dark blue background, is a graphic depicting an analog signal transitioning to blurred digital data, i.e., 1's and 0's. The transition is represented by a red elliptical line. Under the graphic are the words "Marvell designs, develops and markets integrated circuits that provide critical communication functions in high performance data storage and data communications equipment." Under the words is a picture of one of our integrated circuits containing the Marvell logo. To the left of the words and the analog-to-digital graphic is a graphic depicting applications and potential future applications of our technology. In the upper left corner of the graphic is a legend containing four boxes. The first box is blue. Next to the blue box is the phrase "Current Applications." Immediately under the blue box is a smaller white box with a "C" in the center of the box. Next to this box is the phrase "Equipment incorporating recently introduced data communications integrated circuits." Immediately under that box is a white box of the same size with an "S" in the center. Next to this box is the phrase "Equipment incorporating currently shipping data storage integrated circuits." Immediately under this box is a beige box the same size as the first box. Next to the beige box is the phrase "Potential Future Applications for our data communications integrated circuits." The graphics depicting applications are joined by heavy gray lines, depicting communication media, containing digital data, i.e., 0's and 1's. Starting from the left side of the gatefold, the first graphic is a blue depiction of a storage area network switch with the words "Storage Area Network (SAN) Switch and to the right of the words, a white box with a "C" in the center." Immediately under the SAN switch graphic, connected by a gray line, is a blue graphic from left to right depicting a redundant array of independent drives. Underneath the graphic from left to right is the phrase "Redundant Array of Independent Disks," the acronym "RAID and a white box with a "C" in the center." To the right of the graphic depicting the SAN switch, connected by a gray line, is a blue graphic depicting a local area network switch. Under the graphic is the phrase "Local Area Network (LAN) Switch and to the right of the phrase a white box with a "C" in the center." Down and slightly to the left of the graphic depicting the LAN Switch, connected by a gray line, is a blue graphic depicting a router. Under the graphic is the word "Router" and to the right of the word, a white box with a "C" in the center." To the right of the graphic depicting the router, connected by a gray line, is a graphic depicting a beige cable head. Over the graphic are the words "Cable Head." Under the cable head graphic is a beige graphic depicting a home. The home graphic is connected to the cable head graphic by a gray line. To the right of the home are the stacked words "Cable Modem," "Web Based Television Storage" and "Wireless Network." To the right of the LAN switch graphic, connected by a gray line, is a blue graphic depicting a work group switch. Under the graphic are the words "Work Group Switch and to the right of the words, a white box with a "C" in the center." Under the work group switch graphic, connected by a gray line, is a blue graphic depicting a partially open laptop computer. Under the graphic are the words "Laptop" a white box with a "C" in the center and a white box with a "S" in the center. Above the work group switch graphic, connected by a gray line, is a blue graphic depicting a small office/home office switch. Above the graphic are the words "Small Office/Home Office (SoHo) and a white box with a "C" in the center." To the right of the SoHo switch, connected by a gray line, is a blue graphic depicting a work station personal computer. Over the graphic are the words "Work Station," a white box with a "C" in the center and a white box with a "S" in the center. To the right of the work station PC graphic, connected by the same gray line, is a blue graphic depicting a desktop personal computer. Above the graphic is the word "Desktop," a white box with a "C" in the center and a white box with a "S" in the center. Down and to the right of the work group switch graphic, connected by a gray line, is a beige graphic depicting a wireless hub. Under the graphic are the words "Wireless Hub." Down and to the right of the wireless hub graphic is an open laptop computer, connected to the wireless hub by concentric semi-circles depicting wireless communication. To the right of the laptop computer are the stacked words "Laptop" and "Wireless connectivity." To the right of the work group switch graphic, connected by a gray line, is a blue graphic depicting an enterprise server. Under the graphic from left to right are the words "Enterprise Server," a white box with a "C" in the center and a white box with a "S" in the center. Underneath the entire applications graphic is a blue line. Under the blue line are four headings: "High Performance Storage," "High Speed Networking," "Wireless Networking" and "Cable Modem." Under the heading "High Performance Storage," in black letters, is the following text: "Our integrated circuits for data storage applications allow enterprises and consumers to reliably store, transmit and rapidly access large volumes of data." Under the heading "High Speed Networking," in black letters, is the following text: "Our integrated

circuits enable networking devices for high speed data communications throughout the home and business enterprise. Under the heading "Wireless Networking," in black letters, is the following text: "Our core technologies can be applied to the wireless networking market. We are developing products to enable high bandwidth data communication over wireless networks. Under the heading "Cable Modem," in black letters, is the following text: "Our core technologies can be applied to the cable modem market. We are developing products to connect personal computers to cable networks and the Internet at much faster speeds than possible through today's analog modems." On the lower left side of the gatefold is a black Marvell logo with the name "MARVELL" underneath in orange type. On the lower right side of the gatefold is the Marvell trademark "MOVING FORWARD FASTER." The words "MOVING FORWARD" are set in black type and the word "FASTER" is set in orange type. The word "FASTER" is slightly larger than the other words in the trademark.

4

PROSPECTUS SUMMARY

The following summary highlights information found in greater detail elsewhere in this prospectus. It may not contain all of the information that is important to you. You should read the entire prospectus, including "Risk Factors" and the financial statements and notes to those statements, before you decide to buy our common stock. Except as otherwise noted, all information in this prospectus gives effect to the conversion of all outstanding shares of preferred stock, and assumes no exercise of the underwriters' option to purchase additional shares of common stock in the offering. The share information in this prospectus reflects the approval by our shareholders on March 17, 2000 of two common stock dividends in which, in each case, our shareholders received an additional share of our common stock for each share held by them.

OUR BUSINESS

We design, develop and market integrated circuits for communications-related markets. Our products provide the critical interface between real world, analog signals and the digital information used in computing and communications systems. Our products enable our customers to store and transmit digital information reliably and at high speeds. We initially focused our core technology on the data storage market, where we provide high performance products to Seagate, Samsung, Hitachi, Fujitsu and Toshiba, who as a group accounted for 99% of our sales in fiscal 1999, 98% of our sales in fiscal 2000 and 97% of our sales in the first quarter of fiscal 2001. Recently, we applied our technology to the high speed, or broadband, data communications market by introducing products that are used in network access equipment to provide the interface between communications systems and data transmission media. We believe that our core technology can be used to improve performance across a wide range of data communications applications. For example, we are actively developing products for the Gigabit Ethernet, a networking protocol, or format, for connecting devices at data rates of 1,000 megabits per second. In addition, we are committing resources to the development of products for the wireless communications and cable modem markets. For the fiscal year ended January 31, 2000, we generated $81.4 million in net revenue and $13.1 million in net income. For the quarter ended April 30, 2000, we generated $29.7 million in net revenue and $2.1 million in net income.

The advent of new, data-intensive computing and communications applications is driving business and consumer demand for broadband access to large volumes of information in multiple forms, including voice, video and data. Data storage and communications systems providers must consistently introduce higher capacity and higher performance equipment to satisfy this demand. Often the new equipment must operate using existing communications infrastructures that were not designed to support the desired levels of performance. These challenges are creating the need for a new generation of integrated circuit solutions capable of reliably supporting higher data transmission rates over existing media infrastructures.

Our products enable our customers to introduce high performance data storage and broadband data communications products rapidly and at competitive prices. Our products consist of proprietary integrated circuits incorporating custom digital signal processing algorithms, which are formulas that permit the mathematical manipulation of digital data converted from analog form. Our products are designed for the complementary metal oxide semiconductor, or CMOS, manufacturing process. CMOS provides numerous benefits over other manufacturing processes, including lower manufacturing costs, faster time to market and greater worldwide foundry capacity. Based on conversations with our customers concerning product performance, we believe we have achieved a level of integrated circuit performance in CMOS that has typically only been achieved with more expensive, less widely available, fabrication techniques.

3

5

The following are key elements of our strategy:

* Expand our market position by developing new signal processing technologies for broadband data communications-related applications and by continuing to invest in research and development;
* Leverage our core technology in the broadband data communications market by introducing advanced products, including Gigabit Ethernet products;
* Extend our leadership position in the high performance and portable computing segments of the data storage market by continuing to introduce advanced products for these market segments and further penetrate the general purpose personal computer segment by developing cost-effective solutions for that market segment;
* Strengthen and expand our relationships with current and potential customers by customizing products to meet their specific needs and by jointly developing highly integrated products; and
* Use independent manufacturers to fabricate our integrated circuits using CMOS, thereby decreasing time to market and cost while foregoing the necessity for a major investment in manufacturing capacity.

OUR CORPORATE INFORMATION

We incorporated in Bermuda on January 11, 1995. Our registered address in Bermuda is Richmond House, 3rd Floor, 12 Par la Ville Road, Hamilton, HM DX Bermuda, and our telephone number there is (441) 296-6395. The address of our principal location in the United States is Marvell Semiconductor, Inc., 645 Almanor Avenue, Sunnyvale, California, 94086, and our telephone number there is (408) 222-2500. We also have offices in Singapore and Japan.

The Marvell name, logo, and the phrase "Moving Forward Faster" are our trademarks. We have applied for federal registration of these trademarks. All other trademarks or trade names appearing elsewhere in this prospectus are the property of their respective owners.

Information contained on our website is not intended to be part of this prospectus.

THE PERMISSION OF THE BERMUDA MONETARY AUTHORITY MUST BE OBTAINED FOR THE ISSUANCE OF THE COMMON STOCK IN THIS OFFERING. THE PROSPECTUS MUST ALSO BE FILED WITH THE REGISTRAR OF COMPANIES IN BERMUDA. IN GRANTING SUCH PERMISSION AND IN ACCEPTING THIS PROSPECTUS FOR FILING, THE BERMUDA MONETARY AUTHORITY AND THE REGISTRAR OF COMPANIES IN BERMUDA WILL ACCEPT NO RESPONSIBILITY FOR THE FINANCIAL SOUNDNESS OF ANY PROPOSAL OR FOR THE CORRECTNESS OF ANY OF THE STATEMENTS MADE OR OPINIONS EXPRESSED WITH REGARD TO THEM. THE WITHHOLDING OF PERMISSION BY THE BERMUDA MONETARY AUTHORITY WOULD RESULT IN OUR INABILITY TO COMPLETE THE SALE OF COMMON STOCK AS CONTEMPLATED IN THIS PROSPECTUS.

4

6

THE OFFERING

Shares offered......................

6,000,000 shares

Shares to be outstanding after this offering............................

82,211,425 shares

Use of proceeds.....................

General corporate purposes, including working capital, capital expenditures and potential acquisitions of, or investments in, complementary businesses, technologies or services.

Nasdaq National Market Symbol.......

"MRVL"

The information in the above table is based on shares of common stock outstanding as of June 6, 2000. The number of shares of common stock outstanding set forth in the table above excludes the following:

* 180,000 shares issuable upon the exercise of a warrant to purchase common stock that at the closing of this offering will be issued to replace a warrant to purchase 45,000 shares of Series D preferred stock;
* 60,000 shares issuable upon the exercise of an outstanding warrant to purchase common stock;
* 275,408 shares issuable upon the automatic conversion of Series D preferred stock that we expect to issue upon the exercise of warrants that would otherwise expire upon the closing of this offering;
* 11,492,809 shares issuable upon the exercise of outstanding stock options, at a weighted average exercise price of $1.27 per share, granted through April 30, 2000;
* 5,225,270 shares available at April 30, 2000 for future issuance under our 1995 Stock Option Plan and 1997 Directors' Stock Option Plan; and
* 2,790,500 shares issuable upon the exercise of outstanding stock options, at a weighted average exercise price of $10.00 per share, granted subsequent to April 30, 2000 and through June 6, 2000.

5

7

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SUMMARY CONSOLIDATED FINANCIAL DATA | | | | | | |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | THREE MONTHS ENDED | | | |
|  |  |  |  | YEAR ENDED JANUARY 31, | | | | |  |  |  | APRIL 30, | | |
|  | ----------------------------------------------- | |  |  |  |  |  |  |  |  | ------------------- | | | |
|  |  | 1996 |  | 1997 |  | 1998 |  | 1999 |  | 2000 |  | 1999 |  | 2000 |
|  | ------- | | ------- | | ------- | | ------- | | ------- | | -------- | | -------- | |
|  |  |  |  | (IN THOUSANDS, EXCEPT PER SHARE AMOUNTS) | | | | | | | | |  |  |
| CONSOLIDATED STATEMENTS OF |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| OPERATIONS DATA: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net revenue................ | $ | 210 | $ | 190 | $ | 625 | $ | 21,253 | $ | 81,375 | $ | 14,056 | $ | 29,664 |
| Gross profit............... |  | 210 |  | 190 |  | 313 |  | 11,150 |  | 47,602 |  | 7,861 |  | 16,484 |
| Operating income (loss).... |  | (374) |  | (2,246) |  | (7,404) |  | (550) |  | 17,096 |  | 2,747 |  | 2,517 |
| Net income (loss).......... | $ | (355) | $ | (2,153) | $ | (7,444) | $ | (959) | $ | 13,070 | $ | 2,078 | $ | 2,068 |
| Basic net income (loss) per |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| share.................... | $ | (0.02) | $ | (0.08) | $ | (0.24) | $ | (0.03) | $ | 0.32 | $ | 0.06 | $ | 0.04 |
| Diluted net income (loss) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| per share................ | $ | (0.02) | $ | (0.08) | $ | (0.24) | $ | (0.03) | $ | 0.16 | $ | 0.03 | $ | 0.02 |
| Shares used in computing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| basic net income (loss) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| per share................ |  | 20,738 |  | 25,593 |  | 30,436 |  | 32,470 |  | 41,094 |  | 37,135 |  | 46,493 |
| Shares used in computing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| diluted net income (loss) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| per share................ |  | 20,738 |  | 25,593 |  | 30,436 |  | 32,470 |  | 81,545 |  | 78,538 |  | 84,796 |

The pro forma column in the consolidated balance sheet data reflects the automatic conversion of all shares of preferred stock into common stock upon the closing of this offering. The pro forma as adjusted column in the consolidated balance sheet data reflects this conversion and the receipt of the net proceeds from the sale of shares of common stock offered by us at an assumed initial public offering price of $10.00 per share, after deducting an assumed underwriting discount and estimated offering expenses payable by us.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | APRIL 30, 2000 |  |
|  | ---------------------------------------- | | |
|  |  |  | PRO FORMA |
|  |  |  | AS |
|  | ACTUAL | PRO FORMA | ADJUSTED |
|  | ------- | ---------------- | --------- |
|  |  | (IN THOUSANDS) |  |
| CONSOLIDATED BALANCE SHEET DATA: |  |  |  |
| Cash and cash equivalents............................ | $15,703 | $15,703 | $ 69,978 |
| Restricted cash...................................... | 3,022 | 3,022 | 3,022 |
| Working capital...................................... | 26,433 | 26,433 | 80,708 |
| Total assets......................................... | 57,542 | 57,542 | 111,817 |
| Capital lease obligations, less current portion...... | 26 | 26 | 26 |
| Mandatorily redeemable convertible preferred stock... | 22,451 | -- | -- |
| Total shareholders' equity........................... | 13,578 | 36,029 | 90,304 |
| 6 |  |  |  |

8

RISK FACTORS

You should carefully consider these risk factors, together with all of the other information included in this prospectus, before you decide to purchase shares of our common stock. Investing in our common stock involves a high degree of risk. If any of the following risks actually occurs, our business could be seriously harmed and the trading price of our common stock could decline. In those circumstances, you may lose part or all of your investment.

RISKS RELATED TO OUR BUSINESS

WE HAVE ONLY RECENTLY BEGUN OFFERING FOR SALE OUR FIRST DATA COMMUNICATIONS PRODUCT. OUR FUTURE SUCCESS IS DEPENDENT ON OUR ABILITY TO ACHIEVE RAPID AND WIDESPREAD MARKET ACCEPTANCE FOR THIS PRODUCT AND OTHER DATA COMMUNICATIONS PRODUCTS WE DEVELOP AND OFFER FOR SALE.

Prior to March 2000, all of our products were sold for use in data storage devices, a market where we expect our rate of sales growth to slow considerably in fiscal 2001 and going forward. In March 2000, we shipped and generated revenue from our first high speed, or broadband, data communications product, an Ethernet product for Fast Ethernet applications, and we began customer sampling of a second Fast Ethernet product. Ethernet is the predominant networking protocol, or format, for connecting devices at data rates of 10, 100 and 1,000 megabits per second. Ethernet connecting devices at data rates of 100 megabits per second are known as Fast Ethernet, and Ethernet connecting devices at data rates of 1,000 megabits per second are known as Gigabit Ethernet. We are developing other broadband data communications products, including a Gigabit Ethernet product for use with copper twisted pair wiring, a type of wiring widely used in today's large business, or high performance, networks. We have a limited history in developing, marketing and selling our products in the broadband data communications market. Even if we successfully develop and manufacture products for this market, they may not achieve market acceptance in the near term or at all. If our Fast Ethernet products or other broadband data communications products do not achieve rapid and widespread market acceptance, our growth prospects could be seriously harmed.

WE HAVE DEPENDED ON SALES OF OUR READ CHANNEL AND PREAMPLIFIER PRODUCTS FOR SUBSTANTIALLY ALL OF OUR REVENUE TO DATE, AND SIGNIFICANT REDUCTIONS IN ORDERS FOR THESE PRODUCTS, OR THE DATA STORAGE DEVICES INTO WHICH SUCH PRODUCTS ARE INCORPORATED, WOULD SIGNIFICANTLY REDUCE OUR REVENUES.

Substantially all of our revenue to date has been derived from sales of our read channel and preamplifier products. A read channel transmits and receives the analog data that is stored on a magnetic disk and converts it to and from digital data for use in computing systems. A preamplifier amplifies the low level electrical signal transmitted to and from the recording mechanisms in a disk drive device. In fiscal 1999 and 2000, we experienced rapid growth in sales of our data storage products and anticipate our rate of sales growth for these products will slow considerably in 2001 and going forward. Unless we are able to diversify our sales through the introduction of new products, we will continue to be dependent on sales of our read channel and preamplifer products. Our read channel and preamplifier products are incorporated into data storage devices by our customers primarily for sale to the personal computer and computer server markets. Any reduction in the demand for data storage devices that incorporate our products would likely result in reduced demand for our products and would harm our sales. The data storage market is rapidly evolving and is subject to substantial fluctuation. For example, the data storage market may be affected by:

* shifts in market share among data storage device manufacturers, driven by technological advances, price reductions, the level of end-user satisfaction with the data storage devices and the level of support provided to the end-users; and

7

9

* fluctuations in the market for computing devices and products containing data storage devices.

WE HAVE ONLY RECENTLY COMPLETED INITIAL TESTS AND COMMENCED CUSTOMER SAMPLING OF OUR GIGABIT ETHERNET PHYSICAL LAYER DEVICE. IF WE IDENTIFY SIGNIFICANT DEFECTS OR PROBLEMS WITH THE DEVICE THAT WE CANNOT CORRECT IN A TIMELY MANNER, WE MAY BE UNABLE TO ACHIEVE SALES OF OUR DEVICE IN COMMERCIAL QUANTITIES, OUR ABILITY TO INCREASE OUR REVENUES MAY BE HARMED AND OUR REPUTATION MAY SUFFER.

We have only recently completed initial tests and have begun customer sampling of our newest product for the broadband communications market, a Gigabit Ethernet physical layer device. Based on our initial tests, to date we have identified only minor problems with the logic circuit of the device. We are currently implementing a design revision of the device to address these problems. However, our Gigabit Ethernet physical layer device is a very complex device that can only be fully tested over an extended period of time and through use in a wide variety of operating conditions. Some of our competitors have experienced significant defects and problems when they first introduced their Gigabit Ethernet devices, in part due to the inherent complexity of transmitting and receiving data at the rate of one billion bits per second. Further tests that we or our customers conduct could reveal other defects or problems with the device. In addition, the design modifications that we intend to make may not successfully address the problems that we have identified. If we fail to correct the problems we have identified to date or if we identify other defects and problems, we may have to devote significant personnel and financial resources to correct them. Moreover, we cannot be sure that we will be successful in correcting any defects or problems that are identified on a timely basis or at all. Defects or problems with our Gigabit Ethernet physical layer device could harm our reputation, prevent us from making sales of the device in commercial quantities and limit our ability to increase our revenues.

WE DEPEND ON A SMALL NUMBER OF LARGE CUSTOMERS FOR A SUBSTANTIAL MAJORITY OF OUR SALES. THE LOSS OF, OR A SIGNIFICANT REDUCTION OR CANCELLATION IN SALES TO, ANY KEY CUSTOMER WOULD SERIOUSLY HARM OUR ABILITY TO GROW AND BE PROFITABLE.

In fiscal 2000, our five largest customers accounted for approximately 98% of our sales. Of these customers, Samsung accounted for 36%, Seagate for 24%, Hitachi for 14%, Fujitsu for 14% and Toshiba for 10%. In the first quarter of fiscal 2001 these same customers accounted for approximately 97% of our sales. Of these customers, Samsung accounted for 45%, Hitachi for 20%, Seagate for 16%, Fujitsu for 12% and Toshiba for 4%. Sales to these large customers have fluctuated significantly from period-to-period, primarily due to the timing and number of design wins with each customer, and will likely continue to fluctuate dramatically in the future. The loss of any of our largest customers, or a significant reduction in sales we make to them, or any problems we encounter collecting amounts they owe us, would likely seriously harm our results of operations and financial condition. Our operating results in the foreseeable future will continue to depend on sales to a relatively small number of customers, as well as the ability of these customers to sell products that incorporate our products. In the future, these customers may decide not to purchase our products at all, to purchase fewer products than they did in the past, or to alter their purchasing patterns, particularly because:

* we do not have any long-term purchase arrangements or contracts with these or any of our other customers or exclusive arrangements with any customers;
* substantially all of our sales are made on a purchase order basis, which permits our customers to cancel, change or delay product purchase commitments with little or no notice to us and without penalty; and
* our customers purchase integrated circuits from our competitors.

8

10

Our customers may also discontinue sales in the markets for which they purchase our products. For example, in fiscal 1999 two of our major customers in fiscal 1998 discontinued sales in the disk drive market, which led to a shift in the composition of our major customers.

IF WE ARE UNABLE TO DEVELOP NEW AND ENHANCED PRODUCTS THAT ACHIEVE MARKET ACCEPTANCE IN A TIMELY MANNER, OUR OPERATING RESULTS AND COMPETITIVE POSITION WILL BE HARMED.

Our future success will depend on our ability, in a timely and cost effective manner, to develop new products for the broadband data communications markets and to introduce product enhancements to our read channel and preamplifier products. We must also achieve market acceptance for these products and enhancements. If we do not successfully develop and achieve market acceptance for new and enhanced products, our ability to maintain or increase revenues will suffer. The development of our products is highly complex. We occasionally have experienced delays in completing the development and introduction of new products and product enhancements, and we could experience delays in the future. In particular, we have a limited history in developing products for the broadband data communications market and may encounter technical difficulties in developing Gigabit Ethernet or other products for this market that could prevent or delay the successful introduction of these products. Unanticipated problems in developing broadband data communications products could also require the diversion of substantial engineering resources, which may impair our ability to develop new products for the data storage market, and could substantially increase our costs. Even if the new and enhanced products are introduced to the market, we may not be able to achieve market acceptance of these products in a timely manner.

Successful product development and market acceptance of our products depends on a number of factors, including:

* timely and cost-effective completion and introduction of new product designs;
* adoption of our products by customers that are among the first to adopt new technologies and by customers perceived to be market leaders;
* timely qualification and certification of our products for use in our customers' products;
* the level of acceptance of our products by existing and potential customers;
* cost and availability of foundry, assembly and testing capacity;
* availability, price, performance, power use and size of our products and competing products and technologies;
* our customer service and support capabilities and responsiveness;
* successful development of our relationships with existing and potential customers and strategic partners; and
* our ability to predict and respond to changes in technology, industry standards or end-user preferences.

WE ARE A RELATIVELY SMALL COMPANY WITH LIMITED RESOURCES COMPARED TO SOME OF OUR CURRENT AND POTENTIAL COMPETITORS, AND WE MAY NOT BE ABLE TO COMPETE EFFECTIVELY AND INCREASE OR MAINTAIN REVENUES AND MARKET SHARE.

We may not be able to compete successfully against current or potential competitors. If we do not compete successfully, our market share and revenues may not increase or may decline. In addition, some of our current and potential competitors have longer operating histories, significantly greater resources and name recognition and a larger base of customers than we have. As a result, these competitors may have greater credibility with our existing and potential customers. Moreover, our competitors may foresee the course of market developments more accurately than we do. They also may be able to adopt more aggressive pricing policies and devote greater resources to the

9

11

development, promotion and sale of their products than we can to ours, which would allow them to respond more quickly than us to new or emerging technologies or changes in customer requirements. In addition, new competitors or alliances among existing competitors could emerge. We expect to face competition in the future from our current competitors, other manufacturers and designers of integrated circuits, and innovative start-up integrated circuit design companies. Many of our customers are also large, established integrated circuit suppliers. Our sales to and support of such customers may enable them to become a source of competition to us, despite our effort to protect our intellectual property rights.

As we begin to enter the broadband data communications market, we face competition from a number of additional competitors who have a long history of serving that market. Many of these competitors have established reputations in that market and long-standing relationships with the customers to whom we intend to sell our products that could prevent us from competing successfully.

Competition could increase pressure on us to lower our prices and lower our margins.

DUE TO OUR LIMITED OPERATING HISTORY, WE MAY HAVE DIFFICULTY IN ACCURATELY PREDICTING OUR FUTURE SALES AND APPROPRIATELY BUDGETING FOR OUR EXPENSES, AND WE MAY NOT BE ABLE TO MAINTAIN OUR EXISTING GROWTH RATE.

We were incorporated in 1995, did not begin generating any meaningful sales until June 1998 and did not become profitable on an annual basis until fiscal 2000. This limited operating experience, combined with the rapidly changing nature of the markets in which we sell our products, limits our ability to accurately forecast quarterly or annual sales. Additionally, because many of our expenses are fixed in the short term or incurred in advance of anticipated sales, we may not be able to decrease our expenses in a timely manner to offset any shortfall of sales. For example, in the last quarter of fiscal 1999 we failed to achieve budgeted revenues, due to slower than anticipated design wins for our products. We are currently expanding our staffing and increasing our expense levels in anticipation of future sales growth. If our sales do not increase as anticipated, significant losses could result due to our higher expense levels.

Although we have experienced sales and earnings growth in prior quarterly and annual periods, we may not be able to sustain these growth rates. Accordingly, you should not rely on the results of any prior quarterly or annual periods as an indication of our future performance.

BECAUSE WE DO NOT HAVE LONG-TERM COMMITMENTS FROM OUR CUSTOMERS, WE MUST ESTIMATE CUSTOMER DEMAND, AND ERRORS IN OUR ESTIMATES CAN HAVE NEGATIVE EFFECTS ON OUR INVENTORY LEVELS AND SALES.

Our sales are made on the basis of individual purchase orders rather than long-term purchase commitments. In addition, our customers may cancel or defer purchase orders. We have historically placed firm orders for products with our suppliers up to 16 weeks prior to the anticipated delivery date and typically prior to receiving an order for the product. Therefore our order volumes are based on our forecasts of demand from our customers. This process requires us to make multiple demand forecast assumptions, each of which may introduce error into our estimates. If we overestimate customer demand, we may allocate resources to manufacturing products that we may not be able to sell when we expect or at all. As a result, we would have excess inventory, which would harm our financial results. Conversely, if we underestimate customer demand or if insufficient manufacturing capacity is available, we would forego revenue opportunities, lose market share and damage our customer relationships. On occasion, we have been unable to adequately respond to unexpected increases in customer purchase orders, and therefore, were unable to benefit from this increased demand.

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12

WE RELY ON INDEPENDENT FOUNDRIES AND SUBCONTRACTORS FOR THE MANUFACTURE, ASSEMBLY AND TESTING OF OUR INTEGRATED CIRCUIT PRODUCTS, AND THE FAILURE OF ANY OF THESE THIRD-PARTY VENDORS TO DELIVER PRODUCTS OR OTHERWISE PERFORM AS REQUESTED COULD DAMAGE OUR RELATIONSHIPS WITH OUR CUSTOMERS AND DECREASE OUR SALES AND LIMIT OUR GROWTH.

We do not have our own manufacturing, assembly or testing facilities. Therefore, we must rely on third-party vendors to manufacture, assemble and test the products we design. We currently rely on Taiwan Semiconductor Manufacturing Company to produce substantially all of our integrated circuit products. We also currently rely on third-party assembly and test subcontractors to assemble, package and test our products. If these vendors do not provide us with high quality products and services in a timely manner, or if one or more of these vendors terminates their relationship with us, we may be unable to obtain satisfactory replacements to fulfill customer orders on a timely basis, our relationships with our customers could suffer, our sales could decrease and our growth could be limited. Other significant risks associated with relying on these third-party vendors include:

* our customers or their end customers may fail to approve or delay in approving our selected supplier;
* we have reduced control over product cost, delivery schedules and product quality;
* the warranties on wafers or products supplied to us are limited; and
* we face increased exposure to potential misappropriation of our intellectual property.

We currently do not have long-term supply contracts with any of our third-party vendors. They therefore are not obligated to perform services or supply products to us for any specific period, in any specific quantities, or at any specific price, except as may be provided in a particular purchase order. None of our third-party foundry or assembly and test subcontractors has provided contractual assurances to us that adequate capacity will be available to us to meet future demand for our products. These foundries may allocate capacity to the production of other companies' products while reducing deliveries to us on short notice. In particular, foundry customers that are larger and better financed than we are or that have long-term agreements with these foundries may cause these foundries to reallocate capacity to those customers, decreasing the capacity available to us. If we need another integrated circuit foundry or assembly and test contractor because of increased demand or the inability to obtain timely and adequate deliveries from our providers at the time, we might not be able to develop relationships with other vendors who are able to satisfy our requirements. Even if other integrated circuit foundries or assembly and test contractors are available at that time to satisfy our requirements, it would likely take several months to acquire a new provider. Such a change may also require the approval of our customers, which would take time to effect and could cause our customers to cancel orders or fail to place new orders.

IF OUR FOUNDRIES DO NOT ACHIEVE SATISFACTORY YIELDS OR QUALITY, OUR RELATIONSHIPS WITH OUR CUSTOMERS AND OUR REPUTATION WILL BE HARMED.

The fabrication of integrated circuits is a complex and technically demanding process. Our foundries have from time to time experienced manufacturing defects and reduced manufacturing yields. In the fourth quarter of fiscal 2000, we experienced low yields in the production of our newly introduced read channel product, which decreased our gross profits for the quarter. Changes in manufacturing processes or the inadvertent use of defective or contaminated materials by our foundries could result in lower than anticipated manufacturing yields or unacceptable performance. Many of these problems are difficult to detect at an early stage of the manufacturing process and may be time consuming and expensive to correct. Poor yields from our foundries, or defects, integration issues or other performance problems in our products could cause significant customer relations and business reputation problems, harm our financial results and result in financial or other damages to our customers. Our customers could also seek damages from us for their losses. A product liability claim brought against us, even if unsuccessful, would likely be time consuming and costly to defend.

11

13

In addition, defects in our existing or new products could result in significant warranty, support and repair costs, and divert the attention of our engineering personnel from our product development efforts.

BECAUSE FOUNDRY CAPACITY IS LIMITED, WE MAY TAKE VARIOUS ACTIONS TO TRY TO SECURE CAPACITY, WHICH MAY BE COSTLY AND HARM OUR OPERATING RESULTS.

Foundry capacity is limited and competition for capacity is increasing. In order to secure foundry capacity as competition increases, we may enter into various arrangements with suppliers that could be costly and harm our operating results. This year, as we have increased our orders with Taiwan Semiconductor Manufacturing Company, Taiwan Semiconductor has tightened its credit policy applicable to us by determining whether our credit limit has been reached when we place orders, rather than when it begins production of our orders. This action required us to obtain additional credit facilities, which reduces our financial flexibility. As competition for foundry space increases, additional arrangements may be required, including:

* option payments or other prepayments to a foundry;
* nonrefundable deposits with or loans to foundries in exchange for capacity commitments;
* contracts that commit us to purchase specified quantities of integrated circuits over extended periods;
* issuance of our equity securities to a foundry;
* investment in a foundry;
* joint ventures; and
* other partnership relationships with foundries.

We may not be able to make any such arrangement in a timely fashion or at all, and any arrangements may be costly, reduce our financial flexibility, and not be on terms favorable to us. Moreover, if we are able to secure foundry capacity, we may be obligated to use all of that capacity or incur penalties. These penalties may be expensive and could harm our financial results.

WE DEPEND ON KEY PERSONNEL WITH WHOM WE DO NOT HAVE EMPLOYMENT AGREEMENTS TO MANAGE OUR BUSINESS IN A RAPIDLY CHANGING MARKET, AND IF WE ARE UNABLE TO RETAIN OUR CURRENT PERSONNEL AND HIRE ADDITIONAL PERSONNEL, OUR ABILITY TO DEVELOP AND SUCCESSFULLY MARKET OUR PRODUCTS COULD BE HARMED.

We believe our future success will depend in large part upon our ability to attract, integrate and retain highly skilled managerial, engineering and sales and marketing personnel. The loss of any key employees or the inability to attract or retain qualified personnel, including engineers and sales and marketing personnel, could delay the development and introduction of, and harm our ability to sell, our products. Due to the relatively early stage of our company's business, we believe that our future success is highly dependent on the contributions of Sehat Sutardja, our co-founder, President and Chief Executive Officer, Pantas Sutardja, our co-founder and Vice-President, and Chief Technology Officer of Marvell Semiconductor, and Weili Dai, our co-founder and Executive Vice President, and General Manager of Data Communications Group of Marvell Semiconductor. We do not have employment contracts with these or any other key personnel, and their knowledge of the business and industry would be extremely difficult to replace.

There is currently a shortage of qualified technical personnel with significant experience in the design, development, manufacture, marketing and sales of integrated circuits for use in communications products. In particular, there is a shortage of engineers who are familiar with the intricacies of the design and manufacture of products based on analog technology, and competition for these engineers is intense. Our key technical personnel represent a significant asset and serve as

12

14

the source of our technological and product innovations. We may not be successful in attracting, integrating and retaining sufficient numbers of technical personnel to support our anticipated growth.

OUR RAPID GROWTH HAS STRAINED OUR RESOURCES AND OUR INABILITY TO MANAGE ANY FUTURE GROWTH COULD HARM OUR PROFITABILITY.

During the past year, we have significantly increased the scope of our operations and expanded our workforce from 101 employees at January 31, 1999 to 274 employees at May 31, 2000. This growth has placed, and any future growth of our operations will continue to place, a significant strain on our management personnel, systems and resources. We anticipate that we will need to implement a variety of new and upgraded operational and financial systems, procedures and controls, including the improvement of our accounting and other internal management systems. We also expect that we will need to continue to expand, train, manage and motivate our workforce. All of these endeavors will require substantial management effort. If we are unable to effectively manage our expanding operations, our profitability could be harmed.

As a result of this growth, we believe that our current facilities will be inadequate to meet our requirements past 2000. We expect we will need to locate additional space in California, and may find it necessary to vacate our current locations. If we relocate, we may have to pay rent on two leases for a period of time. Because of the competition for space in the area of California in which we are located, additional space may cost substantially more than our existing facilities. We may also incur significant additional capital expenditures for construction of tenant improvements. These relocations could also result in temporary disruptions of our operations and diversion of management's attention and resources.

WE FACE FOREIGN BUSINESS, POLITICAL AND ECONOMIC RISKS, WHICH MAY HARM OUR RESULTS OF OPERATIONS, BECAUSE A MAJORITY OF OUR PRODUCTS AND OUR CUSTOMERS' PRODUCTS ARE MANUFACTURED AND SOLD OUTSIDE OF THE UNITED STATES.

A substantial portion of our business is conducted outside of the United States and as a result, we are subject to foreign business, political and economic risks. All of our products are manufactured outside of the United States. Our current qualified integrated circuit foundries are located in the same region within Taiwan, and our primary assembly and test subcontractors are located in the Pacific Rim region. In addition, many of our customers are located outside of the United States, primarily concentrated in Singapore, Korea, the Philippines and Japan, which further exposes us to foreign risks. Sales outside of the United States accounted for 99% of our revenues in fiscal 1999 and fiscal 2000. We anticipate that our manufacturing, assembly, testing and sales outside of the United States will continue to account for a substantial portion of our operations and revenue in future periods. Accordingly, we are subject to international risks, including:

* difficulties in obtaining governmental approvals and permits and complying with foreign laws;
* difficulties in staffing and managing foreign operations;
* trade restrictions or higher tariffs;
* transportation delays;
* difficulties of managing distributors;
* political and economic instability; and
* inadequate local infrastructure.

Because sales of our products have been denominated to date exclusively in United States dollars, increases in the value of the United States dollar will increase the price of our products so that they become relatively more expensive to customers in the local currency of a particular country, potentially leading to a reduction in sales and profitability for us in that country. A portion of our

13

15

international revenue may be denominated in foreign currencies in the future, which will subject us to risks associated with fluctuations in exchange rates for those foreign currencies.

OUR THIRD PARTY FOUNDRIES AND SUBCONTRACTORS ARE CONCENTRATED IN TAIWAN AND ELSEWHERE IN THE PACIFIC RIM, AN AREA SUBJECT TO SIGNIFICANT EARTHQUAKE RISKS. ANY DISRUPTION TO THE OPERATIONS OF THESE FOUNDRIES AND SUBCONTRACTORS RESULTING FROM EARTHQUAKES OR OTHER NATURAL DISASTERS COULD CAUSE SIGNIFICANT DELAYS IN THE PRODUCTION OR SHIPMENT OF OUR PRODUCTS.

Substantially all of our products are produced by Taiwan Semiconductor Manufacturing Company located in Taiwan. Currently our only alternative manufacturing source is also located in Taiwan. In addition, substantially all of our assembly and testing facilities are located in Singapore, Taiwan and the Philippines. The risk of an earthquake in Taiwan and elsewhere in the Pacific Rim region is a significant risk due to the proximity of major earthquake fault lines to the facilities of our foundries and subcontractors. In September 1999, a major earthquake in Taiwan affected the facilities of several of these third party contractors. As a consequence of this earthquake, these contractors suffered power outages and disruptions that impaired their production capacity. The occurrence of an earthquake or other natural disaster could result in the disruption of our foundry or assembly and test capacity. Any disruption resulting from such events could cause significant delays in the production or shipment of our products until we are able to shift our manufacturing, assembling or testing from the affected contractor to another third party vendor. We may not be able to obtain alternate capacity on favorable terms, if at all.

WE MAY NEED ADDITIONAL FUNDS TO EXECUTE OUR BUSINESS PLAN, AND IF WE ARE UNABLE TO OBTAIN THESE FUNDS, OR IF ADDITIONAL FUNDS ARE NOT AVAILABLE ON ACCEPTABLE TERMS WE WILL NOT BE ABLE TO EXPAND OUR BUSINESS AS PLANNED.

We may require substantial additional capital to finance our future growth, secure additional independent foundry capacity and fund our ongoing research and development activities beyond fiscal 2000. Our capital requirements will depend on many factors, including:

* acceptance of and demand for our products;
* the types of arrangements that we may enter into with our independent foundries; and
* the extent to which we invest in or acquire new technology and research and development projects and increase our sales and marketing or other operating expenses.

To the extent that the net proceeds from this offering, together with our existing sources of liquidity and cash flow from operations are insufficient to fund our activities, we may need to raise additional funds. Additional financing may not be available to us on terms favorable to us or at all. If we can raise additional funds through the issuance of equity securities, the percentage of ownership of our existing shareholders would be reduced. Any equity securities we issue may have rights, preferences or privileges senior to those of our common stock. If we issue debt securities, we may incur significant interest expense, which would harm our profitability. The issuance of debt securities may also require us to agree to various restrictions common to debt securities, including limitations on further borrowings and on our right to pay dividends. If additional funds are not available, we may be required to limit our research and development and sales and marketing activities and the expansion of our business.

OUR FAILURE TO SUCCESSFULLY INTEGRATE ANY ACQUISITIONS WE MAKE COULD DISRUPT OUR BUSINESS AND HARM OUR FINANCIAL CONDITION.

As part of our growth strategy, we may consider opportunities to acquire other businesses or technologies that would complement our current product offerings, expand the breadth of our markets or enhance our technical capabilities. To date, we have not made any acquisitions and we are currently not subject to any agreement or letter of intent with respect to potential acquisitions.

14

16

Acquisitions entail a number of risks that could harm our business and result in the acquired business not performing as expected, including:

* problems integrating the acquired operations, personnel, technologies or products with our existing business and products;
* diversion of management's time and attention from our core business;
* difficulties in retaining business relationships with suppliers and customers of the acquired company;
* risks associated with entering markets in which we lack prior experience; and
* potential loss of key employees of the acquired company.

RISKS RELATED TO OUR INDUSTRY

THE AVERAGE SELLING PRICES OF PRODUCTS IN OUR MARKETS HAVE HISTORICALLY DECREASED RAPIDLY AND WILL LIKELY DO SO IN THE FUTURE, WHICH COULD HARM OUR GROSS PROFITS AND SALES.

The products we develop and sell are used for high volume applications. As a result, the prices of those products have historically decreased rapidly. For example, from fiscal 1999 to fiscal 2000, the average selling price of our data storage products decreased by approximately 20%. Our gross profits and financial results will suffer if we are unable to offset any reductions in our average selling prices by increasing our sales volumes, reducing our costs, or developing new or enhanced products on a timely basis with higher selling prices or gross profits. We expect that as a result of pricing pressure from our customers our gross profits on our data storage products are also likely to decrease over the next fiscal year below levels we have historically experienced. Because we do not operate our own manufacturing, assembly or testing facilities, we may not be able to reduce our costs as rapidly as companies that operate their own facilities, and our costs may even increase. In the past, we have reduced the average unit price of our products in anticipation of future competitive pricing pressures, new product introductions by us or our competitors and other factors. We expect that we will have to do so again in the future.

WE HAVE A LENGTHY AND EXPENSIVE SALES CYCLE, WHICH DOES NOT ASSURE PRODUCT SALES, AND WHICH IF UNSUCCESSFUL MAY HARM OUR OPERATING RESULTS.

The sales cycle for our products is long and requires us to invest significant resources with each potential customer without any assurance of sales to that customer. Our sales cycle typically begins with a three to six month evaluation and test period, also known as qualification, during which our products undergo rigorous reliability testing by our customers. Qualification is followed by a twelve to eighteen month development period by our customers and an additional three to six month period before a customer commences volume production of equipment incorporating our products. This lengthy sales cycle creates the risk that our customer will decide to cancel or change product plans for products incorporating our integrated circuits. During our sales cycle, our engineers assist our customers in implementing our solutions into their product. We incur significant research and development and selling, general and administrative expenses as part of this process and we may never generate related revenues. We derive revenue from this process only if our design is selected. Once a customer selects a particular integrated circuit for use in a data storage product, the customer generally uses solely that integrated circuit for a full generation of its product. Therefore, if we do not achieve a design win for a product we will be unable to sell our integrated circuit to our customer until our customer develops a new product or a new generation of its product. Even if we achieve a design win with a customer, our customer may not ultimately ship products incorporating our products or may cancel orders after we have achieved a sale. In addition, we will have to begin the qualification process again when a customer develops a new generation of a product for which we were the successful supplier.

15

17

Also, during the final production of a mature product, our customers typically exhaust their existing inventory of our integrated circuits. Consequently, orders for our products may decline in those circumstances, even if our products are incorporated into both our customer's mature and replacement products. A delay in the customer's transition to commercial production of a replacement product may cause them to lose sales, which would delay our ability to recover the lost sales from the discontinued mature product. Also customers may defer orders in anticipation of new products or product enhancements from us or our competitors.

WE ARE SUBJECT TO THE CYCLICAL NATURE OF THE INTEGRATED CIRCUIT INDUSTRY. ANY FUTURE DOWNTURNS WILL LIKELY REDUCE OUR REVENUE AND RESULT IN OUR HAVING EXCESS INVENTORY.

The integrated circuit industry is highly cyclical and is characterized by constant and rapid technological change, rapid product obsolescence and price erosion, evolving standards, short product life cycles and wide fluctuations in product supply and demand. The industry has experienced significant downturns, often connected with, or in anticipation of, maturing product cycles of both integrated circuit companies' and their customers' products and declines in general economic conditions. These downturns have been characterized by diminished product demand, production overcapacity, high inventory levels and accelerated erosion of average selling prices. Any future downturns will likely reduce our revenue and result in our having excess inventory. Furthermore, any upturn in the integrated circuit industry could result in increased competition for access to third-party foundry, assembly and test capacity.

WE ARE DEPENDENT UPON THE HARD DISK DRIVE INDUSTRY, WHICH IS HIGHLY CYCLICAL AND EXPERIENCES RAPID TECHNOLOGICAL CHANGE.

Prior to March, 2000, all of our sales were to customers in the hard disk drive industry. The hard disk drive industry is intensely competitive and the technology changes rapidly. As a result, this industry is highly cyclical, with periods of increased demand and rapid growth followed by periods of oversupply and subsequent contraction. These cycles may affect us as our customers are suppliers to this industry. Hard disk drive manufacturers tend to order more components than they may need during growth periods, and sharply reduce orders for components during periods of contraction. In addition, advances in existing technologies and the introduction of new technologies may result in lower demand for disk drive storage devices, thereby reducing demand for our products.

Rapid technological changes in the hard disk drive industry often result in significant and rapid shifts in market share among the industry's participants. If the hard disk drive manufacturer supplied by our customers do not retain or increase market share, our sales may decrease.

THE DEVELOPMENT AND EVOLUTION OF MARKETS FOR OUR INTEGRATED CIRCUITS ARE DEPENDENT ON FACTORS, SUCH AS INDUSTRY STANDARDS, OVER WHICH WE HAVE NO CONTROL. FOR EXAMPLE, IF OUR CUSTOMERS ADOPT NEW OR COMPETING INDUSTRY STANDARDS WITH WHICH OUR PRODUCTS ARE NOT COMPATIBLE OR FAIL TO ADOPT STANDARDS WITH WHICH OUR PRODUCTS ARE COMPATIBLE, OUR EXISTING PRODUCTS WOULD BECOME LESS DESIRABLE TO OUR CUSTOMERS AND OUR SALES WOULD SUFFER.

The emergence of markets for our integrated circuits is affected by a variety of factors beyond our control. In particular, our products are designed to conform to current specific industry standards. Our customers may not adopt or continue to follow these standards, which would make our products less desirable to our customers and reduce our sales. Also, competing standards may emerge that are preferred by our customers, which could also reduce our sales and require us to make significant expenditures to develop new products.

We have made a significant investment in the development and production of our Gigabit Ethernet products. However, the Gigabit Ethernet technology is relatively new compared to the more established 10 and 100 megabits per second Ethernet technologies. If the Gigabit Ethernet

16

18

technology does not achieve widespread market acceptance, our Gigabit Ethernet products may never be profitable.

WE MAY BE UNABLE TO PROTECT OUR INTELLECTUAL PROPERTY, WHICH WOULD NEGATIVELY AFFECT OUR ABILITY TO COMPETE.

We believe one of our key competitive advantages results from our collection of proprietary technologies that we have developed since our inception. If we fail to protect these intellectual property rights, competitors could sell products based on technology that we have developed, which could harm our competitive position and decrease our revenues. We believe that the protection of our intellectual property rights is and will continue to be important to the success of our business. We rely on a combination of patent, copyright, trademark and trade secret laws, as well as nondisclosure agreements and other methods, to protect our proprietary technologies. We also enter into confidentiality or license agreements with our employees, consultants and business partners, and control access to and distribution of our documentation and other proprietary information. As of June 6, 2000, we had been issued nine United States patents and had a number of pending United States patent applications. However, a patent may not be issued as a result of any applications or, if issued, claims allowed may not be sufficiently broad to protect our technology. In addition, it is possible that existing or future patents may be challenged, invalidated or circumvented. Despite our efforts, unauthorized parties may attempt to copy or otherwise obtain and use our products or proprietary technology. Monitoring unauthorized use of our technology is difficult, and the steps that we have taken may not prevent unauthorized use of our technology, particularly in foreign countries where the laws may not protect our proprietary rights as fully as in the United States.

SIGNIFICANT LITIGATION OVER INTELLECTUAL PROPERTY IN OUR INDUSTRY MAY CAUSE US TO BECOME INVOLVED IN COSTLY AND LENGTHY LITIGATION, WHICH COULD SUBJECT US TO LIABILITY, REQUIRE US TO STOP SELLING OUR PRODUCTS OR FORCE US TO REDESIGN OUR PRODUCTS.

Litigation involving patents and other intellectual property is widespread in the high-technology industry and is particularly prevalent in the integrated circuit industry, where a number of companies aggressively bring numerous infringement claims to protect their patent portfolios. We may become a party to litigation in the future either to protect our intellectual property or as a result of an alleged infringement of others' intellectual property. These lawsuits could subject us to significant liability for damages and invalidate our proprietary rights. These lawsuits, regardless of their success, would likely be time-consuming and expensive to resolve and would divert management time and attention. Any potential intellectual property litigation also could force us to do one or more of the following:

* stop selling products or using technology that contain the allegedly infringing intellectual property;
* pay damages to the party claiming infringement;
* attempt to obtain a license to the relevant intellectual property, which license may not be available on reasonable terms or at all; and
* attempt to redesign those products that contain the allegedly infringing intellectual property.

RISKS RELATED TO THIS OFFERING

WE ARE INCORPORATED IN BERMUDA, AND, AS A RESULT, IT MAY NOT BE POSSIBLE FOR SHAREHOLDERS TO ENFORCE CIVIL LIABILITY PROVISIONS OF THE SECURITIES LAWS OF THE UNITED STATES.

We are organized under the laws of Bermuda. As a result, it may not be possible for our shareholders to effect service of process within the United States upon us, or to enforce against us in United States courts judgments based on the civil liability provisions of the securities laws of the United States. Our executive officers and directors are all residents of the United States. However,

17

19

there is significant doubt as to whether the courts of Bermuda would recognize or enforce judgments of United States courts obtained against us or our directors or officers based on the civil liabilities provisions of the securities laws of the United States or any state or hear actions brought in Bermuda against us or those persons based on those laws. We have been advised by our legal advisor in Bermuda, Conyers Dill & Pearman, that the United States and Bermuda do not currently have a treaty providing for the reciprocal recognition and enforcement of judgments in civil and commercial matters. Therefore, a final judgment for the payment of money rendered by any federal or state court in the United States based on civil liability, whether or not based solely on United States federal or state securities laws, would not be automatically enforceable in Bermuda.

OUR BYE-LAWS CONTAIN A WAIVER OF CLAIMS OR RIGHTS OF ACTION BY OUR SHAREHOLDERS AGAINST OUR OFFICERS AND DIRECTORS, WHICH WILL SEVERELY LIMIT YOUR RIGHT TO ASSERT A CLAIM AGAINST OUR OFFICERS AND DIRECTORS UNDER BERMUDA LAW.

Our Bye-laws contain a broad waiver by our shareholders of any claim or right of action, both individually and on our behalf, against any of our officers and directors. The waiver applies to any action taken by an officer or director, or the failure of an officer or director to take any action, in the performance of his or her duties with or for us, other than with respect to any matter involving any fraud or dishonesty on the part of such officer or director. This waiver will limit your right to assert claims against our officers and directors unless the act complained of involves actual fraud or dishonesty. Thus, so long as acts of business judgment do not involve actual fraud or dishonesty, they will not be subject to shareholder claims under Bermuda law. For example, shareholders will not have claims against officers and directors for a breach of trust, unless the breach rises to the level of actual fraud or dishonesty.

BERMUDA LAW DIFFERS FROM THE LAWS IN EFFECT IN THE UNITED STATES AND MAY AFFORD LESS PROTECTION TO SHAREHOLDERS.

Our shareholders may have more difficulty in protecting their interests than would shareholders of a corporation incorporated in a jurisdiction of the United States. We are a Bermuda company and, accordingly, are governed by The Companies Act, 1981 of Bermuda. The Companies Act, 1981 of Bermuda differs in material respects from laws applicable to United States corporations and shareholders, including the following:

* any transaction we enter into in which a director has an interest is neither voidable by us nor is the director liable to us for any profit realized, provided the nature of the director's interest is disclosed to the board of directors at the first opportunity; and
* class actions and derivative actions are not available to shareholders except in limited circumstances. The circumstances in which class actions and derivative actions are available to our shareholders are described in this prospectus under the heading "Description of Capital

Stock -- Appraisal Rights and Shareholder Suits".

Further information on the differences between the laws of Bermuda and the United States are described in this prospectus under the heading "Certain Foreign Issuer Considerations".

TAX BENEFITS WE RECEIVE MAY BE TERMINATED OR REDUCED IN THE FUTURE, WHICH WOULD INCREASE OUR COSTS.

We will be subject to United States federal income tax at regular corporate rates and to United States branch profits tax on our income that is effectively connected with the conduct of a trade or business in the United States. We intend to conduct our business so as to limit the amount of our income that is United States effectively connected income. As an example, we have developed sales offices in Singapore and Japan that handle foreign sales activities. We currently accrue for taxes at a rate of 25%. Based on our analysis of applicable United States federal income tax laws and regulations to our operations as currently conducted, we expect to pay taxes at an effective United

18

20

States federal income tax rate of approximately 5% to 10%. The Internal Revenue Service will probably disagree with our past or future positions as to the amount of effectively connected income that we earn. The maximum federal income tax rate is 35%, and the branch profits tax rate on income remaining after application of the corporate tax is 30%. Together these two taxes combine for a 54.5% tax rate. Any of our income that is deemed to be income that is effectively connected with the conduct of a trade or business in the United States could be subject to this rate of tax. Consequently, if our positions are disallowed, the amount we have accrued on our financial statements for United States federal income taxes may be insufficient to the extent of the difference between the income tax rate ultimately determined to apply and the 25% accrual rate. In addition, we could be required to make significant cash payments for back taxes, interest and penalties based on the difference between the income tax rate ultimately determined to apply and the effective rate at which we paid those taxes. At April 30, 2000, our income tax liability accrued on our balance sheet aggregated $6,420,000, which reflects our best estimate of such liability. However, we cannot assure you that our actual income tax liability will not exceed this amount. We have filed United States federal income tax returns since 1996. The Internal Revenue Service examined our 1996 United States federal income tax return and made no adjustment; however, we had losses for that year. Dividends from our United States subsidiary will be subject to a 30% United States withholding tax. We do not anticipate paying any such dividends in the foreseeable future.

The Economic Development Board of Singapore has informed us that it intends to recommend us for pioneer status. We believe that we will shortly receive official approval of pioneer status for a period of at least six years, commencing July 1, 1999. As a result, we anticipate that a significant portion of the income we earn in Singapore during this period will be exempt from the 26% Singapore tax rate. We are required to meet several requirements as to investment, headcount and activities in Singapore to retain this status. If we do not receive pioneer status or if our status is terminated early, our financial results could be harmed.

Under current Bermuda law, we are not subject to tax on our income or capital gains. We have obtained from the Minister of Finance of Bermuda under the Exempt Undertakings Tax Protection Act 1966, as amended, an undertaking that, in the event that Bermuda enacts any legislation imposing tax computed on income or capital gains, those taxes should not apply to us until March 28, 2016. However, this exemption may not be extended beyond this date.

IF WE ARE CLASSIFIED AS A PASSIVE FOREIGN INVESTMENT COMPANY, OUR SHAREHOLDERS MAY SUFFER ADVERSE TAX CONSEQUENCES.

Because we are incorporated in Bermuda and have operations in the United States and Singapore, we are subject to special rules and regulations, including rules regarding passive foreign investment company or PFIC. We believe that we are not a PFIC, and we expect to continue to manage our affairs so that we will not become a PFIC. However, whether we should be treated as a PFIC is a factual determination that is made annually and is subject to change. If we are classified as a PFIC, then each United States holder of our common stock would, upon qualifying distributions by us or upon the pledge or sale of their shares of common stock at a gain, be liable to pay tax at the then prevailing rates on ordinary income plus an interest charge, generally as if the distribution or gain had been earned ratably over the shareholder's holding period. In addition to the risks related to PFIC status, we and our shareholders could also suffer adverse tax consequences if we are classified as a foreign personal holding company, a personal holding company or a controlled foreign corporation, each of which is described in this prospectus under the heading "Taxation".

19

21

EXISTING SHAREHOLDERS OWN A LARGE PERCENTAGE OF OUR VOTING STOCK, AND THREE EXISTING DIRECTORS, WHO ARE ALSO SIGNIFICANT SHAREHOLDERS, ARE RELATED BY BLOOD OR MARRIAGE. THESE FACTORS MAY ALLOW THE EXISTING SHAREHOLDERS OR THE THREE RELATED DIRECTORS TO CONTROL THE ELECTION OF DIRECTORS AND THE APPROVAL OR DISAPPROVAL OF SIGNIFICANT CORPORATE ACTIONS FOLLOWING THIS OFFERING.

Immediately after this offering, we anticipate that our executive officers and directors will beneficially own or control, directly or indirectly, approximately 65% of the outstanding shares of common stock. Additionally, Sehat Sutardja and Weili Dai are husband and wife and Sehat Sutardja and Pantas Sutardja are brothers. All three are directors and together they will hold approximately 44% of our outstanding common stock after the completion of this offering. As a result, if the existing shareholders or any of Sehat Sutardja, Pantas Sutardja and Weili Dai act together, they will significantly influence, and will likely control, the election of our directors and approval or disapproval of our significant corporate actions. This influence over our affairs might be adverse to the interests of other shareholders. In addition, the voting power of these shareholders or directors could have the effect of delaying or preventing an acquisition of our company on terms that other shareholders may desire.

We have been informed by Conyers Dill & Pearman, our Bermuda counsel, that under Bermuda law all our officers, in exercising their powers and discharging their duties, must act honestly and in good faith with a view to our best interests and exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances. Majority shareholders do not automatically owe fiduciary duties to minority shareholders. As a result, the minority shareholders will not have a direct claim against the majority shareholders in the event the majority shareholders take actions that damage the interests of minority shareholders. Class actions and derivative actions are generally not available to shareholders under the laws of Bermuda, except the Bermuda courts would be expected to follow English case law precedent, which would permit a shareholder to bring an action in our name if the directors or officers are alleged to be acting beyond our corporate power, committing illegal acts or violating our Memorandum of Association or Bye-laws. In addition, minority shareholders would be able to challenge a corporate action that allegedly constituted a fraud against them or required the approval of a greater percentage of our shareholders than actually approved it. The winning party in such an action generally would be able to recover a portion of attorneys' fees incurred in connection with the action.

OUR COMMON STOCK HAS NOT BEEN PUBLICLY TRADED, AND WE EXPECT THAT THE PRICE OF OUR STOCK MAY FLUCTUATE SUBSTANTIALLY.

Recently, the stock prices of technology companies similar to Marvell have been quite volatile. Moreover, prior to this offering, there has been no public market for our common stock. The initial public offering price will be determined through negotiations between the underwriters and us. If you purchase shares of common stock, you may not be able to resell your shares at or above the initial offering price. The market price of our common stock may fluctuate significantly in response to numerous factors, many of which are beyond our control and are difficult or impossible to forecast, including the following:

* actual or anticipated fluctuations in our sales and operating results;
* changes in recommendations or financial estimates by securities analysts or our failure to perform in line with such estimates;
* changes in market valuations of other technology companies, particularly those that design, manufacture and/or sell integrated circuits;
* announcements by us or our competitors of significant technical innovations, acquisitions, strategic partnerships, joint ventures or capital commitments;
* introduction of technologies or product enhancements that reduce the need for our products;

20

22

* departures of key personnel; and
* sales of our common stock in the future.

CLASS ACTION LITIGATION DUE TO STOCK PRICE VOLATILITY COULD CAUSE US TO INCUR SUBSTANTIAL COSTS AND DIVERT OUR MANAGEMENT'S ATTENTION AND RESOURCES.

In the past, securities class action litigation often has been brought against a company following periods of volatility in the market price of its securities. Companies in the integrated circuit industry and other technology industries are particularly vulnerable to this kind of litigation due to the high volatility of their stock prices. Accordingly, we may in the future be the target of securities litigation. Securities litigation could result in substantial costs and could divert our management's attention and resources.

FUTURE SALES OF OUR COMMON STOCK IN THE PUBLIC MARKET MAY DEPRESS OUR STOCK PRICE.

After this offering, we will have outstanding 82,211,425 shares of common stock. Sales of a substantial number of shares of our common stock in the public market following this offering could cause our stock price to decline. Substantially all the shares sold in this offering will be freely tradable. Of the remaining 76,211,425 shares of common stock outstanding after this offering 75,344,205 shares are subject to lock-up agreements with the underwriters and 867,220 shares are subject to lock-up agreements with Marvell, in each case ending 180 days after the date of this prospectus. Upon the expiration of the lock-up agreements, and subject to the provisions of Rule 144 and Rule 701, approximately 78,184,042 shares of common stock, assuming the exercise of outstanding warrants and all outstanding vested stock options, will be available for sale in the public market 180 days after the date of this prospectus. Additional shares issuable upon exercise of outstanding stock options will become freely tradable at various times after that date. Goldman, Sachs & Co. can waive the restrictions of the lock-up agreements at an earlier time without prior notice or announcement and allow shareholders to sell their shares. As restrictions on resale end, the market price of our stock could drop significantly if the holders of these shares sell them or are perceived by the market as intending to sell them. In addition, the sale of these shares could impair our ability to raise capital through the sale of additional stock.

WE INTEND TO ADOPT PROVISIONS IN OUR BYE-LAWS THAT COULD DELAY OR PREVENT A CHANGE IN CORPORATE CONTROL, EVEN IF THE CHANGE IN CORPORATE CONTROL WOULD BENEFIT OUR SHAREHOLDERS.

At our annual general meeting of shareholders on June 17, 2000, we intend to seek the approval of our shareholders of an amendment and restatement of our Bye-laws, which would include the adoption of change in corporate control provisions. These change in corporate control provisions would include:

* authorizing the issuance of preferred stock without shareholder approval;
* providing for a classified board of directors with staggered, three-year terms; and
* requiring two-thirds of the outstanding shares to approve amendments to our Bye-laws.

The adoption of these change in corporate control provisions could make it more difficult for a third party to acquire us, even if doing so would be a benefit to our shareholders.

21

23

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

In this prospectus we have made statements under the headings "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Business" and in other sections that are forward-looking statements. In some cases, you can identify these statements by forward-looking words such as "may," "might," "will," "should," "intends," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "projects," "potential" or "continue," the negative of these terms and other comparable expressions. These forward-looking statements, which are subject to risks, uncertainties, and assumptions about us, may include, among other things, projections of our future financial performance, our anticipated growth strategies, anticipated product introductions and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events. Because these forward-looking statements involve risks and uncertainties, there are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by the forward-looking statements, including those factors discussed under the heading "Risk Factors". You should specifically consider the numerous risks described under the heading "Risk Factors".

22

24

USE OF PROCEEDS

The net proceeds to us from the sale of the 6,000,000 shares of common stock offered by us will be approximately $54.3 million, or approximately $62.6 million if the underwriters' option to purchase additional shares is exercised in full. The amount of net proceeds has been calculated based on an assumed initial public offering price of $10.00 per share and after deducting an assumed underwriting discount and the estimated offering expenses payable by us. The primary purposes of this offering are to obtain additional equity capital, create a public market for our common stock and facilitate future access to public markets.

We intend to use the net proceeds from this offering primarily for general corporate purposes, including working capital and capital expenditures. We may use a portion of the net proceeds from this offering to acquire or invest in businesses, technologies or services that are complementary to our existing business. However, we have no present plans or commitments and are not engaged in any negotiations with respect to any material transactions of this type. Pending these uses, we intend to invest the net proceeds in short-term, investment-grade, interest-bearing securities, certificates of deposit or guaranteed obligations of the United States.

DIVIDEND POLICY

We have never declared or paid cash dividends on our capital stock. We currently expect to retain earnings, if any, to finance the growth and development of our business. Therefore, we do not anticipate declaring or paying cash dividends on our common stock in the foreseeable future. The decision whether to pay dividends will be made by our Board of Directors from time to time in light of conditions then existing including, among other things, our results of operations, financial condition and anticipated cash requirements.

23

25

CAPITALIZATION

The following table sets forth our capitalization as of April 30, 2000:

* on an actual basis;
* on a pro forma basis giving effect to the automatic conversion of all outstanding shares of preferred stock into common stock, resulting in the issuance of 26,529,504 shares of common stock upon the closing of this offering; and
* on a pro forma as adjusted basis to reflect the sale of 6,000,000 shares of common stock in this offering at an assumed initial public offering price of $10.00 per share, after deducting an assumed underwriting discount and the estimated offering expenses payable by us and the application of the net proceeds from the offering.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | APRIL 30, 2000 | | |  |
|  | ---------------------------------- | | | | | |
|  |  |  |  |  | PRO FORMA | |
|  |  | ACTUAL | PRO FORMA | | AS ADJUSTED | |
|  | -------- | | --------- | | ----------- | |
|  | (IN THOUSANDS, EXCEPT SHARE DATA) | | | | | |
| Capital lease obligations, less current portion............. | $ | 26 | $ | 26 | $ | 26 |
| Mandatorily redeemable convertible preferred stock, |  |  |  |  |  |  |
| $0.002 par value, 8,000,000 shares authorized, 6,632,376 |  |  |  |  |  |  |
| shares issued and outstanding, actual; 8,000,000 |  |  |  |  |  |  |
| authorized, none issued and outstanding pro forma and |  |  |  |  |  |  |
| pro forma as adjusted.................................. |  | 22,451 |  | -- |  | -- |
| Shareholders' equity: |  |  |  |  |  |  |
| Common stock, $0.002 par value; 242,000,000 shares |  |  |  |  |  |  |
| authorized, 49,681,921 shares issued and outstanding, |  |  |  |  |  |  |
| actual; 242,000,000 shares authorized, 76,211,425 |  |  |  |  |  |  |
| shares issued and outstanding, pro forma; 242,000,000 |  |  |  |  |  |  |
| shares authorized, 82,211,425 shares issued and |  |  |  |  |  |  |
| outstanding, pro forma as adjusted..................... |  | 99 |  | 152 |  | 164 |
| Additional paid-in capital................................ |  | 24,649 |  | 47,047 |  | 101,310 |
| Deferred stock-based compensation......................... |  | (15,397) |  | (15,397) |  | (15,397) |
| Retained earnings......................................... |  | 4,227 |  | 4,227 |  | 4,227 |
|  | -------- | | -------- | | -------- | |
| Total shareholders' equity............................. |  | 13,578 |  | 36,029 |  | 90,304 |
|  | -------- | | -------- | | -------- | |
| Total capitalization.............................. | $ | 36,055 | $ 36,055 | | $ 90,330 | |
|  | ======== | | ======== | | ======== | |

This information should be read in conjunction with our financial statements and the notes relating to those statements appearing elsewhere in this prospectus.

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The number of shares of common stock outstanding set forth in the table above excludes the following:

* 180,000 shares issuable upon the exercise of a warrant to purchase common stock that at the closing of this offering will be issued to replace a warrant to purchase 45,000 shares of Series D preferred stock;
* 60,000 shares issuable upon the exercise of an outstanding warrant to purchase common stock;
* 275,408 shares issuable upon the automatic conversion of Series D preferred stock that we expect to issue upon the exercise of warrants that would otherwise expire upon the closing of this offering;
* 11,492,809 shares issuable upon the exercise of outstanding stock options, at a weighted average exercise price of $1.27 per share, granted through April 30, 2000;
* 5,225,270 shares available at April 30, 2000 for future issuance under our 1995 Stock Option Plan and 1997 Directors' Stock Option Plan; and
* 2,790,500 shares issuable upon the exercise of outstanding stock options, at a weighted average exercise price of $10.00 per share, granted subsequent to April 30, 2000 and through June 6, 2000.

24

26

DILUTION

As of April 30, 2000, our pro forma net tangible book value was approximately $36,029,000, or $0.47 per share of common stock. Pro forma net tangible book value per share represents the amount of our total tangible assets less total liabilities, divided by 76,211,425 shares of common stock outstanding giving effect to the conversion of all outstanding shares of preferred stock into shares of common stock upon completion of this offering. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of our common stock in this offering and the net tangible book value per share of our common stock immediately following this offering.

Purchasers of common stock in this offering will experience immediate dilution. Without taking into account any changes in net tangible book value after April 30, 2000, other than to give effect to the sale of the shares of common stock offered by us at an assumed initial public offering price of $10.00 per share, and after deducting an assumed underwriting discount and estimated offering expenses payable by us, our pro forma net tangible book value as of April 30, 2000 would have been approximately $90,304,000 or $1.10 per share of common stock. This amount represents an immediate increase in pro forma net tangible book value of $0.63 per share to the existing shareholders and an immediate dilution in pro forma net tangible book value of $8.90 per share to new investors purchasing shares in this offering. If the initial public offering price is higher or lower, the dilution to new investors will be greater or less. The following table illustrates the dilution in pro forma net tangible book value per share to new investors.

|  |  |
| --- | --- |
| Assumed initial public offering price per share............. | $10.00 |
| Pro forma net tangible book value per share as of April |  |
| 30, 2000............................................... | $ 0.47 |
| Increase per share attributable to new investors.......... | 0.63 |
|  | ------ |
| Pro forma net tangible book value per share after this |  |
| offering.................................................. | 1.10 |
|  | ------ |
| Dilution per share to new investors......................... | $ 8.90 |
|  | ====== |

The following table summarizes as of April 30, 2000, on the pro forma basis described above, the number of shares of common stock purchased from us, the total consideration paid to us and the average price per share paid by existing shareholders and by new investors purchasing shares of common stock in this offering, before deducting underwriting discounts and commissions and the estimated offering expenses:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | SHARES PURCHASED | | TOTAL CONSIDERATION | | AVERAGE PRICE |
|  | -------------------- | | --------------------- | | ------------- |
|  | NUMBER | PERCENT | AMOUNT | PERCENT | PER SHARE |
|  | ---------- | ------- | ----------- | ------- | ------------- |
| Existing shareholders............... | 76,211,425 | 92.7% | $28,012,000 | 31.8% | $ 0.37 |
| New investors....................... | 6,000,000 | 7.3 | 60,000,000 | 68.2 | $10.00 |
|  | ---------- | ----- | ----------- | ----- |  |
| Total............................. | 82,211,425 | 100.0% | $88,012,000 | 100.0% |  |
|  | ========== | ===== | =========== | ===== |  |

The above information excludes:

* 180,000 shares issuable upon the exercise of a warrant to purchase common stock that at the closing of this offering will be issued to replace a warrant to purchase 45,000 shares of Series D preferred stock;
* 60,000 shares issuable upon the exercise of an outstanding warrant to purchase common stock;
* 275,408 shares issuable upon the automatic conversion of Series D preferred stock that we expect to issue upon the exercise of warrants that would otherwise expire upon the closing of this offering;
* 11,492,809 shares issuable upon the exercise of outstanding stock options, at a weighted average exercise price of $1.27 per share, granted through April 30, 2000;
* 5,225,270 shares available at April 30, 2000 for future issuance under our 1995 Stock Option Plan and 1997 Directors' Stock Option Plan; and

25

27

* 2,790,500 shares issuable upon the exercise of outstanding stock options, at a weighted average exercise price of $10.00 per share, granted subsequent to April 30, 2000 and through June 6, 2000.

To the extent any of the options and warrants described above are exercised, there will be further dilution to new investors. Assuming the exercise of all outstanding options noted in the fourth bullet point above, and the exercise of all outstanding warrants noted in the first, second and third bullet points above, as of April 30, 2000, our pro forma net tangible book value at April 30, 2000 would have been $51,208,000, or $0.58 per share. Without taking into account any changes in net tangible book value after April 30, 2000, other than to give effect to the sale of the shares of common stock offered by us at an assumed initial public offering price of $10.00 per share, and after deducting an assumed underwriting discount and estimated offering expenses payable by us, our pro forma net tangible book value as of April 30, 2000 would have been approximately $105,483,000 or $1.12 per share of common stock. This amount represents an immediate increase in pro forma net tangible book value of $0.54 per share to the existing shareholders and an immediate dilution in pro forma net tangible book value of $8.88 per share to new investors purchasing shares in this offering.

26

28

SELECTED CONSOLIDATED FINANCIAL DATA

The following selected consolidated financial data should be read in conjunction with, and are qualified by reference to, our consolidated financial statements and related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this prospectus. The statements of operations data for the years ended January 31, 1998, 1999 and 2000, and the balance sheet data as of January 31, 1999 and 2000, are derived from, and are qualified by reference to, our audited consolidated financial statements which are included elsewhere in this prospectus. The statements of operations data for the years ended January 31, 1996 and 1997, and the balance sheet data as of January 31, 1996, 1997 and 1998 are derived from financial statements that are not included in this prospectus. The statement of operations data for the three months ended April 30, 1999 and 2000, and the balance sheet data as of April 30, 2000 are derived from our unaudited financial statements which are included elsewhere in this prospectus. In the opinion of management, the unaudited financial statements have been prepared on the same basis as the audited financial statements and contain all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of our results of operations for these periods and financial condition at that date. The historical results presented below are not necessarily indicative of future results. See Note 1 of the notes to our consolidated financial statements for an explanation of the determination of the number of shares used to compute per share amounts.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  | THREE MONTHS ENDED | | | |
|  |  |  | YEAR ENDED JANUARY 31, | | |  |  |  | APRIL 30, | | |
|  | ----------------------------------------------- | |  |  |  |  |  | ------------------ | | | |
|  |  | 1996 | 1997 | 1998 | 1999 |  | 2000 |  | 1999 |  | 2000 |
|  | ------- | | ------- | ------- | ------- | ------- | | ------- | | ------- | |
|  |  |  | (IN THOUSANDS, EXCEPT PER SHARE AMOUNTS) | | | | | | |  |  |
| CONSOLIDATED STATEMENTS OF |  |  |  |  |  |  |  |  |  |  |  |
| OPERATIONS DATA: |  |  |  |  |  |  |  |  |  |  |  |
| Net revenue........................ | $ | 210 | $ 190 | $ 625 | $21,253 | $81,375 | | $14,056 | | $29,664 | |
| Cost of product revenue............ |  | -- | -- | 312 | 10,103 |  | 33,773 |  | 6,195 |  | 13,180 |
|  | ------- | | ------- | ------- | ------- | ------- | | ------- | | ------- | |
| Gross profit....................... |  | 210 | 190 | 313 | 11,150 |  | 47,602 |  | 7,861 |  | 16,484 |
| Operating expenses: |  |  |  |  |  |  |  |  |  |  |  |
| Research and development......... |  | 480 | 1,350 | 5,018 | 5,837 |  | 14,452 |  | 2,422 |  | 6,118 |
| Marketing and selling............ |  | 12 | 618 | 1,671 | 4,631 |  | 10,436 |  | 1,961 |  | 4,084 |
| General and administrative....... |  | 92 | 468 | 1,028 | 1,190 |  | 3,443 |  | 651 |  | 1,504 |
| Amortization of stock |  |  |  |  |  |  |  |  |  |  |  |
| compensation................... |  | -- | -- | -- | 42 |  | 2,175 |  | 80 |  | 2,261 |
|  | ------- | | ------- | ------- | ------- | ------- | | ------- | | ------- | |
| Total operating expenses....... |  | 584 | 2,436 | 7,717 | 11,700 |  | 30,506 |  | 5,114 |  | 13,967 |
|  | ------- | | ------- | ------- | ------- | ------- | | ------- | | ------- | |
| Operating income (loss)............ |  | (374) | (2,246) | (7,404) | (550) |  | 17,096 |  | 2,747 |  | 2,517 |
| Interest income.................... |  | 22 | 96 | 170 | 175 |  | 486 |  | 52 |  | 242 |
| Interest expense................... |  | (3) | (2) | (164) | (101) |  | (156) |  | (29) |  | (2) |
|  | ------- | | ------- | ------- | ------- | ------- | | ------- | | ------- | |
| Income (loss) before income |  |  |  |  |  |  |  |  |  |  |  |
| taxes............................ |  | (355) | (2,152) | (7,398) | (476) |  | 17,426 |  | 2,770 |  | 2,757 |
| Provision for income taxes......... |  | -- | 1 | 46 | 483 |  | 4,356 |  | 692 |  | 689 |
|  | ------- | | ------- | ------- | ------- | ------- | | ------- | | ------- | |
| Net income (loss).................. | $ | (355) | $(2,153) | $(7,444) | $ (959) | $13,070 | | $ 2,078 | | $ 2,068 | |
|  | ======= | | ======= | ======= | ======= | ======= | | ======= | | ======= | |
| Basic net income (loss) per |  |  |  |  |  |  |  |  |  |  |  |
| share............................ | $ (0.02) | | $ (0.08) | $ (0.24) | $ (0.03) | $ | 0.32 | $ | 0.06 | $ | 0.04 |
| Diluted net income (loss) per |  |  |  |  |  |  |  |  |  |  |  |
| share............................ | $ (0.02) | | $ (0.08) | $ (0.24) | $ (0.03) | $ | 0.16 | $ | 0.03 | $ | 0.02 |
| Shares used in computing basic net |  |  |  |  |  |  |  |  |  |  |  |
| income (loss) per share.......... |  | 20,738 | 25,593 | 30,436 | 32,470 |  | 41,094 |  | 37,135 |  | 46,493 |
| Shares used in computing diluted |  |  |  |  |  |  |  |  |  |  |  |
| net income (loss) per share...... |  | 20,738 | 25,593 | 30,436 | 32,470 |  | 81,545 |  | 78,538 |  | 84,796 |
| Pro forma basic net income per |  |  |  |  |  |  |  |  |  |  |  |
| share............................ |  |  |  |  |  | $ | 0.20 |  |  | $ | 0.03 |
| Pro forma diluted net income per |  |  |  |  |  |  |  |  |  |  |  |
| share............................ |  |  |  |  |  | $ | 0.16 |  |  | $ | 0.02 |
| Shares used in computing pro forma |  |  |  |  |  |  |  |  |  |  |  |
| basic net income per share....... |  |  |  |  |  |  | 66,157 |  |  |  | 72,978 |
| Shares used in computing pro forma |  |  |  |  |  |  |  |  |  |  |  |
| diluted net income per share..... |  |  |  |  |  |  | 81,545 |  |  |  | 84,796 |

27

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 29 |  |  |  |  |  |  |
|  |  | AS OF JANUARY 31, | | |  |  |
|  | -------------------------------------------- | |  |  |  | APRIL 30, |
|  | 1996 | 1997 | 1998 | 1999 | 2000 | 2000 |
|  | ------ | ------ | ------ | ------- | ------- | --------- |
|  |  |  | (IN THOUSANDS) | |  |  |
| CONSOLIDATED BALANCE SHEET DATA: |  |  |  |  |  |  |
| Cash and cash equivalents......................... | $1,264 | $4,763 | $3,307 | $ 5,515 | $16,600 | $15,703 |
| Restricted cash................................... | -- | -- | -- | -- | -- | 3,022 |
| Working capital................................... | 1,188 | 4,426 | 2,682 | 6,865 | 22,611 | 26,433 |
| Total assets...................................... | 1,364 | 5,267 | 5,291 | 16,563 | 46,500 | 57,542 |
| Notes payable to bank and capital lease |  |  |  |  |  |  |
| obligations, less current portion............... | 30 | -- | 21 | 897 | 36 | 26 |
| Mandatorily redeemable convertible preferred |  |  |  |  |  |  |
| stock........................................... | 1,383 | 7,176 | 13,465 | 17,524 | 22,353 | 22,451 |
| Total shareholders' equity (deficit).............. | (126) | (2,289) | (9,578) | (9,350) | 7,940 | 13,578 |
| 28 |  |  |  |  |  |  |

30

MANAGEMENT'S DISCUSSION AND ANALYSIS OF

FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This prospectus contains forward-looking statements that involve risks and uncertainties. Our actual results may differ significantly from the results discussed in these forward-looking statements. We assume no obligation to update the forward-looking statements or such risk factors. Our fiscal year-end financial reporting periods end on the Saturday closest to January 31st. For purposes of presentation, we have indicated our fiscal year as ending on January 31.

OVERVIEW

We design, develop and market integrated circuits for the communications-related markets of high speed, high density data storage and broadband data communications. We were founded in 1995, and our business has grown rapidly since our inception. We are a fabless integrated circuit company, which means that we rely on independent, third-party contractors to perform manufacturing, assembly and test functions. This approach allows us to focus on designing, developing and marketing our products and significantly reduces the amount of capital we need to invest in manufacturing products.

From January 1995 until early calendar 1998, we were in a development stage and engaged primarily in research and development. To develop our business quickly, we initially focused our efforts on applying our core technology to develop products for the data storage market. All our product revenues from inception through February 2000 were derived from sales of our read channel and preamplifier products to customers in the data storage market.

We began shipping our first generation read channel products in volume in June 1998. We began volume shipments of preamplifier products in June 1999. Read channels have historically accounted for more than 85% of our quarterly sales and virtually all of the balance has been derived from sales of preamplifier products. We expect to remain dependent on continued sales of read channel and preamplifier products for a majority of our revenue until we are able to diversify revenue through the addition of new products. We have introduced two new generations of read channel products and one new generation of preamplifier products since we first started shipping read channel and preamplifier products.

The data storage market is highly competitive and is dominated by a small number of large companies, including Seagate, Quantum, Western Digital, Samsung, Hitachi, Fujitsu and Toshiba. These companies have historically experienced marginal profit levels from sales of their data storage products and are under enormous pricing pressure from their customers, which they typically pass through to their integrated circuit suppliers.

We have achieved successive quarterly growth in revenues and profitability in fiscal 2000 from sales of our data storage products. However, the data storage industry is an old, matured industry with rapidly declining average selling prices, short product life cycles and cyclical nature of demand for its products. We were able to penetrate this market by offering integrated circuits we believe were more technologically advanced than our competitors. However, we believe this market offers limited opportunities for continued future growth in revenues and profitability. We believe that the data communications sector is an emerging market that offers greater opportunities for growth.

In December 1999, we introduced our first generation product for Fast Ethernet applications, which began shipping and generating revenue in March 2000. In March 2000, we introduced another product for Fast Ethernet applications, which customers are now sampling. We expect to introduce additional broadband data communications products during calendar year 2000. Our future broadband data communications revenue will depend upon completion of our product development and acceptance by our customers.

We recognize product revenue upon shipment of our products to customers, net of accruals for estimated sales returns and allowances. We have not experienced any significant sales returns from

29

31

customers to date. Substantially all of our sales have been generated through our direct sales force. In March 2000, we entered into our first distribution agreement to support our sales and marketing activities in the broadband data communications market, and we plan to enter into other distribution agreements during calendar year 2000. We defer recognition of product revenue on sales made through a distributor until the distributor sells our product to its customer.

Historically, a relatively small number of customers have accounted for a significant portion of our revenue. Our top five customers accounted for 90%, 99% and 98% of our revenue for the years ended January 31, 1998, 1999 and 2000, and 97% of our revenue for the three months ended April 30, 2000. We anticipate that sales to distributors will increase as a percentage of our revenue in future periods. However, we expect to continue to experience significant customer concentration from direct sales to key customers.

In addition, a significant portion of our products is sold to customers overseas. Sales to customers in Asia accounted for 99% of our revenue in each of the years ended January 31, 1999 and 2000, and 98% of our revenue for the three months ended April 30, 2000. Because many manufacturers and subcontractors of data storage and broadband data communications devices are located in Asia, we expect that a majority of our revenue will continue to be represented by sales to customers in that region. All of our sales have been denominated in U.S. dollars.

Our sales have historically been made on the basis of purchase orders rather than long-term agreements. In addition, the sales cycle for our products is long, which may cause us to experience a delay between the time we incur expenses and the time we generate revenue from these expenditures. We expect to increase our research and development, marketing and selling, and general and administrative expenditures as we seek to expand our operations. We anticipate the rate of new orders may vary significantly from quarter to quarter. Consequently, if anticipated sales and shipments in any quarter do not occur when expected, expenses and inventory levels could be disproportionately high, seriously harming our operating results for that quarter and, potentially, future quarters.

We will incur substantial stock compensation expense in future periods which represents non-cash charges incurred as a result of the issuance of stock options to employees and directors. These charges are recorded based on the difference between the deemed fair value of the common stock and the option exercise price of such options at the date of grant and are amortized under an accelerated method over the option vesting period. At April 30, 2000, the amount of the deferred charge to be amortized over future periods was $15.4 million. Of the $15.4 million remaining to be amortized, $5.9 million is expected to be charged in the remaining nine months of fiscal 2001, $4.7 million in fiscal 2002, $2.7 million in fiscal 2003 and the balance in future years.

We have accrued income taxes at an effective tax rate of 25% since achieving consolidated profitability in fiscal 2000. The difference between this rate and the federal tax rate of 35% is due to the lower tax rates imposed on our operations in Bermuda and Singapore and to the benefits realized from research and development credits in the United States. Our operations in Singapore are subject to a statutory tax rate of 26%. The Economic Development Board of Singapore has informed us that it intends to recommend us for pioneer status. We believe that we will shortly receive official approval of pioneer status for a period of at least six years, commencing July 1, 1999. As a result, we currently believe that approximately 60% of our Singapore profits will not be subject to tax prior to July 31, 2005. During the year ended January 31, 2000, Singapore profits represented approximately 6% of our total income before taxes. This percentage will fluctuate from period to period depending upon the relative growth of our Singapore operations as compared to our overall operations. We have an undertaking from the government of Bermuda that we will not be subject to tax on our income and capital gains in Bermuda until March 28, 2016.

30

32

RESULTS OF OPERATIONS

The following table sets forth the statements of operations data expressed as a percentage of net revenue for the periods indicated.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | THREE MONTHS | |
|  |  |  |  | ENDED |  |
|  | YEAR ENDED JANUARY 31, | | | APRIL 30, | |
|  | ------------------------- | |  | -------------- | |
|  | 1998 | 1999 | 2000 | 1999 | 2000 |
|  | ------- | ----- | ----- | ----- | ----- |
| Net revenue........................... | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Cost of product revenue............... | 49.9 | 47.5 | 41.5 | 44.1 | 44.4 |
|  | ------- | ----- | ----- | ----- | ----- |
| Gross profit.......................... | 50.1 | 52.5 | 58.5 | 55.9 | 55.6 |
| Operating expenses: |  |  |  |  |  |
| Research and development............ | 802.9 | 27.5 | 17.8 | 17.2 | 20.6 |
| Marketing and selling............... | 267.4 | 21.8 | 12.8 | 14.0 | 13.8 |
| General and administrative.......... | 164.5 | 5.6 | 4.2 | 4.6 | 5.1 |
| Amortization of stock |  |  |  |  |  |
| compensation..................... | -- | 0.2 | 2.7 | 0.6 | 7.6 |
|  | ------- | ----- | ----- | ----- | ----- |
| Total operating expenses....... | 1234.8 | 55.1 | 37.5 | 36.4 | 47.1 |
|  | ------- | ----- | ----- | ----- | ----- |
| Operating income (loss)............... | (1184.7) | (2.6) | 21.0 | 19.5 | 8.5 |
| Interest income....................... | 27.2 | 0.8 | 0.6 | 0.4 | 0.8 |
| Interest expense...................... | (26.2) | (0.5) | (0.2) | (0.2) | 0.0 |
|  | ------- | ----- | ----- | ----- | ----- |
| Income (loss) before income taxes..... | (1183.7) | (2.3) | 21.4 | 19.7 | 9.3 |
| Provision for income taxes............ | (7.4) | (2.3) | (5.4) | (4.9) | (2.3) |
|  | ------- | ----- | ----- | ----- | ----- |
| Net income (loss)..................... | (1191.1)% | (4.6)% | 16.0% | 14.8% | 7.0% |
|  | ======= | ===== | ===== | ===== | ===== |

YEARS ENDED JANUARY 31, 1998, 1999 AND 2000

NET REVENUE. We recognize revenue upon shipment of product to our customers, net of accruals for estimated sales returns and allowances. Net revenue increased from $625,000 in fiscal 1998 to $21.3 million in fiscal 1999, and to $81.4 million in fiscal 2000. Fiscal 1998 revenue included approximately $197,000 of revenue derived from a research and development contract. Revenue in fiscal 1999 reflects commencement of volume shipments of our read channel products. Revenue increased from fiscal 1999 to fiscal 2000 primarily as a result of continued market acceptance of our read channel products and commencement of volume shipment of our preamplifier products. Although average selling prices declined by approximately 20% from fiscal 1999 to fiscal 2000, the volume of units shipped increased from approximately 5.1 million units in fiscal 1999 to 24.9 million units in fiscal 2000. Sales of read channel products increased from $21.2 million in fiscal 1999 to $76.0 million in fiscal 2000, while sales of preamplifier products increased from $8,000 in fiscal 1999 to $5.4 million in fiscal 2000. We expect that the rate of growth of our revenue from sales of data storage products will be considerably lower in fiscal 2001 than the rate of growth we experienced in fiscal 1999 and fiscal 2000.

COST OF PRODUCT REVENUE. Cost of product revenue consists primarily of the costs of manufacturing, assembly and test of our integrated circuit devices and related overhead costs, and compensation and associated costs related to manufacturing support, logistics and quality assurance personnel. Gross profit, which equals product revenue, excluding $197,000 in revenue for the year ended January 31, 1998 related to a research and development contract, less cost of product revenue, as a percentage of revenue, increased from 27.1% in fiscal 1998, to 52.5% in fiscal 1999, and to 58.5% in fiscal 2000. The increase in gross profit in fiscal 1999 was primarily due to the substantial increase in sales from $625,000 in fiscal 1998 to $21.3 million in fiscal 1999. The increase in gross profit in fiscal 2000 was primarily due to the substantial increase in sales from $21.3 million in fiscal 1999 to $81.4 million in fiscal 2000, and a reduction in product costs per unit in fiscal 2000 of approximately 15%. We expect our gross profit to decrease as a percentage of revenue due to

31

33

increased pricing pressures from our customers as well as from our competitors and due to potential cost increases resulting from limited foundry capacity.

Product costs per unit declined in fiscal 2000 due to a general decrease in the prices charged by contract manufacturers of integrated circuits because of the availability of capacity within the integrated circuit manufacturing industry, as well as improvements in the manufacturing yields achieved through the third quarter of fiscal 2000. We experienced a decline in our yields in the fourth quarter of fiscal 2000 due to the initial production ramp up of our newest, more complex, read channel products.

RESEARCH AND DEVELOPMENT. Research and development expense consists primarily of compensation and associated costs relating to development personnel, prototype costs, depreciation expenses and allocated occupancy costs for these operations. Research and development expense was $5.0 million, or 802.9% of revenue, for fiscal 1998, $5.8 million, or 27.5% of revenue, for fiscal 1999, and $14.5 million, or 17.8% of revenue, for fiscal 2000. The fiscal 1999 to fiscal 2000 increases in absolute dollars were primarily due to increases of $3.6 million for the hiring of additional development personnel, $813,000 for prototype wafer costs and services, $593,000 for mask and reticle costs and $537,000 for depreciation expense arising from significant purchases of computer aided design software tools. We expect that research and development expense will increase substantially in absolute dollars in future periods and as a percentage of revenue in fiscal 2001 as we develop new products, engage in other product development initiatives and increase our number of research and development personnel.

MARKETING AND SELLING. Marketing and selling expense consists primarily of compensation and associated costs relating to marketing and selling personnel, sales commissions to independent sales representatives, promotional and other marketing expenses, and allocated occupancy costs for these operations. Marketing and selling expense was $1.7 million, or 267.4% of revenue, for fiscal 1998, $4.6 million or 21.8% of revenue, for fiscal 1999, and $10.4 million, or 12.8% of revenue, for fiscal 2000. The year-to-year increases in absolute dollars were due primarily to the hiring of additional personnel and a resulting increase in salary and related costs of approximately $2.3 million from fiscal 1999 to fiscal 2000, increased sales commissions of approximately $1.8 million from fiscal 1999 to fiscal 2000, and increased costs of approximately $627,000 from fiscal 1999 to fiscal 2000 related to expanding our sales and marketing activities as we broadened our customer and product base. We expect that marketing and selling expense will increase substantially in absolute dollars and as a percentage of revenue in fiscal 2001 as we hire additional personnel, expand our sales and marketing efforts, particularly in broadband data communications, and pay increased sales commissions.

GENERAL AND ADMINISTRATIVE. General and administrative expense consists primarily of compensation and associated costs relating to general and administrative personnel, professional fees and allocated occupancy costs for these operations. General and administrative expense was $1.0 million, or 164.5% of revenue, for fiscal 1998, $1.2 million, or 5.6% of revenue, for fiscal 1999, and $3.4 million or 4.2% of revenue, for fiscal 2000. The year-to-year increases in absolute dollars were due primarily to the hiring of additional personnel and a resulting increase in salary and related costs of approximately $1.6 million from fiscal 1999 to fiscal 2000, and increased legal, accounting and consulting fees of approximately $403,000 from fiscal 1999 to fiscal 2000. We expect that general and administrative expense will continue to increase in absolute dollars as we hire additional personnel and incur costs associated with being a public company. We also expect our consulting expenses to increase as a result of post implementation support costs associated with our new enterprise resource planning system which is currently being installed. We expect general and administrative expense to fluctuate as a percentage of revenue due to changes in our sales volume and the fluctuating use of consultants for post implementation support associated with our enterprise resource planning system.

AMORTIZATION OF STOCK COMPENSATION. In connection with the grant of stock options to our employees and directors, we recorded deferred stock compensation of approximately $14.1 million,

32

34

which is being amortized under the accelerated method over the option vesting period. Amortization expense was $42,000, or 0.2% of total revenue for fiscal 1999, and $2.2 million, or 2.7% of total revenue for fiscal 2000. The increase in expense was due to deferred stock compensation recorded in fiscal 2000.

INTEREST INCOME. Interest income reflects interest earned on cash and cash equivalents and investment balances. Interest income was $170,000 in fiscal 1998, $175,000 in fiscal 1999, and $486,000 in fiscal 2000. In each year, the increase in interest income was primarily due to interest earned on higher invested cash balances.

INTEREST EXPENSE. Interest expense consists of interest on our notes payable to bank and capital lease obligations. Interest expense was $164,000 in fiscal 1998, $101,000 in fiscal 1999, and $156,000 in fiscal 2000. The changes in interest expense were primarily due to fluctuating average debt balances.

COMPARISON OF THE THREE MONTHS ENDED APRIL 30, 1999 AND 2000

NET REVENUE. Net revenue increased from $14.1 million for the three months ended April 30, 1999 to $29.7 million for the three months ended April 30, 2000. Revenue in the first quarter of fiscal 2000 reflects volume shipments of our read channel products only. Revenue in the first quarter of fiscal 2001 primarily reflects increased volume shipments of our read channel products and commencement of shipments of our initial data communications product, which totaled approximately $500,000. Although average selling prices declined by approximately 20% from the first quarter of fiscal 2000 to the first quarter of fiscal 2001, the volume of units shipped increased from approximately 3.7 million units in the first quarter of fiscal 2000 to approximately 9.8 million units in the first quarter of fiscal 2001. Sales of read channel products increased from $14.1 million in the first quarter of fiscal 2000 to $25.9 million in the first quarter of fiscal 2001, while sales of preamplifier products increased from $36,000 in the first quarter of fiscal 2000 to $3.5 million in the first quarter of fiscal 2001.

COST OF PRODUCT REVENUE. Gross profit, which equals product revenue less cost of product revenue, as a percentage of revenue, was essentially flat, decreasing marginally from 55.9% in the three months ended April 30, 1999 to

55.6% in the three months ended April 30, 2000. We expect our gross profit to decrease as a percentage of revenue in future quarters due to increased pricing pressures from our customers as well as from our competitors and due to potential cost increases resulting from limited foundry capacity.

RESEARCH AND DEVELOPMENT. Research and development expense increased from

$2.4 million, or 17.2% of net revenue, for the three months ended April 30, 1999

to $6.1 million, or 20.6% of net revenue, for the three months ended April 30,

2000. The increase in absolute dollars was primarily due to increases of $1.4

million for the hiring of additional development personnel, $480,000 for

prototype wafer costs and services, $366,000 for mask and reticle costs, and

$448,000 for facility and other allocable expenses. We expect that research and

development expense will increase in absolute dollars in future quarters as we

develop new products and increase our number of research and development

personnel.

MARKETING AND SELLING. Marketing and selling expense increased from $2.0 million, or 14.0% of net revenue, for the three months ended April 30, 1999 to $4.1 million, or 13.8% of net revenue, for the three months ended April 30, 2000. The increase in absolute dollars was primarily due to the hiring of additional personnel and a resulting increase in salary and related costs of $782,000, increased sales commissions of $481,000, increased costs of $278,000 related to expanding our sales and marketing activities as we broadened our customer and product base, and increased facility and other allocable expenses of $259,000. We expect that marketing and selling expenses will increase in absolute dollars in future quarters as we hire additional personnel, expand our sales and marketing efforts, particularly in broadband data communications, and pay increased sales commissions.

33

35

GENERAL AND ADMINISTRATIVE. General and administrative expense increased from $0.7 million, or 4.6% of net revenue, for the three months ended April 30, 1999 to $1.5 million, or 5.1% of net revenue, for the three months ended April 30, 2000. The increase in absolute dollars was due primarily to the hiring of additional personnel and a resulting increase in salary and related costs of approximately $736,000. We expect that general and administrative expenses will increase in absolute dollars in future quarters as we hire additional personnel, incur consulting costs for post implementation support for our new enterprise resource planning system and incur costs associated with being a public company.

AMORTIZATION OF STOCK COMPENSATION. Amortization expense increased from

$80,000, or 0.6% of net revenue, for the three months ended April 30, 1999 to

$2.3 million, or 7.6% of net revenue, for the three months ended April 30, 2000.

The increase in expense was due to deferred stock compensation recorded in

fiscal 2000 and the first quarter of fiscal 2001.

INTEREST INCOME. Interest income increased from $52,000 for the three months ended April 30, 1999 to $242,000 for the three months ended April 30, 2000. The increase was due to interest earned on higher invested cash balances.

INTEREST EXPENSE. Interest expense decreased from $29,000 for the three months ended April 30, 1999 to $2,000 for the three months ended April 30, 2000. The decrease was due to a reduction in outstanding debt balances.

QUARTERLY RESULTS OF OPERATIONS

The following tables present unaudited quarterly results, in dollars and as a percentage of net revenue, for each of the nine quarters in the period ended April 30, 2000. We believe this information reflects all adjustments, consisting only of normal recurring adjustments, that we consider necessary for a fair presentation of such information in accordance with generally accepted accounting principles. The results for any quarter are not necessarily indicative of results for any future period.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | QUARTER ENDED |  |  |  |
|  | ------------------------------------------------------------------------------------- | | | | | | | |
|  | APRIL 30, | | JULY 31, | OCTOBER 31, | JANUARY 31, | APRIL 30, | JULY 31, | OCTOBER 31, |
|  |  | 1998 | 1998 | 1998 | 1999 | 1999 | 1999 | 1999 |
|  | --------- | | -------- | ----------- | ----------- | --------- | -------- | ----------- |
|  |  |  |  |  | (IN THOUSANDS) |  |  |  |
| Net revenue..................... | $ | 466 | $ 1,862 | $5,081 | $13,844 | $14,056 | $16,860 | $23,463 |
| Cost of product revenue......... |  | 285 | 1,099 | 2,757 | 5,962 | 6,195 | 7,120 | 8,874 |
|  | ------- | | ------- | ------ | ------- | ------- | ------- | ------- |
| Gross profit.................... |  | 181 | 763 | 2,324 | 7,882 | 7,861 | 9,740 | 14,589 |
| Operating expenses: |  |  |  |  |  |  |  |  |
| Research and development....... |  | 1,451 | 1,098 | 1,377 | 1,911 | 2,422 | 2,946 | 3,716 |
| Marketing and selling.......... |  | 687 | 821 | 1,238 | 1,885 | 1,961 | 2,511 | 2,784 |
| General and administrative..... |  | 254 | 224 | 271 | 441 | 651 | 784 | 793 |
| Amortization of stock |  |  |  |  |  |  |  |  |
| compensation................. |  | -- | -- | 12 | 30 | 80 | 156 | 329 |
|  | ------- | | ------- | ------ | ------- | ------- | ------- | ------- |
| Total operating expenses..... |  | 2,392 | 2,143 | 2,898 | 4,267 | 5114 | 6,397 | 7,622 |
|  | ------- | | ------- | ------ | ------- | ------- | ------- | ------- |
| Operating income (loss)......... |  | (2,211) | (1,380) | (574) | 3,615 | 2,747 | 3,343 | 6,967 |
| Interest income................. |  | 77 | 51 | 28 | 19 | 52 | 72 | 129 |
| Interest expense................ |  | (1) | (9) | (72) | (19) | (29) | (59) | (41) |
|  | ------- | | ------- | ------ | ------- | ------- | ------- | ------- |
| Income (loss) before income |  |  |  |  |  |  |  |  |
| taxes.......................... |  | (2,135) | (1,338) | (618) | 3,615 | 2,770 | 3,356 | 7,055 |
| Provision for income taxes...... |  | -- | (30) | (40) | (413) | (692) | (839) | (1,764) |
|  | ------- | | ------- | ------ | ------- | ------- | ------- | ------- |
| Net income (loss)............... | $(2,135) | | $(1,368) | $ (658) | $ 3,202 | $ 2,078 | $ 2,517 | $ 5,291 |
|  | ======= | | ======= | ====== | ======= | ======= | ======= | ======= |
|  |  | QUARTER ENDED | |  |  |  |  |  |
|  | ----------------------- | | |  |  |  |  |  |
|  | JANUARY 31, | | APRIL 30, |  |  |  |  |  |
|  |  | 2000 | 2000 |  |  |  |  |  |
|  | ----------- | | --------- |  |  |  |  |  |
|  |  | (IN THOUSANDS) | |  |  |  |  |  |
| Net revenue..................... |  | $26,996 | $29,664 |  |  |  |  |  |
| Cost of product revenue......... |  | 11,584 | 13,180 |  |  |  |  |  |
|  |  | ------- | ------- |  |  |  |  |  |
| Gross profit.................... |  | 15,412 | 16,484 |  |  |  |  |  |
| Operating expenses: |  |  |  |  |  |  |  |  |
| Research and development....... |  | 5,368 | 6,118 |  |  |  |  |  |
| Marketing and selling.......... |  | 3,180 | 4,084 |  |  |  |  |  |
| General and administrative..... |  | 1,215 | 1,504 |  |  |  |  |  |
| Amortization of stock |  |  |  |  |  |  |  |  |
| compensation................. |  | 1,610 | 2,261 |  |  |  |  |  |
|  |  | ------- | ------- |  |  |  |  |  |
| Total operating expenses..... |  | 11,373 | 13,967 |  |  |  |  |  |
|  |  | ------- | ------- |  |  |  |  |  |
| Operating income (loss)......... |  | 4,039 | 2,517 |  |  |  |  |  |
| Interest income................. |  | 233 | 242 |  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| Interest expense................ | (27) | (2) |
|  | ------- | ------- |
| Income (loss) before income |  |  |
| taxes.......................... | 4,245 | 2,757 |
| Provision for income taxes...... | (1,061) | (689) |
|  | ------- | ------- |
| Net income (loss)............... | $ 3,184 | $ 2,068 |
|  | ======= | ======= |
|  | 34 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 36 |  |  |  |  |  |
|  | QUARTER ENDED AS A PERCENTAGE OF NET REVENUE | | | | |
|  | ------------------------------------------------------------ | | | | |
|  | APRIL 30, | JULY 31, | OCTOBER 31, | JANUARY 31, | APRIL 30, |
|  | 1998 | 1998 | 1998 | 1999 | 1999 |
|  | --------- | -------- | ----------- | ----------- | --------- |
| Net revenue................... | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Cost of product revenue....... | 61.2 | 59.1 | 54.3 | 43.1 | 44.1 |
|  | ------ | ----- | ----- | ----- | ----- |
| Gross profit.................. | 38.8 | 40.9 | 45.7 | 56.9 | 55.9 |
| Operating expenses: |  |  |  |  |  |
| Research and development..... | 311.4 | 59.0 | 27.1 | 13.7 | 17.2 |
| Marketing and selling........ | 147.4 | 44.1 | 24.4 | 13.6 | 14.0 |
| General and administrative... | 54.5 | 12.0 | 5.4 | 3.2 | 4.6 |
| Amortization of stock |  |  |  |  |  |
| compensation............... | -- | -- | 0.2 | 0.2 | 0.6 |
|  | ------ | ----- | ----- | ----- | ----- |
| Total operating expenses... | 513.3 | 115.1 | 57.1 | 30.7 | 36.4 |
|  | ------ | ----- | ----- | ----- | ----- |
| Operating income (loss)....... | (474.5) | (74.2) | (11.4) | 26.2 | 19.5 |
| Interest income............... | 16.5 | 2.7 | 0.6 | 0.1 | 0.4 |
| Interest expense.............. | (0.2) | (0.5) | (1.4) | (0.1) | (0.2) |
|  | ------ | ----- | ----- | ----- | ----- |
| Income (loss) before income |  |  |  |  |  |
| taxes........................ | (458.2) | (72.0) | (12.2) | 26.2 | 19.7 |
| Provision for income taxes.... | -- | (1.6) | (0.8) | (3.0) | (4.9) |
|  | ------ | ----- | ----- | ----- | ----- |
| Net income (loss)............. | (458.2)% | (73.6)% | (13.0)% | 23.2% | 14.8% |
|  | ====== | ===== | ===== | ===== | ===== |
|  | QUARTER ENDED AS A PERCENTAGE OF NET REVENUE | | | |  |
|  | ------------------------------------------------ | | | |  |
|  | JULY 31, | OCTOBER 31, | JANUARY 31, | APRIL 30, |  |
|  | 1999 | 1999 | 2000 | 2000 |  |
|  | -------- | ----------- | ----------- | --------- |  |
| Net revenue................... | 100.0% | 100.0% | 100.0% | 100.0% |  |
| Cost of product revenue....... | 42.2 | 37.8 | 42.9 | 44.4 |  |
|  | ----- | ----- | ------ | ------ |  |
| Gross profit.................. | 57.8 | 62.2 | 57.1 | 55.6 |  |
| Operating expenses: |  |  |  |  |  |
| Research and development..... | 17.5 | 15.8 | 19.9 | 20.6 |  |
| Marketing and selling........ | 14.9 | 11.9 | 11.8 | 13.8 |  |
| General and administrative... | 4.7 | 3.4 | 4.5 | 5.1 |  |
| Amortization of stock |  |  |  |  |  |
| compensation............... | 0.9 | 1.4 | 6.0 | 7.6 |  |
|  | ----- | ----- | ------ | ------ |  |
| Total operating expenses... | 38.0 | 32.5 | 42.2 | 47.1 |  |
|  | ----- | ----- | ------ | ------ |  |
| Operating income (loss)....... | 19.8 | 29.7 | 14.9 | 8.5 |  |
| Interest income............... | 0.4 | 0.5 | 0.9 | 0.8 |  |
| Interest expense.............. | (0.3) | (0.2) | (0.1) | (0.0) |  |
|  | ----- | ----- | ------ | ------ |  |
| Income (loss) before income |  |  |  |  |  |
| taxes........................ | 19.9 | 30.0 | 15.7 | 9.3 |  |
| Provision for income taxes.... | (5.0) | (7.5) | (3.9) | (2.3) |  |
|  | ----- | ----- | ------ | ------ |  |
| Net income (loss)............. | 14.9% | 22.5% | 11.8% | 7.0% |  |
|  | ===== | ===== | ====== | ====== |  |

Our quarterly results of operations have varied from quarter-to-quarter in the past and we expect them to vary from quarter-to-quarter in future periods. These fluctuations may occur due to a number of factors, including:

* the cyclical nature of the integrated circuit industry;
* the timing and volume of orders and order cancellations from our customers;
* the level of acceptance of our products by existing and potential customers;
* the demand for, seasonality of the markets for, and life cycles of, products incorporating our products;
* our ability to fund, develop, introduce, ship and support new products and product enhancements, and the related timing and costs associated with those activities;
* deferrals of customer orders in anticipation of new products or product enhancements from us or our competitors;
* the loss of one or more of our major customers;
* fluctuations in our manufacturing yields;

* the introduction of competing products by us or our competitors;
* changes in our product mix;
* competitive pricing pressures;
* the cost and availability of capacity at our integrated circuit manufacturers and subcontractors;
* the rate at which new markets emerge for products we are currently developing or for which our design expertise can be utilized to develop new products;
* transition of our markets to new technologies or standards; and
* departures of key personnel.

Net revenue increased from the preceding quarter in each of the nine quarters in the period ended April 30, 2000. All of our sales in each of the eight quarters in the period ended January 31, 2000 have been derived from sales of our read channel and preamplifier products. Our sales in the

35

37

quarter ended April 30, 2000, included approximately $500,000 from initial shipments of our recently introduced broadband data communications product. Gross profit increased in each quarter in fiscal 1999, primarily due to substantial increases in product sales. Gross profit decreased slightly in the first quarter of fiscal 2000, to 55.9% of net revenue, primarily due to increased test and rework costs related to a product design issue with a significant customer. The increases in gross profit in the second and third quarter of fiscal 2000 were primarily due to a reduction in product costs. The decrease in gross profit in the fourth quarter of fiscal 2000, to 57.1% of net revenue, and in the first quarter of fiscal 2001, to 55.6% of net revenue, was due primarily to a decline in yields of our newest, more complex read channel product. Our gross profit may decline in future periods due to the expected introduction of competitive products and increased demand for foundry capacity within the integrated circuit industry.

LIQUIDITY AND CAPITAL RESOURCES

Since our inception, we have financed operations through a combination of private sales of convertible preferred stock, bank loan and capital lease financing and, since fiscal 2000, net cash flow from operations. At April 30, 2000, we had $26.4 million in working capital and $15.7 million in cash and cash equivalents.

We used cash in our operating activities in the amount of $6.8 million in fiscal 1998 and $2.9 million in fiscal 1999. In fiscal 1998, cash used for operating activities was attributable primarily to our net loss. In fiscal 1999, cash used for operating activities was attributable to our net loss and a significant increase in accounts receivable and inventory, partially offset by increases in accounts payable and accrued liabilities. Accounts receivable and inventory increased as a result of the significant increase in revenue in fiscal 1999, particularly in the fourth quarter. Accounts payable and accrued liabilities increased as a result of an overall increase in our inventory levels and operating expenses as our business has grown. Our operating activities provided cash in the amount of $12.6 million in fiscal 2000. The increase in cash was primarily a result of our net income for the period and increases in accounts payable, accrued liabilities and income taxes payable, partially offset by increases in accounts receivable and inventory. Accounts receivable and inventory increased as a result of the significant increase in revenue in fiscal 2000. Accounts payable increased as a result of an overall increase in our inventory levels and operating expenses as our business has grown. The increase in income taxes payable is due to the increasing amount of income earned in Singapore and Bermuda, both of which have tax rates lower than the U.S. federal tax rate. The balance of our accounts receivable at each period-end varies, primarily due to the timing of our shipments within the period. We have not experienced any material collection difficulties. Our operating activities provided cash in the amount of $3.5 million for the three months ended April 30, 2000. The increase in cash was primarily a result of our net income and non cash charges for depreciation and stock compensation amortization for the period, and increases in accounts payable and income taxes payable and a decrease in accounts receivable, partially offset by an increase in inventory. Accounts payable increased as a result of an increase in our inventory levels as we broadened our product base, particularly in broadband data communications, and increased lead times for the procurement of inventories from our foundries.

We used cash in our investing activities in the amount of $1.0 million in fiscal 1998, $1.6 million in fiscal 1999, $6.8 million in fiscal 2000, and $5.7 million for the three months ended April 30, 2000, in each case attributable to purchases of property and equipment. Additionally, in the first quarter of fiscal 2001, our restricted cash increased by $3.0 million due to an investment in a certificate of deposit with a U.S. bank as security for a standby letter of credit with a foundry. The standby letter of credit expires on September 1, 2000.

Net cash provided by financing activities was $6.4 million in fiscal 1998, $6.7 million in fiscal 1999, $5.3 million in fiscal 2000 and $1.4 million for the three months ended April 30, 2000. In fiscal 1998, cash provided by financing activities was primarily attributable to proceeds from the issuance of convertible preferred stock. In fiscal 1999, cash provided by financing activities was primarily

36

38

attributable to proceeds from the issuance of convertible preferred stock, the financing of property and equipment, and the exercise of stock options. In fiscal 2000, cash provided by financing activities was primarily attributable to proceeds from the issuance of convertible preferred stock and the exercise of warrants to purchase convertible preferred stock and the exercise of stock options, partially offset by the repayment of notes payable to our bank. In the first quarter of fiscal 2001, cash provided by financing activities was primarily attributable to proceeds from the exercise of stock options.

In May 1998, we entered into a loan agreement, which was amended in July 1999, and provides for borrowings of up to $8.0 million in the form of line of credit advances based on eligible accounts receivable and inventory, and $3.1 million available in the form of equipment advances. Borrowings accrue interest at the bank's prime rate plus 0.125%, which equaled 8.625% on January 31, 2000, and are secured by our tangible assets. In fiscal 1999 and 2000 we borrowed $3.6 million under this agreement, which we repaid in full in fiscal 2000. On January 31, 2000, we were in compliance with all line of credit covenants, no amounts were outstanding and $8.0 million was available for borrowing. This loan agreement expired in April 2000.

We lease equipment and software under leases with three-year terms. We intend to exercise purchase options at the end of the lease terms for a minimal cost. We also plan to spend up to approximately $12.0 million during the next 12 months for test and other equipment and software. We lease our facilities under a non-cancelable operating lease, which expires in February 2002. We currently intend to either relocate our headquarters to larger facilities or secure additional leased space within the next 12 months. We will incur additional costs related to any relocation or increase in leased facilities, and may have to pay rent on two leases for a period of time if we relocate.

Our relationships with our foundries allow us to cancel all outstanding purchase orders, but require us to pay the foundries for expenses they have incurred in connection with the purchase orders through the date of cancellation. As of April 30, 2000, our foundries had incurred approximately $4.3 million of manufacturing expenses on our outstanding purchase orders.

We believe that the net proceeds from this offering, together with existing cash balances, will be sufficient to meet our capital requirements for at least the next 12 months. After this period, capital requirements will depend on many factors, including the rate of sales growth, market acceptance of our products, costs of securing access to adequate manufacturing capacity, the timing and extent of research and development projects and increases in our operating expenses. To the extent that funds generated by this offering, together with existing cash balances and cash from operations, are insufficient to fund our future activities, we may need to raise additional funds through public or private equity or debt financing. Although we are currently not a party to any agreement or letter of intent with respect to a potential acquisition or strategic arrangement, we may enter into acquisitions or strategic arrangements in the future, which also could require us to seek additional equity or debt financing. Additional funds may not be available on terms favorable to us or at all.

QUANTITATIVE AND QUALITATIVE DISCLOSURE OF MARKET RISKS

INTEREST RATE RISK. Our cash equivalents are exposed to financial market risk due to fluctuation in interest rates, which may affect our interest income. As of April 30, 2000, our cash included money market securities. Due to the short term nature of our investment portfolio, we would not expect our operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest rates. We do not use our investment portfolio for trading or other speculative purposes.

FOREIGN CURRENCY EXCHANGE RISK. All of our sales and substantially all of our expenses are denominated in U.S. dollars, and, as a result, we have relatively little exposure to foreign currency exchange risk. We do not currently enter into forward exchange contracts to hedge exposures denominated in foreign currencies or any other derivative financial instruments for trading or speculative

37

39

purposes. However, in the event our exposure to foreign currency risk increases, we may choose to hedge those exposures.

INFLATION

The impact of inflation on our business has not been material for the fiscal years ended January 31, 1998, 1999 and 2000, and the three months ended April 30, 2000.

RECENT ACCOUNTING PRONOUNCEMENTS

In June 1998, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 133, "Accounting for Derivative Instruments and Hedging Activities," as amended by Statement of Financial Accounting Standards No. 137, "Accounting for Derivative Instruments and Hedging Activities -- Deferral of the Effective Date of FASB Statement No. 133- an amendment of FASB Statement No. 133". SFAS 133 requires that all derivative instruments be recorded on the balance sheet at their fair market value. Changes in the fair market value of derivatives are recorded each period in current earnings or comprehensive income, depending on whether a derivative is designed as part of a hedge transaction, and if so, the type of hedge transaction. All of our revenue and substantially all of our costs are denominated in U.S. dollars, and to date we have not entered into any derivative contracts. We do not expect that the adoption of SFAS 133 will have a material effect on our financial statements. The effective date of SFAS 133 as amended by SFAS 137 is for fiscal quarters of fiscal years beginning after June 15, 2000.

In December 1999, the Securities and Exchange Commission staff released Staff Accounting Bulletin (SAB) No. 101, "Revenue Recognition in Financial Statements," which provides guidance on the recognition, presentation and disclosure of revenue in financial statements. The application of SAB No. 101 did not have a material impact on our financial statements.

38

40

BUSINESS

This prospectus contains forward-looking statements that involve risks and uncertainties. Our actual results may differ significantly from the results discussed in these forward-looking statements. Factors that may cause such a difference include, but are not limited to, those discussed in "Risk Factors".

OUR BUSINESS

We design, develop and market integrated circuits for communications-related markets. Our products provide the critical interface between real world, analog signals and the digital information used in computing and communications systems. We enable our customers to store and transmit digital information reliably and at high speeds. We initially focused our core technology on the data storage market, where we provide high performance products to Seagate, Samsung, Hitachi, Fujitsu and Toshiba, who as a group accounted for 99% of our sales in fiscal 1999, 98% of our sales in fiscal 2000 and 97% of our sales in the first quarter of fiscal 2001. Recently, we applied our technology to the high speed, or broadband, data communications market by introducing products that are used in network access equipment to provide the interface between communications systems and data transmission media. We believe that our core technology can be used to improve performance across a wide range of data communications applications. For example, we are actively developing products for the Gigabit Ethernet, a networking protocol, or format, for connecting devices at data rates of 1,000 megabits per second. In addition, we are committing resources to the development of products for the wireless communications and cable modem markets. For the fiscal year ended January 31, 2000, we generated $81.4 million in net revenue and $13.1 million in net income. For the quarter ended April 30, 2000, we generated $29.7 million in net revenue and $2.1 million in net income.

INDUSTRY BACKGROUND

SATISFYING BANDWIDTH DEMAND

Businesses and consumers today are creating a rapidly growing demand for broadband access to large volumes of information in multiple forms, including voice, video and data. Ryan Hankin Kent, a telecommunications industry market research firm, estimates that North American network data traffic grew to approximately 350,000 trillion bytes, or terabytes, per month in 1999. This demand is being driven by the introduction of new data-intensive computing and communications applications, such as web-based commerce, streaming audio and video, enterprise-wide information systems and telecommuting. In addition, information is increasingly available via networks through a variety of access devices, including personal computers, digital cable set-top boxes used in conjunction with television sets, cable modems, small, handheld computing devices known as personal digital assistants and wireless phones. Improving end-user satisfaction with these applications and devices requires increasingly higher data transfer rates within computing systems and data storage devices and across computer networks, the public telephone infrastructure and the Internet.

Communications systems must transfer data reliably at very high speeds using a wide range of physical media, including magnetic and optical storage disks, twisted pair copper wire, coaxial cable, fiber optic cable and open air. A critical element of these systems is a physical layer device, which performs the important interface functions between the communications system and the media. The physical layer device converts digital computer information into real world analog signals before transmitting them over communications media. The physical layer device also receives analog signals from communications media and converts them to digital data that computers can understand and manipulate.

Physical layer devices often determine the overall performance of the communications system. Achieving high integrity data recovery and transmission becomes increasingly difficult at higher data transfer rates. Data transfer rates, often referred to as bandwidth, are measured in terms of megabits per second transmitted over given media. In order to achieve high integrity in data transmission and

39

41

data recovery at high transfer rates, physical layer devices must overcome a number of factors that can impair signal quality and introduce errors, including substandard media, noise, signal level degradation over distance, interference from adjacent lines and signal echo. In many computing systems and networks, bandwidth bottlenecks arise where the media and physical layer devices are incapable of supporting the required data transfer rates. As transmission speeds approach the fundamental limits of particular transmission media, physical layer devices must increasingly employ sophisticated signal processing algorithms and techniques to accurately recover the transmitted data. A digital signal processing algorithm involves mathematical manipulation of digital data converted from analog form.

High performance communications-related end markets in which bandwidth bottlenecks present critical problems include the data storage and broadband data communications markets.

DATA STORAGE

A substantial portion of all business and personal information is recorded in analog form on magnetic disk drives in data servers, workstations, personal computers and consumer entertainment devices. As end-user data requirements increase, disk drive suppliers must consistently offer drives with faster data transfer rates and higher capacities. Disk capacity is measured by areal density, which is the amount of data stored on one square inch of disk space. Current high performance disk drive systems offer data transfer rates of 400 to 500 million bits per second and capacities of up to 100 gigabytes. In comparison, high performance disk drive systems in 1998 offered data transfer rates of approximately 200 to 250 megabits per second and capacities of up to 50 gigabytes.

A critical component in every disk drive is the read channel. The read channel is a physical layer device that transmits and receives the analog data that is stored on the magnetic disk and converts it to the digital data required for use in computing systems. The read channel plays a critical role in enabling the disk drive to achieve higher data transfer rates and areal densities. Often, the read channel can become the limiting bottleneck for the entire disk drive system because higher data transfer rates complicate recovery of the data stored on the disk. As data tracks are packed more closely together to achieve greater areal density, problems arise from interference between adjacent data tracks. These communication challenges require increasingly sophisticated read channel designs. In addition, as disk drive manufacturers seek to reduce costs, they are increasingly demanding that functions traditionally performed by stand-alone integrated circuits be combined with the read channel into a single integrated circuit.

BROADBAND DATA COMMUNICATIONS

In recent years there has been a rapid increase of data transmitted across and within computer networks, the public telephone infrastructure and the Internet. Communications infrastructures are constantly evolving to support this increase in data transmission demand. In computer networks that span relatively large geographical areas, known as wide area networks, this increase in data transmission demand has driven the deployment of high capacity fiber optic transmission systems and new broadband access technologies, such as cable modems and digital subscriber lines. In computer networks that span relatively small geographical areas, known as local area networks, this increase in data transmission demand has resulted in a transition from the 10 megabit per second Ethernet technology to the 100 megabit per second Fast Ethernet technology. Several manufacturers of physical layer devices have publicly announced that they are developing products based on a new standard, Gigabit Ethernet, which provides data transfer rates of 1,000 megabits per second, to support the increasing data transmission demand. Many businesses have installed computer networks, which requires the installation of copper twisted pair wires. As a result, we believe that businesses have made a significant investment installing copper twisted pair wires to support their local area networks. Based on the estimates of International Data Corporation, or IDC, in 1999 the worldwide installed base of 10 and 100 megabit per second Ethernet network interface cards and

40

42

switch ports, which are devices used to connect computers to networks, totaled approximately 333 million.

In the broadband data communications market, physical layer devices are critical to the deployment of new, higher data rate transmission technologies. Gigabit data transmission rates present significant data recovery challenges. A number of problems, such as interference from adjacent lines and signal echo, arise when transmitting data at gigabit rates on the existing copper twisted pair wire. The most common form of copper twisted pair wire installed was originally designed to support 100 megabit per second data rates. As a result, the deployment of Gigabit Ethernet requires either the costly and time-consuming upgrading of this wiring or the deployment of new physical layer devices that enable gigabit transmission rates on the existing infrastructure.

THE OPPORTUNITY FOR NEW INTEGRATED CIRCUIT SOLUTIONS

The rapidly growing demand for high speed broadband data communications products that enable the transmission of large volumes of data is creating the need for a new generation of integrated circuit solutions. Physical layer devices capable of supporting increasingly higher data transmission rates over existing media infrastructures require sophisticated mixed signal and digital signal processing techniques. Mixed signal technologies employ both analog and digital circuitry in a single integrated circuit. To keep the power consumption of these new solutions at acceptable levels, more efficient yet powerful signal processing algorithms, implemented in silicon, are required. These new generation physical layer devices must also satisfy market demands associated with large production volumes, competitive pricing, high reliability and decreasing size.

THE MARVELL SOLUTION

We design, develop and market integrated circuits for the communications-related markets of high speed, high density data storage and broadband data communications. Our integrated circuits combine precise mixed signal technologies with complex signal processing algorithms. Our products are used for transmitting and recovering digitally converted analog signals to and from various types of broadband communications media. Our products allow our customers to store and move digital data reliably at high data transfer rates while utilizing existing media infrastructures.

Our products target high volume markets where some of the most critical success factors are performance, power consumption, quality and cost. We initially applied our mixed signal and digital signal processing technology to the data storage market, where we provide read channel devices and preamplifiers to meet the high data transfer rate, high areal density and data integrity requirements of our customers. A preamplifier amplifies the low level electrical signal transmitted to and from the recording heads in a disk drive device. As of April 30, 2000, we have shipped nearly 40 million read channels and preamplifiers to the desktop, high performance and portable computing segments of the data storage market. The high performance and portable computing segments have the most demanding performance requirements in terms of data transfer rates and areal densities. More recently, we applied our core technology to developing high performance physical layer devices for the broadband data communications market. We introduced the first member of our data communications product family, a physical layer device for 10 and 100 megabit per second Ethernet and Fast Ethernet applications, in the fourth quarter of calendar year 1999. Our fast Ethernet physical layer devices are manufactured in 0.25-micron CMOS manufacturing process and provide long distance signal transmission capability and low power consumption. We are currently developing our first generation of Gigabit Ethernet physical layer devices for use with existing copper twisted pair wiring infrastructures.

Key features of our technology solutions include:

* MIXED SIGNAL BROADBAND ANALOG FRONT-END TECHNOLOGY. One of the most critical components of many communications-related mixed signal integrated circuits is the analog front-end. The analog front-end is the

analog-to-digital and digital-to-analog converter that

41

43

serves as the interface between the digital signal processor and the physical communications media. We have developed high precision analog front-ends that are implemented in CMOS manufacturing processes. We are able to design these broadband analog front-ends due to a number of innovations, including proprietary self calibration techniques that compensate for the inherent variations of these processes. Our analog circuits are designed to be highly reusable across many of our products and easily scalable to new CMOS processes as they emerge.

* CUSTOM DIGITAL SIGNAL PROCESSORS. We have designed high performance, low power usage digital signal processors for broadband communications applications. These processors are customized to execute our suite of advanced digital signal processing algorithms in real time at high speeds. For example, our latest generation read channel device performs several hundred billion operations per second.
* PROPRIETARY DIGITAL SIGNAL PROCESSING ALGORITHMS. Our advanced digital signal processing algorithms enable data transmission at high speeds across a wide range of physical media with low data error rates. These digital signal processing algorithms improve performance in the presence of media imperfections such as substandard media, noise, signal level degradation over distance, interference from adjacent lines and signal echo. We have developed a broad suite of broadband communications algorithms targeted at both data storage and broadband data communications applications.
* DESIGN FOR ADVANCED CMOS MANUFACTURING PROCESSES. In addition to CMOS, there are several modern processes for manufacturing integrated circuits including Bipolar, BiCMOS, silicon germanium and gallium arsenide. While it is significantly more difficult to design high performance analog integrated circuits in CMOS, CMOS provides multiple benefits compared to other processes, including significantly lower manufacturing cost, more predictable migration to smaller process geometries, more cost effective integration of additional functions in a single integrated circuit and greater worldwide foundry capacity. We have successfully combined advanced analog signal processing blocks with high speed digital signal processors in 0.25- and 0.18-micron CMOS manufacturing processes. Based on conversations with our customers, we believe we have achieved a level of circuit speed performance in CMOS process technologies that has typically only been achieved with more expensive special fabrication techniques, such as BiCMOS.

Key benefits for our customers are:

* HIGH PERFORMANCE. In the data storage market, our products achieve high data transfer rates and areal densities. In the broadband data communications market, our products achieve the required low error rates when used with lower quality media and attain superior signal transmission distance when used with standard media. Our broadband data communications products are designed to enable businesses to upgrade their networks without the expense associated with upgrading to new wiring.
* LOW POWER. Our custom digital signal processors use fewer transistors to perform data transfer functions than the standard designs used by some of our competitors, thereby reducing overall system power usage. We also implement our designs in advanced CMOS processes, which further reduces power requirements. These designs allow our customers to eliminate costly heat reduction components in their products.
* COST EFFECTIVE SOLUTIONS. We are able to lower our manufacturing costs by using advanced manufacturing processes and our custom digital signal processing technology. These processes and technologies allow us to use a smaller silicon chip size, which results in more integrated circuits per wafer. In addition, our products generate less heat, which allows us to use less expensive packaging technologies and achieve lower cost system implementations than for products that generate more heat. These manufacturing advantages reduce the cost

42

44

of next generation communications equipment, enabling our customers to offer their products at competitive prices.

* HIGHER INTEGRATION CAPABILITY. The combination of our use of CMOS manufacturing processes, small silicon chip size and low power requirements allows us to increase the number of functions in a single integrated circuit. These capabilities position us to integrate elements of our customers' designs, currently implemented in discrete integrated circuits, into our products. Integration reduces the overall number of components, thereby reducing overall system cost.
* ACCELERATED TIME TO MARKET. We help our customers rapidly introduce higher performance, lower cost products. Many features of our integrated circuits are software-configurable, allowing our customers to customize circuit operation for their specific applications. In addition, the scalability of our designs helps us more rapidly adopt future process technologies to deliver new generations of products.

MARVELL STRATEGY

Our objective is to be a leading provider of mixed signal and digital signal processing integrated circuit technologies for broadband communications-related markets. Key elements of this strategy include the following:

EXPAND OUR MARKET POSITION BY DEVELOPING NEW SIGNAL PROCESSING TECHNOLOGIES FOR BROADBAND COMMUNICATIONS-RELATED APPLICATIONS

We have built expertise in the core areas of technology that are relevant for broadband communications, including mixed signal circuit design methodologies, broadband signal processing algorithms, custom digital signal processors and system-level expertise. We intend to continue to invest considerable resources in developing new and enhanced algorithms and improved mixed signal and digital signal processing technologies. We expect that our investment will allow us to develop products that can achieve data transmission speeds approaching the fundamental limits of particular transmission media infrastructures. Our core signal processing technologies can be applied to a wide range of broadband communications-related markets, including data storage, data networking, wireless networking and cable modems.

LEVERAGE OUR TECHNOLOGY IN THE BROADBAND DATA COMMUNICATIONS MARKET

We initially applied our mixed signal and digital signal processing technology expertise to the data communications market through the introduction of our physical layer devices using the Fast Ethernet networking protocol. These physical layer devices are manufactured in 0.25-micron CMOS manufacturing processes and provide long distance signal transmission capability and low power consumption. We are currently developing our Gigabit Ethernet physical layer devices. Additionally, we plan to integrate our physical layer devices with functions previously provided by other integrated circuits, such as the media access controller. The media access controller is the component that controls access by different devices to the physical media to ensure that signals sent from different devices over the same channel do not collide.

EXTEND OUR LEADERSHIP POSITION IN THE DATA STORAGE MARKET

The data storage market presents a large volume opportunity for our broadband mixed signal and digital signal processing technologies. We believe our technology effectively addresses the increasing data access rates and higher data integrity and reliability requirements of the data storage markets. We have achieved significant market share in the high performance and portable computing segments of the data storage market. These segments of the data storage market demand the highest performance read channel products. We intend to extend our leadership position in the high performance and portable computing market segments by continuing to develop and introduce products enabling higher data

43

45

transfer rates and areal densities. In addition, we intend to apply our cost effective design to develop products targeted at the general purpose personal computer segment.

STRENGTHEN AND EXPAND OUR RELATIONSHIPS WITH CURRENT AND POTENTIAL CUSTOMERS

Our goal is to achieve design wins with companies that are among the first to adopt new technologies and technology leaders in the data storage and broadband data communications markets. While we design products that can be used by multiple customers, we often customize our products to incorporate our customers' specific requirements. As the markets we address become increasingly complex and competitive, we anticipate that many of our customers will increasingly wish to combine elements of their designs with our own. We intend to jointly develop highly integrated products with our customers to meet their cost and performance requirements and to strengthen our relationships with them. For example, we are actively working with some of our customers to incorporate specific features developed by them into our read channel products.

CAPITALIZE ON WIDELY AVAILABLE CMOS MANUFACTURING PROCESSES AND FABLESS OPERATING MODEL

We intend to continue to use widely available CMOS processes to manufacture our advanced mixed signal and digital signal processing products. We believe this will better enable us to reliably manufacture our products in volume, thereby decreasing our time-to-market and costs, while also facilitating the development of highly integrated products. We are a fabless integrated circuit manufacturer in the sense that we rely on third parties to manufacture, assemble and test our products for us. Our fabless model allows us to focus our resources on the development of proprietary and innovative mixed signal and digital signal processing designs, while reducing capital and operating infrastructure requirements.

MARKETS

We target communications-related markets and applications that require integrated circuit devices for high speed data transmission. We currently offer solutions for two major markets: data storage and broadband data communications.

DATA STORAGE

Demand for data storage is increasing rapidly due to the introduction of new data-intensive computing and communications applications, such as web-based commerce, streaming audio and video, enterprise wide information systems, and telecommuting. IDC estimates that shipments of hard disk drive units will increase at a compound annual growth rate of 15% from 1998 to 2003, reaching 292 million units in 2003. IDC estimates that the market for combined standalone and integrated read channel devices is expected to grow from $733 million in 1998 to $1.8 billion in 2003. We provide solutions tailored to the specific needs of the high performance, portable and general purpose personal computer segments of this market.

HIGH PERFORMANCE. The proliferation of new technologies such as redundant array of independent drives and network-based storage systems is resulting in increased usage of high performance data storage devices. IDC projects a 17% compound annual growth in shipments of high performance hard disk drive units from 15 million in 1998 to 32 million in 2003. High performance computing applications require systems that are capable of storing and retrieving large amounts of data at high rates. As a result, manufacturers of storage devices for the high performance segment place primary importance on disk drive performance, reliability and capacity and are less concerned with the size, power consumption and absolute cost. To accommodate these requirements, we provide integrated circuits that enable reliable data storage devices with high data transfer rates and high capacity that are essential for complex, large-scale processing environments.

PORTABLE. IDC projects a 15% compound annual growth in shipments of portable hard disk drive units from 17.5 million in 1998 to 34 million in 2003. Manufacturers of storage devices for the portable

44

46

segment are primarily concerned with power consumption, heat dissipation, cost and areal density. Our product family targeted at this market segment incorporates advanced digital signal processing technologies. These elements allow us to provide very low power consumption integrated circuits that can accommodate high data transfer rates and enable very high areal density disk drives.

GENERAL PURPOSE PERSONAL COMPUTERS. IDC projects a 15% compound annual growth in shipments of general purpose personal computer hard disk drive units from 111 million in 1998 to 222 million in 2003. Personal computer users have become increasingly price sensitive. As a result, disk drive manufacturers focused on this segment require integrated circuit components that facilitate design for high volume, low cost manufacturing. Our CMOS-based design is well suited to high volume, low cost manufacturing, scalable performance and integration. In addition, due to our ability to deliver high performance data transfer rates while meeting the cost requirements of the general purpose personal computer segment, we offer manufacturers of general purpose personal computer data storage products a migration path for building the higher performance drives of the future. In addition, we expect that emerging consumer entertainment devices, such as digital camera devices, digital video recorders and digital audio entertainment centers, will increasingly use data storage systems.

BROADBAND DATA COMMUNICATIONS

As businesses and consumers seek faster access to increasing amounts of information through local area networks and wide area networks, such as the Internet, networks are constrained in their ability to process and transmit information quickly. As a result, the high speed networking equipment market is undergoing a rapid transition from first generation Ethernet technologies operating at 10 megabits per second to newer technologies, including Fast Ethernet and Gigabit Ethernet. A majority of the local area network equipment sold today is based on the Fast Ethernet standard. Based on IDC estimates, shipments of 10 and 100 megabits per second Fast Ethernet network interface cards and switch ports will grow from 136 million in 1999 to 316 million in 2003. As lower cost, lower power consumption Gigabit Ethernet physical layer devices become available, we believe that Gigabit Ethernet will emerge as an important local and wide area network communications technology.

PRODUCTS

We design, develop and market integrated circuits for the communications-related markets of high speed, high density data storage and broadband data communications. Our integrated circuits utilize proprietary mixed signal and digital signal processing technologies.

DATA STORAGE PRODUCTS

READ CHANNEL. The read channel is an integrated circuit providing the interface between the analog signals from magnetic storage media and the digital signals that computers can understand and manipulate. Our read channel products allow our customers to achieve fast data transfer rates, high areal densities and low power dissipation. Our read channels are designed in CMOS manufacturing processes and use customized digital signal processors and broadband analog front-ends. We introduced our first generation of read channels in 1997 and have introduced two subsequent generations of signal processing technology enhancements since then. We have migrated our manufacturing process technology from 0.5- to 0.18-micron and our product speed from 240 to 750 megabits per second. Our read channel integrated circuits target specific feature and performance requirements of high performance, portable and general purpose personal computer customers. Beginning with the 88C4000 product family, we implemented a strategy to consolidate the signal processing algorithms required by each of our different market segments into a single integrated circuit design. This strategy provides cost savings and reduced product line complexity.

We are actively working with our customers to incorporate specific features requested by them in our read channel products. In an effort to enhance performance and lower cost, we are developing

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integrated products that incorporate the read channel, the disk drive controller and embedded memory functions in one integrated circuit.

Our current read channel products are shown in the table below.

- -------------------------------------------------------------------------------------------------------------

CMOS INTRODUCTION

READ CHANNEL DESCRIPTION PERFORMANCE PROCESS DATE\*

- -------------------------------------------------------------------------------------------------------------

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 88P2010 | First generation read channel for | 240Mbits/s | 0.5(Greek mu)m | 1st Qtr 1997 |
|  | use in high performance storage |  |  |  |
|  | systems such as high end |  |  |  |
|  | workstations. |  |  |  |

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|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 88C3000 | Second generation | read channel | 360Mbits/s | 0.35(Greek mu)m | 1st Qtr 1998 |
|  | for use in higher | density high |  |  |  |

performance storage systems.

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 88C3100 | Second generation read channel | 300Mbits/s | 0.35(Greek mu)m | 2nd Qtr 1998 |
|  | for extremely high user bit |  |  |  |
|  | densities in portable storage |  |  |  |

applications.

- -------------------------------------------------------------------------------------------------------------

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 88C3020 | Lower speed derivative of the | 280Mbits/s | 0.35(Greek mu)m | 3rd Qtr 1998 |
|  | 88C3000 for use in general |  |  |  |
|  | purpose personal computer storage |  |  |  |
|  | products. |  |  |  |

- -------------------------------------------------------------------------------------------------------------

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 88C4200 | Third generation | read channel for | 550Mbits/s | 0.25(Greek mu)m | 1st Qtr 1999 |
|  | high performance | and general |  |  |  |
|  | purpose personal computer storage | |  |  |  |
|  | systems. |  |  |  |  |

- -------------------------------------------------------------------------------------------------------------

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 88C4220 | Derivative of the 88C4200 for | 380Mbits/s | 0.25(Greek mu)m | 1st Qtr 1999 |
|  | lower speed but higher user bit |  |  |  |
|  | density portable storage systems. |  |  |  |

- -------------------------------------------------------------------------------------------------------------

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 88C4300 | Third generation read channel for | 550Mbits/s | 0.25(Greek mu)m | 1st Qtr 2000 |
|  | future portable and high-end |  |  |  |
|  | general purpose personal computer |  |  |  |

applications.

- -------------------------------------------------------------------------------------------------------------

88C5200 Fourth generation read channel 750Mbits/s 0.18(Greek mu)m 1st Qtr 2000 for use in future high

performance storage systems.

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* Introduction date refers to the calendar quarter in which product samples were initially made available to a customer for evaluation purposes. These products may not be available in commercial volumes for one or more quarters following sample introduction.

PREAMPLIFIER. A preamplifier amplifies the low level electrical signal transmitted to and from the recording heads in a disk drive device. Preamplifiers operate in two basic modes: read and write. In read mode, preamplifiers provide initial amplification of the high bandwidth signal from the read head. In write mode, the preamplifier provides the write head with the high frequency switched current required for writing on the magnetic media. We provide the only commercially available preamplifiers manufactured in 0.5-micron CMOS processes. Our CMOS-based preamplifier products provide high performance at a lower manufacturing cost than standard BiCMOS-based products. We introduced our first preamplifier product in the third quarter of 1998 and our second-generation product in the second quarter of 1999. We have also introduced derivative products targeted at a range of applications for each of these product families.

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Our current preamplifier products are shown in the table below.

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CMOSINTRODUCTION

PREAMPLIFIERS DESCRIPTION PERFORMANCE PROCESS DATE\*

- -------------------------------------------------------------------------------------------------------------

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 81G3004 | 4-channel derivative of the | 300Mbits/s | 0.5(Greek mu)m | 3rd Qtr 1998 |
|  | 81G3018 design for two-disk |  |  |  |

storage platforms.

- -------------------------------------------------------------------------------------------------------------

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 81G3018 | 8-channel high gain-bandwidth | 300Mbits/s | 0.5(Greek mu)m | 4th Qtr 1998 |
|  | preamplifier. |  |  |  |

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 81G3002 | 2-channel derivative of the | 300Mbits/s | 0.5(Greek mu)m | 2nd Qtr 1999 |
|  | 81G3018. |  |  |  |

- -------------------------------------------------------------------------------------------------------------

81G4008 8-channel second generation high 500Mbits/s 0.5(Greek mu)m 2nd Qtr 1999 gain-bandwidth preamplifier.

- -------------------------------------------------------------------------------------------------------------

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 81G4014 | 4-channel derivative | of the | 500Mbits/s | 0.5(Greek mu)m | 4th Qtr 1999 |
|  | 81G4008 for two-disk | storage |  |  |  |

platforms.

- -------------------------------------------------------------------------------------------------------------

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 81G4002 | 2-channel derivative of the | 500Mbits/s | 0.5(Greek mu)m | 1st Qtr 2000 |
|  | 81G4008. |  |  |  |

* -------------------------------------------------------------------------------------------------------------
* ---------------
* Introduction date refers to the calendar quarter in which product samples were initially made available to a customer for evaluation purposes. These products may not be available in commercial volumes for one or more quarters following sample introduction.

BROADBAND DATA COMMUNICATIONS PRODUCTS

We are applying our mixed signal and digital signal processing technology to a variety of broadband data communications markets, including Fast and Gigabit Ethernet. Our integrated circuits provide the core functionality required for building Ethernet network interface cards, routers, repeaters, hubs and switches.

FAST ETHERNET PRODUCTS. Our first products for the Fast Ethernet data communications market are highly integrated, physical layer devices. These devices contain the active circuitry, or ports, needed for interfacing with up to six or eight independent network connections and are typically used by our customers in Fast Ethernet repeaters, hubs, switches and routers. We have designed our products to enable reliable communication over long cable distances and lower quality cable installations.

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Our current Fast Ethernet products are listed in the table below.

- --------------------------------------------------------------------------------------------------------------

DATA COMMUNICATIONS CMOS INTRODUCTION

PRODUCTS DESCRIPTION PERFORMANCE PROCESS DATE\*

- --------------------------------------------------------------------------------------------------------------

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 88E3080 | 8-port digital signal processing | | 10/100Mbits/s 0.25(Greek mu)m | 4th Qtr 1999 |
|  | based Fast Ethernet physical | |  |  |
|  | layer device | for use in workgroup |  |  |
|  | and enterprise repeaters, hubs, | |  |  |
|  | switches and | routers. |  |  |

- --------------------------------------------------------------------------------------------------------------

88E3060 6-port digital signal processing 10/100Mbits/s 0.25(Greek mu)m 1st Qtr 2000 based Fast Ethernet physical

layer device for use in general

purpose personal computer hubs

and switches.

* --------------------------------------------------------------------------------------------------------------
* ---------------
* Introduction date refers to the calendar quarter in which product samples were initially made available to a customer for evaluation purposes. These products may not be available in commercial volumes for one or more quarters following sample introduction.

GIGABIT ETHERNET PRODUCTS. We recently began early customer sampling of our latest product for the broadband communications market, a Gigabit Ethernet physical layer device. We were the first to publicly announce the introduction of a Gigabit Ethernet physical layer device in a 0.18-micron CMOS manufacturing process. The design for this product incorporates sophisticated digital signal processing algorithms, as well as higher resolution analog-front-ends, to overcome the reduced signal quality of gigabit data rate signals on standard copper twisted pair wire. Target applications include network interface cards, routers, repeaters, hubs and next-generation switches.

Samples of our Gigabit Ethernet physical layer device have been shipped to some of our major customers for testing. In addition, some of these customers are beginning the design process of integrating our device with their products. We have submitted our Gigabit Ethernet physical layer device to our foundry to implement some minor revisions to the logic circuits. We intend to commence commercial production as soon as we can after the revisions are made. However, we cannot predict when and if commercial production will begin. For a further description of the risks associated with introducing this new product, see the discussion in the "Risk Factors" section of this prospectus. We also recently entered into an agreement with Intel Corporation. Our agreement with Intel, which is described in more detail below under the heading "Agreement with Intel", relates to the joint development of a device integrating our Gigabit Ethernet physical layer device with an Intel networking product.

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CUSTOMERS, SALES AND MARKETING

Our sales and marketing strategy is to achieve design wins with companies that are among the first to adopt new technologies and technology leaders in each of our selected markets. Our direct sales force targets emerging high growth markets that have high intensity communications processing requirements. Our customers for read channel and preamplifier products are manufacturers of hard disk drives for the enterprise, mobile and desktop markets. As of April 30, 2000, we have shipped nearly 40 million read channels and preamplifiers to our customers in the data storage industry. A small number of our customers have historically accounted for a substantial portion of our revenue. The percentage of our revenue accounted for by our five major customers in fiscal 1999 and 2000 and the three months ended April 30, 2000 are set forth below.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | PERCENTAGE OF REVENUE | |
|  | ------------------------------ | | |
|  | YEAR ENDED | |  |
|  | JANUARY 31, | | THREE MONTHS |
|  | ------------ | | ENDED |
| CUSTOMER | 1999 | 2000 | APRIL 30, 2000 |
| -------- | ---- | ---- | -------------- |
| Samsung......................................... | 46% | 36% | 45% |
| Seagate......................................... | 43 | 24 | 16 |
| Hitachi......................................... | 7 | 14 | 20 |
| Fujitsu......................................... | 2 | 14 | 12 |
| Toshiba......................................... | 1 | 10 | 4 |
|  | -- | -- | -- |
| Total................................. | 99% | 98% | 97% |

We recently introduced two data communications products, our eight-port and six-port Fast Ethernet physical layer devices. We first began shipping for evaluation our eight-port physical layer device in December 1999 and our six-port physical layer device in March 2000. In March 2000, our eight-port Fast Ethernet physical layer device began shipping to customers for revenue. Other potential customers are currently designing the eight-port physical layer device into their products. Our target customers for this product are leading manufacturers of high speed networking equipment.

To date, substantially all of our data storage product sales have been made through our direct sales force of nine people. We also complement and support our direct sales force with manufacturer's representatives in North America and Asia. In the first calendar quarter 2000, we entered into our first distribution agreement to support our sales and marketing activities in the data communications market, and we plan to enter into other distribution agreements in the near term. We anticipate that sales through distributors will increase as a percentage of our revenues in future periods. However, we expect a significant percentage of our sales will continue to come from direct sales to key customers. As of May 31, 2000, our sales and marketing organization consisted of 70 employees and 11 manufacturers' representatives. In November 1999, our Japanese subsidiary, Marvell Japan, opened a new technical and sales support facility in Japan to provide greater support for our international customers.

Our sales are made under purchase orders received between one and four months prior to the scheduled delivery date. These purchase orders can be cancelled without charge if notice is given within an agreed upon period. Because of the scheduling requirements of our foundries, we generally place firm orders for products with our suppliers up to sixteen weeks prior to the anticipated delivery date and prior to an order for the product. We typically warrant our products for a 90-day period. To date, we have not experienced material product returns or warranty expense.

Our marketing team works in conjunction with our sales force and is organized around our product applications. Due to the complexity of our products, we introduce our new products to major customers with a global tour by a marketing, sales and engineering team. We believe that individual meetings are the most effective and rapid means of communicating the capabilities, benefits and extremely technical specifications of each new product.

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We use field application engineers to provide intensive technical support and assistance to existing and potential customers in designing, testing and qualifying systems designs that incorporate our products. We believe that superior field applications engineering support plays a pivotal role in building long-term relationships with our customers by improving our customers' time-to-market, maintaining a high level of customer satisfaction and encouraging customers to use our next generation of products. As of May 31, 2000, we had ten field application engineers.

AGREEMENT WITH INTEL

Effective May 19, 2000, we entered into an agreement with Intel Corporation for the integration of our Gigabit Ethernet physical layer device and an Intel networking product for the personal computer end user market. The integrated device that we develop pursuant to the agreement may be sold only to Intel. Under the agreement, Intel is required to purchase its requirements for any similar item from us through the one-year period after the sampling date, which means the date Intel first makes the integrated device generally available for purchase. The term of the agreement is two years from the sampling date, subject to Intel's right to terminate the agreement early. If Intel provides us with notice of early termination after the sampling date, Intel will remain obligated to purchase its requirements for any similar integrated device from us during the one-year period following Intel's notice of early termination.

Under the agreement, Intel may purchase the integrated device from us at specified prices. Alternatively, Intel may elect to purchase the integrated device from us at prices based on our cost of product and the price at which Intel sells the product, which may impact our margin on sales of the integrated device.

The agreement includes exclusivity provisions that provide that we may not deliver or license our Gigabit Ethernet physical layer device technology to any third party under an agreement that would permit that third party to integrate that technology with a device similar to the Intel networking product. We further agreed not to design or perform any other work with anyone other than Intel on any chip that integrates our Gigabit Ethernet physical layer device with a device similar to the Intel networking product for use in developing a product similar to the integrated device. The exclusivity provisions generally terminate upon the earlier of notification of early termination of the agreement or the end of the second calendar quarter after the sampling date. The agreement does not restrict our sales of stand-alone Gigabit Ethernet physical layer devices. The agreement also does not restrict sales of other integrated devices provided those devices do not integrate our Gigabit Ethernet physical layer device technology with devices similar to the Intel networking device that is the subject of our agreement with Intel.

MARVELL TECHNOLOGY

We believe our key technical competitive advantages result from the collection of proprietary technologies that we have developed since our inception. Our products are based on the following technologies:

* high bandwidth analog front-end technology;
* advanced communications algorithms;
* custom digital signal processors; and
* reusable building blocks for integrated system-on-a-chip design.

HIGH BANDWIDTH ANALOG FRONT-END TECHNOLOGY

We have developed significant expertise in mixed signal circuit design architectures and techniques required to design high performance analog front-ends, which provide the interface between the digital signal processor and the physical communications media. We have developed this technology for use with advanced CMOS manufacturing processes, which allows us to cost effectively

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integrate complex digital signal processing functions with other high level system functions on a small silicon chip. Our mixed signal circuits achieve performance levels that are associated with more expensive, special purpose integrated circuit manufacturing process technologies, such as BiCMOS. For example, our analog front-ends for use in read channel applications achieve conversion rates of up to 900MHz using a 0.18-micron CMOS process. A conversion rate of 900 MHz means that the analog to digital converter completes 900 million analog to digital conversion cycles per second. In addition to achieving high performance, our mixed signal circuits are designed to compensate for variations inherent in current 0.25- and 0.18-micron CMOS manufacturing processes.

Our high bandwidth analog front-end technology can be used in various communications-related applications. We are currently developing experimental mixed signal technologies for extreme high bandwidth applications, such as physical layer devices for fibre optic media operating at data rates of up to

2.5 gigabits per second for use in a high-speed shared storage devices, known as storage area networks.

ADVANCED COMMUNICATIONS ALGORITHMS

We have also developed complex communications algorithms that are required for broadband data communications-related applications. Our communications algorithms perform the signal equalization, data detection and error corrections required to overcome media imperfections such as substandard media, noise, signal level degradation over distance, interference from adjacent lines and signal echo. These communications algorithms enable us to design digital signal processors for use in data storage, Fast Ethernet and Gigabit Ethernet applications as well as other possible future applications, such as cable modem and broadband wireless products.

CUSTOM DIGITAL SIGNAL PROCESSORS

We target communications-related markets, which require very fast data transfer rates and low power dissipation. To achieve the required performance levels, we implement our signal processing algorithms in custom-designed digital signal processors. Our Fast Ethernet digital signal processors performs several billion operations per second while dissipating less than 100 milliwatts of power. Our fastest read channel digital signal processors performs over 50 billion operations per second while dissipating less than 750 milliwatts of power. Such performance is not readily available using standard programmable digital signal processing solutions. We believe our custom digital signal processors, when combined with our library of digital signal processing circuit building blocks, will enable us to implement application specific digital signal processors that can perform at computational rates of up to one trillion operations per second in very small silicon chips. Small silicon chips result in low power dissipation, small packaging and low overall system cooling requirements.

REUSABLE BUILDING BLOCKS FOR INTEGRATED SYSTEM-ON-A-CHIP DESIGN

We have developed a proprietary set of manufacturing process design rules that we believe are scalable over several generations of manufacturing process geometries. We have also collected a significant library of circuit building blocks that can be reused with minimum modification in successive generations of products. These design methodologies allow us to shorten time-to-market for new products and take advantage of the latest CMOS manufacturing processes. We believe that as manufacturing process geometries continue shrinking, our customers will pursue silicon integration strategies. To address this market development, we have recently developed our own embedded memory technology for complex system-on-a-chip designs that require large amounts of repairable on-chip memory. We are also in the process of developing products that integrate our core mixed signal and digital signal processors with our customers' silicon components and on-chip memory.

RESEARCH AND DEVELOPMENT

We believe that our future success depends on our ability to introduce improvements to our existing products and to develop new products that deliver cost effective solutions for both existing

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and new markets. Our research and development efforts are directed largely to the development of proprietary circuit designs for high bandwidth communications-related applications. We devote a significant portion of our resources to expanding our core technology library with designs that enable high performance, reliable communications over a variety of physical media. We are also focused on incorporating functions currently provided by stand-alone integrated circuits into our products to reduce our customers' overall system costs.

We have assembled a core team of engineers who have extensive experience in the areas of mixed signal circuit design, digital signal processing, and CMOS technology. As of May 31, 2000, we had 114 employees in engineering and process development, including 74 with advanced degrees. We have invested, and expect that we will continue to invest, significant funds for research and development. Our research and development expense was approximately $5.8 million in fiscal 1999, $14.5 million in fiscal 2000, and $6.1 million for the three months ended April 30, 2000.

MANUFACTURING

We believe our fabless manufacturing approach provides us with the benefits of superior manufacturing capability as well as flexibility to move the manufacture, assembly and test of our products to those vendors that offer the best capability at an attractive price. Our engineers work closely with our foundries and other subcontractors to increase yields, lower manufacturing costs and improve quality.

INTEGRATED CIRCUIT FABRICATION

Our integrated circuits are fabricated using widely available CMOS processes, which provide us greater flexibility to engage independent foundries to manufacture integrated circuits. By outsourcing our manufacturing, we are able to avoid the cost associated with owning and operating our own manufacturing facility. This allows us to focus our efforts on the design and marketing of our products. We currently outsource substantially all of our integrated circuit manufacturing to Taiwan Semiconductor Manufacturing Company. We work closely with Taiwan Semiconductor to forecast on a monthly basis our manufacturing capacity requirements. Our integrated circuits are currently fabricated in 0.50-, 0.35- and 0.25-micron manufacturing processes. We are also currently sampling 0.18-micron products with customers. Because finer manufacturing processes lead to enhanced performance, smaller silicon chip size and lower power requirements, we continually evaluate the benefits and feasibility of migrating to smaller geometry process technology in order to reduce cost and improve performance.

ASSEMBLY AND TEST

Our silicon chips are shipped from our third-party foundries to our third-party assembly and test facilities where they are assembled into finished integrated circuit packages and tested. Our products are designed to use low cost, standard packages and to be tested with widely available test equipment. In addition, we specifically design our integrated circuits for ease of testability, further reducing manufacturing costs. We outsource all of our product packaging and testing requirements to several third-party assembly and test subcontractors, including ST Assembly Test Services in Singapore, Siliconware Precision Industries in Taiwan and Amkor Technology in the Philippines.

QUALITY ASSURANCE

We build quality into our products starting with the design and development process. Our designs are subjected to extensive circuit simulation under extreme conditions of temperature, voltage and processing before being committed to manufacture. We pre-qualify each of our subcontractors and conduct regular in-depth quality audits. We closely monitor foundry production to ensure consistent overall quality, reliability and yield levels. All of our independent foundries and assembly and test subcontractors have been awarded ISO 9000 certification.

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INTELLECTUAL PROPERTY

Our future revenue growth and overall success depend in large part on our ability to protect our intellectual property. We rely on a combination of patents, copyrights, trademarks, trade secret laws, contractual provisions and licenses to protect our intellectual property. We also enter into confidentiality agreements with our employees, consultants, suppliers and customers and seek to control access to, and distribution of, our documentation and other proprietary information. Despite these precautions, it may be possible for a third party to copy or otherwise obtain and use our products and technology without authorization, develop similar technology independently or design around our patents.

As of June 6, 2000, we had been granted nine United States patents on various aspects of our technology, with expiration dates ranging from 2015 to 2018, and we had filed 21 additional United States patent applications. However, there can be no assurance that patents will ever be issued for these applications. Furthermore, it is possible that our patents may be invalidated, circumvented, challenged or licensed to others.

In addition, the laws of some foreign countries in which our products are or may be developed, manufactured or sold, including various countries in Asia, may not protect our products or proprietary information to the same extent as do the laws of the United States and thus make the possibility of piracy of our technology and products more likely in these countries.

We have expended and will continue to expend considerable resources in establishing a patent position designed to protect our intellectual property. While our ability to compete is enhanced by our ability to protect our intellectual property, we believe that, in view of the rapid pace of technological change, the combination of the technical experience and innovative skills of our employees may be as important to our business as the legal protection of our patents and other proprietary information.

From time to time, we may desire or be required to renew or to obtain licenses from third parties in order to further develop and market commercially viable products effectively. We cannot be sure that any necessary licenses will be available or will be available on commercially reasonable terms.

The integrated circuit industry is characterized by vigorous protection and pursuit of intellectual property rights, which have resulted in significant and often time consuming and expensive litigation. Although there is currently no pending or threatened intellectual property litigation filed against us, there can be no assurance that third parties will not assert claims of infringement against us. Such claims, even those without merit, could be time consuming and result in costly litigation. We may not prevail in any such litigation or may not be able to license any valid and infringed patents from third parties on commercially reasonable terms. Litigation, regardless of the outcome, is likely to result in substantial cost and diversion of our resources, including our management's time. Any such litigation could harm our business and financial results.

COMPETITION

The markets for data storage and broadband data communications devices are intensely competitive and characterized by rapid technological change, evolving standards, short product life cycles and pricing pressures imposed by high volume customers. We expect competition to intensify as current competitors expand their product offerings and new competitors enter the market.

We believe that our ability to compete successfully in the rapidly evolving markets for our products depends on a number of factors, including:

* performance, features, quality and price of our products;
* the timing and success of new product introductions by us, our customers and our competitors;
* the emergence of new industry standards;
* our ability to obtain adequate foundry capacity;

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* the number and nature of our competitors in a given market; and
* general market and economic conditions.

Our current products face competition from a number of sources. We believe our principal competitors in the read channel market are Cirrus Logic, Lucent Technologies, NEC, STMicroelectronics and Texas Instruments. Our primary competitors in the preamplifier market are Texas Instruments and Lucent Technologies. In expanding our presence in the broadband data communications market, we expect to compete with Broadcom, Intel and National Semiconductor.

Many of our current competitors and potential competitors have longer operating histories, greater name recognition, access to larger customer bases and significantly greater financial, sales and marketing, manufacturing, distribution, technical and other resources than us. As a result, they may be able to respond more quickly to changing customer demands or to devote greater resources to the development, promotion and sale of their products than we can. Our current or future competitors may develop and introduce new products that will be priced lower, provide superior performance or achieve greater market acceptance than our products. In addition, in the event of a manufacturing capacity shortage, these competitors may be able to manufacture products when we are unable to do so.

Furthermore, current or potential competitors have established or may establish, financial and strategic relationships among themselves or with existing or potential customers or other third parties to increase the ability of their products to address the needs of our prospective customers. Accordingly, it is possible that new competitors or alliances among competitors could emerge and rapidly acquire significant market share, which would harm our business.

In addition, many of our customers and potential customers have substantial technological capabilities and financial resources. Some customers have already developed, or in the future may develop, technologies that will compete directly with our products. We also may face competition from suppliers of products based on new or emerging technologies.

Historically, average unit selling prices in the integrated circuit industry in general, and for our products in particular, have decreased over the life of a particular product. We expect that the average unit selling prices of our products will continue to be subject to significant pricing pressures. In order to offset expected declines in the average unit selling prices of our products, we will likely need to reduce the cost of our products. We intend to accomplish this by implementing design changes that lower the cost of manufacturing, assembly and testing, by negotiating reduced charges by our foundries as and if volumes increase, and by successfully managing our manufacturing and subcontracting relationships. Because we do not operate our own manufacturing, assembly or testing facilities, we may not be able to reduce our costs as rapidly as companies that operate their own facilities. If we fail to introduce lower cost versions of our products in a timely manner or to successfully manage our manufacturing, assembly and testing relationships, our business would be harmed.

EMPLOYEES

As of May 31, 2000, we had a total of 274 employees, of which 114 were in research and development, 70 in sales and marketing, 41 in operations and 49 in general and administration. Our employees are not represented by any collective bargaining agreements, and we have not experienced any work stoppage. We consider our relations with our employees to be good.

FACILITIES

Our primary facility, housing our research and design function as well as elements of marketing and administration, is in Sunnyvale, California. This facility consists of approximately 66,000 square feet and is leased until February 15, 2002. In addition, our other subsidiaries in Singapore and Japan have leased space for their operations. Based upon our estimates of future hiring, we believe that these facilities will be inadequate to meet our requirements past 2000. Accordingly, we will need to

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56

locate additional space in California and may find it necessary to vacate our current locations. The additional space we anticipate requiring may cost substantially more than our existing space, and we may incur significant additional capital expenditures for construction of tenant improvements.

LEGAL PROCEEDINGS

We are not currently a party to any legal proceedings. However, we are engaged in discussions with Mr. Gordon Steel, our former Chief Financial Officer, regarding the terms of his separation. Mr. Steel did not have an employment agreement with us. Although we believe we are not obligated to do so, we made Mr. Steel an offer in connection with his separation, which Mr. Steel did not accept. If we are unable to resolve the terms of Mr. Steel's separation, it is possible that we may in the future become involved in litigation relating to his separation.

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57

MANAGEMENT

We are the parent of Marvell Semiconductor, Inc., a California corporation we founded to develop proprietary technology and to provide selected support services to us. Set forth below is certain information regarding the executive officers, directors and some of the other officers of both Marvell Technology Group Ltd. and Marvell Semiconductor, Inc. as of June 6, 2000.

|  |  |  |
| --- | --- | --- |
| NAME | AGE | POSITION |
| ---- | --- | -------- |
| Diosdado P. Banatao(1)(2)......... | 53 | Co-Chairman of the Board, Marvell Technology Group Ltd. |
| Sehat Sutardja.................... | 38 | Co-Chairman of the Board, President and Chief Executive |
|  |  | Officer, Marvell Technology Group Ltd.; President and |
|  |  | Chief Executive Officer and Director of Marvell |
|  |  | Semiconductor, Inc. |
| Weili Dai......................... | 38 | Executive Vice President, Assistant Secretary and |
|  |  | Director of Marvell Technology Group Ltd.; Executive Vice |
|  |  | President, General Manager of Data Communications Group |
|  |  | and Director of Marvell Semiconductor, Inc. |
| Pantas Sutardja................... | 37 | Vice President and Director of Marvell Technology Group |
|  |  | Ltd.; Chief Technology Officer and Director of Marvell |
|  |  | Semiconductor, Inc. |
| George Hervey..................... | 53 | Vice President of Finance, and Chief Financial Officer, |
|  |  | Marvell Technology Group Ltd.; Vice President of Finance |
|  |  | and Chief Financial Officer of Marvell Semiconductor, |
|  |  | Inc. |
| Alan J. Armstrong................. | 36 | Vice President of Marketing, Data Storage, Marvell |
|  |  | Semiconductor, Inc. |
| Gani Jusuf........................ | 37 | Vice President of Product Development, Data |
|  |  | Communications, Marvell Semiconductor, Inc. |
| Nersi Nazari...................... | 41 | Vice President of Signal Processing Technology, Marvell |
|  |  | Semiconductor, Inc. |
| George Papa....................... | 51 | Vice President of Sales, Data Communications, Marvell |
|  |  | Semiconductor, Inc. |
| Larry L. Smith.................... | 59 | Vice President of Sales, Data Storage, Marvell |
|  |  | Semiconductor, Inc. |
| LeeChung Yiu...................... | 44 | Vice President of Engineering, Marvell Semiconductor, |
|  |  | Inc. |
| Stephen Zadig..................... | 49 | Vice President of Operations, Marvell Semiconductor, Inc. |
| Herbert Chang(1)(2)............... | 37 | Director, Marvell Technology Group Ltd. |
| John M. Cioffi(2)................. | 43 | Director, Marvell Technology Group Ltd. |
| Paul R. Gray(2)................... | 57 | Director, Marvell Technology Group Ltd. |
| Ron Verdoorn(1)................... | 49 | Director, Marvell Technology Group Ltd. |

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1. Member of the Audit Committee.
2. Member of the Compensation Committee.

DIOSDADO P. BANATAO has served as our Co-Chairman of the Board since October 1995. Mr. Banatao has been a partner in Mayfield Fund, a venture capital fund, since 1998. Prior to joining Mayfield Fund, Mr. Banatao founded S3, Incorporated, a designer and manufacturer of graphics and video accelerators for personal computers and related peripheral products, where he served as President and Chief Executive Officer from 1989 until 1992 and Chairman from 1992 to 1998. Mr. Banatao holds a Bachelor of Science degree in Electrical Engineering from the Mapua Institute of Technology and a Master of Science degree in Electrical Engineering and Computer Science from Stanford University.

SEHAT SUTARDJA, one of our co-founders, has served as our President since inception and as our Co-Chairman of the Board and Chief Executive Officer since August 1995. In addition, he has served as President, Chief Executive Officer and a Director of Marvell Semiconductor, Inc. since its founding.

56

58

From 1989 until 1995, Dr. Sutardja served as a manager and principal project engineer at 8X8 Inc., a designer and manufacturer of digital communications products. Dr. Sutardja received his Master of Science and Ph.D. degrees in Electrical Engineering and Computer Science from the University of California at Berkeley. Dr. Sutardja is the husband of Weili Dai and the brother of Dr. Pantas Sutardja.

WEILI DAI, one of our co-founders, has served as our Vice President, Corporate Assistant Secretary and one of our Directors since inception. Ms. Dai was promoted from Vice President to Executive Vice President in 1996, which position she currently holds. Ms. Dai has also served as Executive Vice President and Director for Marvell Semiconductor, Inc. since its founding. As Executive Vice President for Marvell Semiconductor, Inc., Ms. Dai is the General Manager of the Data Communications Group and is also responsible for the corporate business development and human resources functions. From 1992 until 1995, Ms. Dai was involved in software development and project management at Canon Research Center America, Inc. Ms. Dai holds a Bachelor of Science degree in Computer Science from the University of California at Berkeley. Ms. Dai is the wife of Dr. Sehat Sutardja.

PANTAS SUTARDJA, one of our co-founders, has served as our Vice President and one of our Directors since inception, and as Vice President of Engineering for Marvell Semiconductor, Inc. from its founding until 1999, when he was appointed Chief Technology Officer. Dr. Sutardja has also been a Director of Marvell Semiconductor, Inc. from inception. Previously, Dr. Sutardja served as Research Staff Member at IBM Almaden Research Center from 1988 to 1994. Dr. Sutardja holds Bachelor of Science, Master of Science and Ph.D. degrees in Electrical Engineering and Computer Science from the University of California at Berkeley. Dr. Sutardja is the brother of Dr. Sehat Sutardja.

GEORGE HERVEY joined us in April 2000 as our Vice President of Finance and Chief Financial Officer and in a similar capacity for Marvell Semiconductor, Inc. From March 1997 to April 2000, Mr. Hervey served as Senior Vice President, Chief Financial Officer and Secretary for Galileo Technology Ltd., which manufactures chips which provide Ethernet switching capabilities for high performance local area networks. From June 1992 to February 1997, Mr. Hervey was Senior Vice President of Finance and Chief Financial Officer of S3 Incorporated, a designer and manufacturer of graphics and video accelerators for personal computers and related peripheral products. Mr. Hervey holds a Bachelor of Science degree in Business Administration from the University of Rhode Island.

ALAN ARMSTRONG has served as Vice President of Marketing, Data Storage for Marvell Semiconductor since July 1999. From 1992 until 1999, Dr. Armstrong held various positions at Cirrus Logic Inc., a designer and manufacturer of analog and mixed signal circuits, most recently as Director of Product Planning and Applications for Data Storage Products. Dr. Armstrong holds a Bachelor of Science degree in Electrical Engineering from San Diego State University and Master of Science and Ph.D. degrees in Electrical Engineering from the University of California, San Diego.

GANI JUSUF has served as Vice President of Product Development, Data Communications, since February 2000. From 1998 to February 2000, Dr. Jusuf was a Research and Development Manager for Agilent Technologies, Inc., a subsidiary of Hewlett-Packard, which develops test, measurement and monitoring products and devices. From 1995 to 1998, Dr. Jusuf served as Director of Engineering responsible for product definition and development for Marvell Semiconductor, Inc. Dr. Jusuf holds Bachelor of Science, Master of Science and Ph.D. degrees in Electrical Engineering and Computer Science from the University of California at Berkeley.

NERSI NAZARI has served as Vice President of Signal Processing Technology for Marvell Semiconductor, Inc. since October 1997. From 1994 until 1997, Dr. Nazari served as Chief Technologist at GEC Plessey Semiconductors, a designer and manufacturer of integrated circuits, including data storage and data communications products. Dr. Nazari holds Bachelor of Science degrees in Electrical Engineering and Mathematics from Southern Illinois University, a Master of Science degree in Electrical Engineering from the University of Missouri, and a Ph.D. in Electrical Engineering from the University of Colorado.

57

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GEORGE PAPA joined Marvell Semiconductor, Inc. in February 2000 as Vice President of Sales, Data Communications. From 1997 until 2000, Mr. Papa served as Vice President of Worldwide Sales for Level One Communications, Inc., a subsidiary of Intel Corporation. From 1991 to 1997, Mr. Papa served as Vice President of North American Sales for Siemens Corporation. Mr. Papa holds a Bachelor of Science degree in Electrical Engineering from Northeastern University.

LARRY SMITH has served as Vice President of Sales, Data Storage, for Marvell Semiconductor, Inc. since September 1996. From 1981 until 1996, Mr. Smith served as a manufacturing sales representative for a number of companies, including Silicon Systems Inc., a company specializing in the development and production of both analog and digital integrated circuits for data storage applications.

LEECHUNG YIU has served as Vice President of Engineering for Marvell Semiconductor, Inc. since May 1999. From 1994 until 1997, Dr. Yiu served as the Director of Engineering for SEEQ Technology Inc., a supplier of Ethernet data communications products for networking applications. From 1997 until 1999, Dr. Yiu was the Vice President of Engineering for Newave Semiconductor Corporation, a privately held company developing integrated circuits for the telecommunications market. Dr. Yiu holds a Bachelor of Science degree in Electrical Engineering from National Taiwan University and Master of Science and Ph.D. degrees in Electrical Engineering from the University of California at Berkeley.

STEPHEN ZADIG has served as the Vice President of Operations for Marvell Semiconductor, Inc. since 1996. From 1995 to 1996, Mr. Zadig served as Vice President of Operations for Paradigm Technology Inc., a designer and supplier of high performance SRAM products. From 1990 until 1995, Mr. Zadig served as Vice President of Operations for C-Cube Microsystems Inc., a company that designs and markets integrated circuits that implement digital video encoding and decoding.

HERBERT CHANG has served as one of our Directors since November 1996. Since April 1996, Mr. Chang has been President of InveStar Capital, Inc., a technology venture capital management firm based in Taiwan. From 1994 to 1996, Mr. Chang was Senior Vice President of WK Technology Fund, a venture capital fund. Mr. Chang serves as a director for NetIQ Corporation and Silicon Image, Inc. Mr. Chang holds a Bachelor of Science degree from National Taiwan University and a Master of Business Administration degree from National Chiao-Tung University in Taiwan.

JOHN M. CIOFFI has served as one of our Directors since March 2000. Dr. Cioffi has been a professor of Electrical Engineering at Stanford University since 1986. In 1991, he founded Amati Communications Corporation, which designs and manufactures modems for Asymmetric Digital Subscriber Lines, and served as the Chief Technology Officer until the company's acquisition by Texas Instruments, Inc. in 1998. Dr. Cioffi is an IEEE fellow and serves as a director for ITEX, and on the advisory boards of Coppercom, Gigabit Wireless, Kestrel Solutions, Inc., Charter Ventures, Portview Communications Partners and Accel Partners.

PAUL R. GRAY has served as one of our Directors since March 2000. Dr. Gray currently serves as the Dean of the College of Engineering at the University of California at Berkeley and has been appointed as Executive Vice Chancellor and Provost, effective July 2000. During his 28 year tenure with the University, Dr. Gray has held numerous administrative posts, including Director of the Electronics Research Laboratory, Vice Chairman of the EECS Department for Computer Resources, and Chairman of the Department of Electrical Engineering and Computer Sciences.

RON VERDOORN has served as one of our Directors since January 1998. From January 1999 to the present, Mr. Verdoorn has served as Executive Vice President of Manufacturing for Affymetrix, Inc., a company specializing in the development of technology for acquiring and managing complex genetic information for use in biomedical research, genomics and clinical diagnostics. From 1997 to 1999, Mr. Verdoorn served as an independent consultant to the hard disk drive industry. From 1983 to 1997, Mr. Verdoorn held a number of positions with Seagate Technology, Inc., most recently as Executive Vice President and Chief Operating Officer of Storage Products. Mr. Verdoorn holds a Bachelor of Arts degree in Sociology from Linfield College.

58

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COMPOSITION OF THE BOARD OF DIRECTORS

Our Bye-laws provide for two or more directors and the number of directors is currently fixed at eight. Following the completion of this offering, our Board of Directors will be divided into three classes, each serving staggered three-year terms, which means that only one class of directors will be elected at each annual meeting of shareholders, with the other classes continuing for the remainder of their respective terms, and directors may only be removed for cause by the holders of two-thirds of the shares entitled to vote at an election of directors. Our executive officers are elected by the Board of Directors and serve at the discretion of the Board of Directors.

COMMITTEES OF THE BOARD OF DIRECTORS

We have a Compensation Committee comprised of Messrs. Banatao, Chang, Cioffi and Gray and an Audit Committee comprised of Messrs. Banatao, Chang and Verdoorn. The Compensation Committee has the authority to approve salaries and bonuses and other compensation matters for our officers and consultants, to approve employee health and benefit plans and to administer our stock option plans. The Audit Committee, which is comprised of independent directors, has the authority to recommend the appointment of our independent auditors and to review the results and scope of audits, internal accounting controls and other accounting related matters.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

None of our executive officers serves as a member of the Board of Directors or Compensation Committee of any entity that has one or more executive officers serving as a member of our Board of Directors or Compensation Committee.

DIRECTOR COMPENSATION

Our directors do not receive cash compensation for their service as directors. Under our 1997 Directors' Stock Option Plan, each new non-employee director will receive an option to purchase 180,000 shares of common stock upon joining the Board of Directors. In addition, under the plan, each incumbent non-employee director will be granted an option to purchase an additional 36,000 shares of our common stock annually. For a more detailed description of the 1997 Directors' Stock Option Plan see the discussion in this prospectus under the heading "Management -- Compensation Plans."

59

61

EXECUTIVE COMPENSATION

The following table shows the cash compensation paid or accrued for the fiscal year ended January 31, 2000 to our Chief Executive Officer and each of our most highly compensated executive officers or former executive officers other than the Chief Executive Officer. We did not make any restricted stock awards or long-term incentive plan payments in the fiscal year ended January 31, 2000. The amount of cash compensation does not include the aggregate value of personal benefits or securities, property or other non-cash compensation paid or distributed other than pursuant to a plan that was less than the lesser of $50,000 and 10% of the cash compensation received by such officer.

|  |  |  |
| --- | --- | --- |
| SUMMARY COMPENSATION TABLE |  |  |
|  | ANNUAL | ALL OTHER |
|  | COMPENSATION | COMPENSATION(1) |
|  | ------------ | --------------- |
| Sehat Sutardja.............................................. | $100,000 | $3,081 |
| Co-Chairman of the Board, President and Chief Executive |  |  |
| Officer |  |  |
| Weili Dai................................................... | 100,000 | 3,081 |
| Executive Vice President, Corporate Assistant Secretary |  |  |
| and Director |  |  |
| Pantas Sutardja............................................. | 100,000 | 3,081 |
| Vice President and Director |  |  |
| Gordon M. Steel(2).......................................... | 165,000 | 3,081 |
| Vice President of Finance and Chief Financial Officer |  |  |

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1. These amounts consist of discretionary profit sharing payments.
2. Mr. Steel's employment with us terminated in April 2000. FISCAL YEAR 2000 OPTIONS

No stock options were granted to those executive officers listed in the Summary Compensation Table for the year ended January 31, 2000. However, on May 8, 2000 we granted George Hervey options to purchase 760,000 shares at an exercise price of $10.00 per share, which was the fair market value of the common stock on the grant date as determined by our Board of Directors. We have never granted any stock appreciation rights.

None of those executive officers listed in the Summary Compensation Table exercised stock options during fiscal 2000 or held unexercised options as of January 31, 2000.

EMPLOYMENT CONTRACTS AND CHANGE OF CONTROL ARRANGEMENTS

We do not have employment agreements or change in control agreements with any of our executive officers. Accordingly, our executive officers may resign at any time and the employment of each executive officer may be terminated at any time by the Board of Directors.

COMPENSATION PLANS

1995 STOCK OPTION PLAN

Our Board of Directors adopted our 1995 Stock Option Plan on April 18, 1995. On May 8, 2000, our Board of Directors amended the 1995 Plan to add flexibility to the administration of the plan and to add certain other improvements. We intend to seek shareholder approval of the amendments at our annual general meeting on June 17, 2000. The plan will terminate no later than April 18, 2005. The plan provides for the grant of incentive stock options to our employees and nonstatutory stock options to our employees, directors and consultants. Subject to adjustments for stock splits and similar events, 29,500,000 shares of common stock may be issued under the plan. As of April 30, 2000, 11,492,809 were subject to outstanding options and 5,225,270 were available for future grant. As amended, the plan will provide for annual increases in the number of shares available for issuance on

60

62

the first day of each fiscal year, beginning January 30, 2000, equal to the lesser of 5,000,000 shares, 5% of the outstanding shares on the date of the annual increase, or a number of shares determined by our Board.

Our Board or a committee appointed by the Board administers the stock option plan and determines the terms of options granted, including the exercise price, the number of shares subject to individual option awards and the vesting period of options. The exercise price of nonstatutory options will generally be at least the fair market value of the common stock on the date of grant. The exercise price of incentive stock options cannot be lower than 100% of the fair market value of the common stock on the date of grant and, in the case of incentive stock options granted to holders of more than 10% of our voting power, not less than 110% of the fair market value. The term of an incentive stock option cannot exceed ten years, and the term of an incentive stock option granted to a holder of more than 10% of our voting power cannot exceed five years.

A participant may not transfer rights granted under our stock option plan other than by will, the laws of descent and distribution, or as otherwise provided under the stock option plan. As amended, the plan will provide the Board or committee with broad authority to adjust the treatment of options granted under our stock option plan if we are acquired, including causing them to accelerate and become fully exercisable, if the successor corporation does not assume them or substitute equivalent options in their place. Our Board of Directors may not amend, modify, or terminate the stock plan if the amendment, modification, or termination would impair optionees' rights unless we first obtain the prior written consent of all optionees who would be adversely affected.

2000 EMPLOYEE STOCK PURCHASE PLAN

On May 8, 2000, our Board of Directors approved the 2000 Employee Stock Purchase Plan, the adoption of which we intend to seek at our annual general meeting on June 17, 2000. The purchase plan will terminate no later than 20 years after the Board approval. The purchase plan will provide our employees and those of our participating subsidiaries an opportunity to purchase our common stock through accumulated payroll deductions.

A total of 1,000,000 shares of common stock will initially be reserved for issuance under the purchase plan. In addition, the purchase plan will provide for annual increases in the number of reserved shares on the first day of each calendar year in the plan's term, beginning January 1, 2001, equal to the lesser of 500,000 shares, 0.75% of the outstanding shares on the date of the annual increase, or the amount the Board determines.

Our Board of Directors or a committee appointed by the Board will administer the purchase plan. The Board or committee will have full and exclusive authority to interpret the terms of the purchase plan. In addition, the Board will have the authority to amend or terminate the purchase plan at any time.

Employees will be eligible to participate if they are customarily employed for at least 20 hours per week. However, an employee will not be eligible to participate if immediately after the grant of a right to purchase stock under the purchase plan, he or she would own stock with five percent or more of the total combined voting power or value of all classes of our capital stock, or if and to the extent that, his or her rights to purchase stock under all of our employee stock purchase plans accrue at a rate that exceeds $25,000 worth of stock per calendar year.

The purchase plan will permit participants to purchase common stock though payroll deductions of up to 20% of the participant's base compensation, which will include regular straight-time gross earnings and exclude overtime, shift premiums, incentive compensation or payments, bonuses, and commissions. However, the Board or committee may set a maximum withholding percentage that is less than 20%. Employees will participate in the purchase plan by enrolling in "offering periods" of 24 months, unless determined otherwise by the plan administrator. Each offering period will include four

61

63

purchase periods. We intend that the first offering period is to begin on the first trading day before the effective date of this offering. An employee may be enrolled in only one offering period at a time.

On each purchase date, amounts that are deducted and accumulated for the participant's account will be used to purchase shares of common stock at a price of 85% of the lower of the fair market value of the common stock at the first day of the offering period and the purchase date. If the fair market value of the common stock is lower on the purchase date than it was on the first day of the offering period, then all participants in that offering period will automatically be enrolled in the offering period that begins the next trading day, and their participation in the prior offering period will be terminated. In addition, if the fair market value of the common stock drops more than 25% from one purchase date (the "benchmark date") to the next, the number of shares a participant may purchase will be limited, unless the administrator determines otherwise, to 75% of the number that could have been purchased at 85% of the higher price. This limit will remain in place until the fair market value on a purchase date has recovered to at least 75% of its level on the benchmark date.

Participants will be able to reduce their withholding percentage, but not below one percent, at any time during an offering period and will be able to increase their withholding percentage effective the first day of each purchase period. Participants will be able to end their participation, and will be repaid their payroll deductions through that date, at any time during an offering period. Participation will end automatically upon termination of employment.

We intend the purchase plan to qualify under Section 423 of the Internal Revenue Code, to allow favorable tax treatment of participants. In general, if a participant in a qualified employee stock purchase plan holds stock purchased under the plan for at least two years from the date he or she was granted the right to purchase the stock and at least one year after the purchase, then upon sale of the stock, (a) gain up to 15% of the value of the stock on the date the purchase right was granted is taxable as ordinary income and (b) additional gain is long-term capital gain.

A participant will not be able to transfer rights granted under the purchase plan other than by will, the laws of descent and distribution or as otherwise provided under the purchase plan.

The purchase plan will provide that, if we merge with or into another corporation or a sale of substantially all of our assets, a successor corporation may assume or substitute for each outstanding purchase right. If the successor corporation refuses to assume or substitute for the outstanding purchase rights, the offering period then in progress will be shortened, and a new purchase date will be set.

1997 DIRECTORS' STOCK OPTION PLAN

On January 28, 1997 our Board of Directors adopted the 1997 Directors' Stock Option Plan and our shareholders approved the adoption of the plan on August 5, 1997. The plan provides for the grant of nonstatutory stock options to non-employee directors. A total of 900,000 shares of our common stock have been reserved for issuance under the director plan.

The 1997 Directors' Stock Option Plan provides that each non-employee director will automatically be granted an option to purchase 180,000 shares of our common stock on the date that he or she first becomes a non-employee director. In addition, each non-employee director will automatically be granted an option to purchase 36,000 shares on the date of each annual shareholders' meeting if at that time he or she will have served on the Board of Directors for at least the preceding six months. The term of each option shall not exceed ten years. Under the plan, the initial grant of 180,000 shares of common stock vests over five years with the first 20% vesting at the end of the first year and one sixtieth of the total vesting each month thereafter. Each subsequent grant of 36,000 shares begins to vest with 20% on the day that is one month after the fourth anniversary of the date of the grant and one twelfth of the total vests each month thereafter. In addition, upon a merger or the sale of substantially all of our assets, adoption of a plan of liquidation, dissolution, consolidation or reorganization all unvested options shall immediately vest and we will give

62

64

each director a reasonable time thereafter to exercise his or her option. Alternatively, we may grant the director the right to exercise the option, whether or not vested, for an equivalent number of shares of the company acquiring our business by reason of such transaction.

The exercise price of each option granted under the 1997 Directors' Stock Option Plan will be 100% of the fair market value per share of our common stock, on the date of grant. Each option will have a maximum term of 10 years, but will terminate earlier if the director ceases to be a member of the Board of Directors. The Board of Directors may amend the plan without shareholder approval unless shareholder approval is required under applicable law.

401(k) PLAN

We sponsor a defined contribution plan intended to qualify under Section 401(k) of the Internal Revenue Code. Most employees are eligible to participate and may enter at any time during the year. Participants may make pre-tax contributions to the plan of up to the statutorily prescribed annual limit. Participants are fully vested in their contributions and the investment earnings. The plan permits us to make discretionary matching contributions. To date, we have not made matching contributions under the plan.

INDEMNIFICATION OF DIRECTORS AND EXECUTIVE OFFICERS AND LIMITATION ON LIABILITY

Bermuda law permits a company to indemnify its directors and officers, except for any acts of fraud or dishonesty. We have provided in our Bye-laws that our directors and officers will be indemnified and held harmless out of our assets from and against any and all actions, costs, charges, losses, damages and expenses by reason of any act or omission in the discharge of their duty, other than in the case of fraud or dishonesty.

Bermuda law and our Bye-laws also permit us to purchase insurance for the benefit of our directors and officers against any liability incurred by them for the failure to exercise the requisite care, diligence and skill in the exercise of their powers and the discharge of their duties, and to indemnify them in respect of any loss arising or liability incurred by them other than in respect of fraud or dishonesty. We intend to purchase such insurance prior to the completion of this offering.

To the extent that our directors, officers and controlling persons are indemnified under the provisions contained in our Bye-laws, Bermuda law or contractual arrangements against liabilities arising under the Securities Act, we have been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

We intend to enter into indemnification agreements with our officers and directors. To the extent permitted by law, the indemnification agreements may require us, among other things, to indemnify our officers and directors against certain liabilities that may arise by reason of their status or service as officers or directors (other than liabilities arising from fraud or dishonesty) and to advance expenses they incurred as a result of any proceedings against them as to which they could be indemnified.

There is currently no pending litigation or proceeding involving an officer or director that will require or permit us to provide indemnification. We are not aware of any threatened litigation or proceeding that may result in a claim for such indemnification.

63

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CERTAIN TRANSACTIONS

Since January 1997, there has not been nor is there currently proposed any transaction or series of similar transactions to which we were or will be a party in which the amount involved exceeded or will exceed $60,000 and in which any director, executive officer, holder of more than 5% of our stock or any member of his or her immediate family had or will have a direct or indirect material interest, except as noted below.

ISSUANCES OF OPTIONS AND PURCHASES OF COMMON STOCK

From January 1, 1997 through June 6, 2000, we granted options for the purchase of and issued shares of our common stock as follows:

* In January 1997, we granted Diosdado Banatao an option to purchase 180,000 shares at an exercise price per share of $0.05.
* In January 1997, we granted Herbert Chang an option to purchase 180,000 shares at an exercise price per share of $0.05. In June 1997, Mr. Chang exercised all of the options.
* In January 1998, we granted Ron Verdoorn options to purchase an aggregate of 630,000 shares at an exercise price per share of $0.25. In March 2000, Mr. Verdoorn exercised all of the options.
* In December 1999, we granted Dr. John Cioffi options to purchase 180,000 shares at an exercise price per share of $2.00. In January 2000, Dr. Cioffi exercised all of the options.
* In December 1999, we granted Dr. Paul Gray options to purchase 180,000 shares at an exercise price per share of $2.00. In January 2000, Dr. Gray exercised 36,000 of these options.
* In May 2000, we granted George Hervey options to purchase 760,000 shares at an exercise price per share of $10.00.

The exercise prices of the options represent the estimate by our Board of Directors of the fair market value of the common stock on the grant date. In establishing these prices, the Board of Directors considered many factors, including our financial condition and operating results, transactions involving the issuances of shares of our preferred stock, the senior rights and preferences accorded shares of preferred stock and the market for comparable stocks.

Except as set forth above, none of our executive officers, directors or 5% shareholders received options to purchase or purchased our common stock during this period.

CONVERTIBLE NOTE FINANCING AND SERIES D PREFERRED STOCK

In June 1997 we sold an aggregate of $2.2 million in convertible promissory notes and warrants to purchase 76,542 Series D preferred shares to 6 accredited investors. The exercise price for the warrants was $4.33 per share. The promissory notes were cancelled in December 1997, and the accrued indebtedness, consisting of principal and interest, was converted to Series D preferred stock at conversion price of $4.33 per share. Concurrent with the conversion of the convertible promissory notes, during the period December 1997 through February 1998 we sold additional shares of Series D preferred stock to investors at a purchase price of $4.33 per share. Set forth below is a description of the warrants and shares of Series D preferred stock issued to our officers, directors and 5% shareholders.

* In December 1997, InveStar Burgeon Venture Capital, Inc., purchased 119,330 shares of Series D Preferred for the cancellation of $517,094.50 in accrued indebtedness under a convertible promissory note issued in June 1997, and we granted to InveStar Burgeon Venture Capital, Inc. a warrant to purchase 17,307 shares of Series D preferred stock.

64

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* In December 1997, InveStar Semiconductor Development Fund, Inc. purchased 469,428 shares of Series D preferred stock for $999,999 in cash and cancellation of $1,034,189 in accrued indebtedness under a convertible promissory note issued in June 1997, and we issued to InveStar Semiconductor Development Fund, Inc. a warrant to purchase 34,616 shares of Series D preferred stock.
* In December 1997, Sehat Sutardja and Weili Dai purchased 23,078 shares of Series D preferred stock for cash.
* In December 1997, InveStar Dayspring Venture Capital, Inc. purchased 115,385 shares of Series D preferred stock for cash.
* In February 1998, InveStar Semiconductor Development, Inc. purchased 92,309 shares of Series D preferred stock for cash.
* In February 1998, InveStar Dayspring Venture Capital, Inc. purchased 46,154 shares of Series D preferred stock for cash.
* In February 1998, Forefront Venture Partners, L.P., purchased 46,154 shares of Series D preferred stock for cash.
* In February 1998, InveStar Excelsus Venture Capital, Inc. purchased 46,154 shares of Series D preferred stock for cash.
* In February 1998, Ron Verdoorn purchased 8,078 shares of Series D preferred stock for cash.

All share numbers and exercise prices for common stock have been adjusted to reflect the 50% stock dividend in June 1998 and the two 100% common stock dividends approved by our shareholders on March 17, 2000. All share numbers and exercise prices for preferred stock have been adjusted to reflect the 50% stock dividend in June 1998. Although the number of shares of Series D preferred stock was not affected by the two 100% common stock dividends approved by our shareholders on March 17, 2000, as a result of the stock dividends, each share of Series D preferred stock automatically adjusted and became convertible into four shares of common stock.

InveStar Capital, Inc. acted as placement agent for several sales of the Series D preferred stock. As consideration for such services, we paid a cash fee equal to 6% of the value of the securities placed by InveStar Capital, Inc., or approximately $141,000, and issued to InveStar Capital, Inc. warrants to purchase 10,825 shares of Series D preferred stock.

We have entered into an investor rights agreement with each of the purchasers of our preferred stock and common stock warrant holders, including those set forth above. Under this agreement, these stockholders are entitled to registration rights with respect to their shares of common stock issuable upon conversion of the preferred stock. If we decide to register securities, the registration rights provided in the agreement permit the holders of the rights to participate in the registration. However any managing underwriter for the offering may limit the shares the holders can register. In our initial public offering the underwriters can exclude the holders from participating and have done so in this offering. In future offerings the underwriters can limit the holders participation to 25% of the securities we are offering.

DIRECTOR AFFILIATIONS

Our director Ronald Verdoorn was employed by Seagate Technology, Inc. from May 1983 through September 1997, most recently as Executive Vice President and Chief Operating Officer of Storage Products. Seagate represented 21% of our net revenue in fiscal 1998, 43% of our net revenue in fiscal 1999 and 24% of our net revenue in fiscal 2000.

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67

PRINCIPAL SHAREHOLDERS

The following table sets forth information regarding the beneficial ownership of our common stock as of June 6, 2000, and as adjusted to reflect the sale of the shares in this offering for:

* each person known by us to own beneficially more than 5% of our outstanding shares;
* each director and executive officer; and
* all directors and executive officers as a group.

The percentage of beneficial ownership for the following table is based on 76,211,425 shares of our common stock outstanding on June 6, 2000, assuming the conversion of all outstanding shares of preferred stock into common stock. The percentage of beneficial ownership after this offering also assumes 82,211,425 shares of common stock outstanding after completion of this offering, and assumes no exercise of the underwriters' option to purchase additional shares in the offering. Unless otherwise indicated, to our knowledge, all persons listed below have sole voting and investment power with respect to their shares of common stock, except to the extent authority is shared by spouses under applicable law.

The number of shares beneficially owned by each shareholder is determined in accordance with the rules of the Securities and Exchange Commission and are not necessarily indicative of beneficial ownership for any other purpose. Under these rules, beneficial ownership includes those shares of common stock that the shareholder has sole or shared voting of investment power and any shares of common stock that the shareholder has a right to acquire within 60 days after June 6, 2000 through the exercise of any option, warrant or other right. The percentage ownership of the outstanding common stock, however, is based on the assumption, expressly required by the rules of the Securities and Exchange Commission, that only the person or entity whose ownership is being reported has converted options or warrants into shares of common stock. Although the number of shares of preferred stock was not affected by the two 100% common stock dividends approved by our shareholders on March 17, 2000, as a result of the stock dividends, each share of preferred stock automatically adjusted and became convertible into four shares of common stock.

Unless otherwise indicated, the address of each person owning more than 5% of our outstanding shares is c/o Marvell Semiconductor, Inc., 645 Almanor Avenue, Sunnyvale, CA 94086.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | SHARES BENEFICIALLY | | SHARES BENEFICIALLY | |
|  | OWNED PRIOR | | OWNED |  |
|  | TO OFFERING | | AFTER OFFERING | |
|  | -------------------- | | -------------------- | |
| NAME AND ADDRESS OF BENEFICIAL OWNER | NUMBER | PERCENT | NUMBER | PERCENT |
| ------------------------------------ | ---------- | ------- | ---------- | ------- |
| EXECUTIVE OFFICERS, DIRECTORS AND 5% SHAREHOLDERS: |  |  |  |  |
| Entities Affiliated with InveStar Capital, |  |  |  |  |
| Inc.(1)......................................... | 8,730,640 | 11.5% | 8,730,640 | 10.6% |
| 3600 Pruneridge Avenue, Suite 300 |  |  |  |  |
| Santa Clara, CA 95051 |  |  |  |  |
| Sehat Sutardja(2)................................. | 24,092,312 | 31.6% | 24,092,312 | 29.3% |
| Weili Dai(2)...................................... | 24,092,312 | 31.6% | 24,092,312 | 29.3% |
| Pantas Sutardja................................... | 12,000,000 | 15.7% | 12,000,000 | 14.6% |
| Gordon M. Steel(3)................................ | 480,000 | \* | 480,000 | \* |
| George Hervey(4).................................. | 760,000 | 1.0% | 760,000 | \* |
| Diosdado P. Banatao(5)............................ | 6,879,208 | 9.0% | 6,879,208 | 8.4% |
| 2800 Sand Hill Road, #250 |  |  |  |  |
| Menlo Park, CA 94025 |  |  |  |  |
| Herbert Chang(1).................................. | 8,730,640 | 11.5% | 8,730,640 | 10.6% |
| 3600 Pruneridge Avenue, Suite 300 |  |  |  |  |
| Santa Clara, CA 95051 |  |  |  |  |
| John M. Cioffi.................................... | 180,000 | \* | 180,000 | \* |
| Paul R. Gray(6)................................... | 180,000 | \* | 180,000 | \* |
| Ron Verdoorn...................................... | 662,312 | \* | 662,312 | \* |
| Executive Officers and Directors |  |  |  |  |
| as a Group (9 persons)(7)....................... | 53,484,472 | 70.2% | 53,484,472 | 65.1% |

66

68

* ---------------

\* Less than one percent

1. Represents 161,539 shares of Series D Preferred Stock held by InveStar Dayspring Venture Capital, Inc., 46,154 shares of Series D Preferred Stock held by InveStar Excelsus Venture Capital (Int'l), Inc., 570,000 shares of Series C Preferred Stock, 561,737 shares of Series D Preferred Stock and a warrant to purchase 34,615 shares of Series D Preferred Stock held by InveStar Semiconductor Development Fund, Inc., 569,999 shares of Series C Preferred Stock, 119,330 shares of Series D Preferred Stock and a warrant to purchase 17,307 shares of Series D Preferred Stock held by InveStar Burgeon Venture Capital, Inc., 46,154 shares of Series D Preferred Stock held by Forefront Venture Partners L.P., and warrants to purchase 10,825 shares of Series D preferred stock issued to InveStar Capital, Inc. Herbert Chang is the President of InveStar Capital, Inc., which is the investment manager of each of InveStar Dayspring Venture Capital, Inc., InveStar Excelsus Venture Capital (Int'l), Inc., InveStar Semiconductor Development Fund, Inc., and InveStar Burgeon Venture Capital, Inc. Mr. Chang is also the managing director of Forefront Associates LLC, which is the general partner of Forefront Venture Partners, L.P. Mr. Chang disclaims beneficial ownership of these shares, except to the extent of his pecuniary interest, if any.
2. Dr. Sutardja and Ms. Dai are husband and wife. Includes 9,000,000 shares held by Dr. Sutardja, of which Ms. Dai may be deemed to be a beneficial owner, although Ms. Dai disclaims such beneficial ownership, 9,000,000 shares held by Ms. Dai, of which Dr. Sutardja may be deemed to be a beneficial owner, although Dr. Sutardja disclaims such beneficial ownership, 23,078 shares of Series D Preferred Stock convertible into 92,312 common shares held jointly by Dr. Sutardja and Ms. Dai, and 6,000,000 shares held by the Sutardja Family Partners of which Dr. Sutardja and Ms. Dai are the general partners. Dr. Sutardja and Ms. Dai disclaim beneficial ownership of the 6,000,000 shares held by the Sutardja Family Partners, except to the extent of their pecuniary interest, if any.
3. Includes 240,000 shares held by each of Mr. Steel's two children. Mr. Steel disclaims beneficial ownership of the 480,000 shares held by his children, except to the extent of his pecuniary interest therein, if any. Mr. Steel's employment with us terminated in April 2000.
4. Includes 760,000 shares subject to stock options that are currently exercisable or will become exercisable within 60 days of June 6, 2000.
5. Includes 15,711 shares held by Mr. Banatao's minor children. Mr. Banatao may be deemed to be a beneficial owner of these shares, although Mr. Banatao disclaims such beneficial ownership. Also includes 1,680,000 shares subject to stock options that are currently exercisable or will become exercisable within 60 days after June 6, 2000.
6. Includes 144,000 shares subject to stock options that are currently exercisable or will become exercisable within 60 days after June 6, 2000.
7. Includes 2,584,000 shares subject to stock options that are currently exercisable or will become exercisable within 60 days after June 6, 2000.

67

69

DESCRIPTION OF CAPITAL STOCK

Our authorized share capital consists of $500,000, divided into 242,000,000 shares of common stock, $0.002 par value per share, and 8,000,000 shares of preferred stock, $0.002 par value per share.

COMMON STOCK

As of April 30, 2000, there were 76,211,425 shares of our common stock issued and outstanding, held of record by approximately 258 shareholders. The number of shares of common stock outstanding has been adjusted to reflect the conversion when this offering closes of 6,632,376 outstanding shares of preferred stock into 26,529,504 shares of common stock, at a conversion ratio of four shares of common stock for each share of preferred stock. In the event of our liquidation, dissolution or winding up, holders of common stock would be entitled to receive all of our assets, pro rata, after payment of all our debts and liabilities, and any liquidation payment that we may be required to pay to our preferred shareholders on the date of liquidation. The shares of common stock do not have preemptive or conversion rights or other subscription rights and there are no redemption or sinking fund provisions. The outstanding shares of common stock are, and the shares of common stock offered hereby, when issued and upon our receipt of the full purchase price therefore, will be, fully paid and nonassessable.

PREFERRED STOCK

The Board of Directors is authorized to issue up to 8,000,000 shares of preferred stock in one or more series. The Board of Directors may, without any further approval of our shareholders:

* fix the rights, preferences, privileges and restrictions of the preferred stock, including dividend rights, dividend rates, conversion rights, voting rights, terms of redemption, redemption prices, and liquidation preferences; and
* fix the number of shares and designation of any series of preferred stock.

Although the Board of Directors presently does not intend to do so, it could issue shares of preferred stock with voting and conversion rights which could adversely affect the voting power and other rights of the holders of common stock, including the loss of voting control to others, without obtaining further approval of our shareholders. The issuance of shares of preferred stock could delay or prevent a change in control of this company, without further action by our shareholders.

BERMUDA LAW

We were incorporated as an exempted Bermuda company under The Companies Act, 1981 of Bermuda. This means that we are exempted from the provisions of Bermuda law which stipulate that at least 60% of our equity must be beneficially owned by Bermudians. The rights of our shareholders, including those persons who will become our shareholders in connection with this offering, are governed by Bermuda law, our Memorandum of Association and Bye-laws. The following is a summary of certain provisions of Bermuda law and our organizational documents. Because this summary does not contain all of the information set forth in the Bermuda law provisions or our organizational documents, we encourage you to read those documents.

DIVIDENDS. Bermuda law authorizes a company to declare or pay a dividend or make a distribution out of contributed surplus, unless,

* the company would not be able to pay its debts as they become due, or
* the realizable value of the company's total assets would thereby be less than the aggregate of its liabilities and its issued share capital and share premium accounts.

68

70

VOTING RIGHTS. Unless otherwise provided by the Companies Act or a company's bye-laws, under Bermuda law, questions brought before a general meeting of shareholders are decided by the vote of a majority of the shareholders present at the meeting. Each shareholder has one vote, regardless of the number of shares held, unless a poll is requested. If a poll is requested, each shareholder present in person or by proxy has one vote for each share held. A poll may be requested by:

* the chairman of the meeting,
* at least three shareholders present in person or by proxy,
* any shareholder or shareholders present in person or represented by proxy and holding between them not less than one-tenth of the total voting rights of all the shareholders having the right to vote, or
* any shareholder or shareholders present in person or represented by proxy holding shares conferring the right to vote at the meeting, and the total paid up on those shares has been paid up equal to at least one-tenth of the total sum paid up on all shares conferring the right to vote at the meeting.

At our annual general meeting on June 17, 2000, we intend to seek the approval of our shareholders of an amendment and restatement of our Bye-laws requiring two-thirds of the outstanding shares to approve amendments to the provisions of our Bye-laws.

RIGHTS IN LIQUIDATION. Under Bermuda law, in the event of liquidation, dissolution or winding up of a company, the proceeds of such liquidation, dissolution or winding up are distributed pro rata among the holders of common stock, after satisfaction in full of all claims of creditors and subject to the preferential rights accorded to any series of preferred stock.

MEETINGS OF SHAREHOLDERS. Under Bermuda law, a company is required to convene at least one general shareholders' meeting per calendar year. Bermuda law provides that a special general meeting must be called by the board of directors and must be called upon the request of shareholders holding not less than 10% of such of the paid-up capital of the company having the right to vote. Bermuda law also requires that shareholders be given at least five days' advance notice of a general meeting, but the accidental omission of notice to any person does not invalidate the proceedings at such meeting. Our Bye-laws require at least five days' notice be given to each shareholder of the annual general meeting and of any special general meeting.

Under Bermuda law, the number of shareholders constituting a quorum at any general meeting of shareholders is determined by the bye-laws of the company. Our Bye-laws provide that two persons present in person and representing in person or by proxy at least 50% of the total issued voting shares constitutes a quorum.

ACCESS TO BOOKS AND RECORDS AND DISSEMINATION OF INFORMATION. Members of the general public have the right to inspect the public documents of a company available at the office of the Registrar of Companies in Bermuda. These documents include:

* our Memorandum of Association (including its objects and powers), and
* any amendment of our Memorandum of Association.

In addition, our shareholders have the right to inspect:

* our Bye-laws,
* our minutes of general meetings, and
* our audited financial statements, which must be presented at the annual general meeting.

Our register of shareholders is also open to inspection by our shareholders without charge and to members of the general public, upon the payment of a fee. We are required to maintain our share

69

71

register in Bermuda but may, subject to the provisions of the Companies Act, establish a branch register outside Bermuda. We are required to keep at our registered office a register of our directors and officers which is open for inspection for not less than two hours each day by members of the public without charge. However, Bermuda law does not provide a general right for shareholders to inspect or obtain copies of any other corporate records.

ELECTION OR REMOVAL OF DIRECTORS. Under Bermuda law and our Bye-laws, directors are elected at the annual general meeting for a term of one year or until their successors are elected or appointed, unless they resign or are earlier removed.

Under Bermuda law, unless otherwise provided in a company's bye-laws, a director may be removed at a special general meeting of shareholders specifically called for that purpose, provided that the director was served with at least 14 days' notice of the meeting. The director has a right to be heard at such meeting. Any vacancy created by the removal of a director at a special general meeting may be filled at such meeting by the election of another director in his or her place or, in the absence of any such election, by the board of directors.

At our annual general meeting on June 17, 2000, we intend to seek the approval of our shareholders of an amendment and restatement of our Bye-laws providing for a classified Board of Directors with staggered terms and limiting the removal of directors without cause.

AMENDMENT OF MEMORANDUM OF ASSOCIATION AND BYE-LAWS. Bermuda law provides that the memorandum of association of a company may be amended by a resolution passed at a general meeting of shareholders after due notice has been given. An amendment to the memorandum of association, other than an amendment which alters or reduces a company's share capital, also requires the approval of the Bermuda Minister of Finance, who may grant or withhold approval at his or her discretion. The directors may amend the bye-laws, but the amendment must be approved by the shareholders at a general meeting.

Under Bermuda law, the holders of a total of at least 20% in par value of any class of a company's issued share capital have the right to apply to the Bermuda courts for an annulment of any amendment of the memorandum of association adopted by shareholders at any general meeting, other than an amendment which alters or reduces a company's share capital as provided in the Companies Act. Where such an application is made, the amendment becomes effective only to the extent that it is confirmed by the Bermuda courts. An application for annulment of any amendment of the memorandum of association must be made within 21 days after the date on which the resolution altering the company's memorandum is passed and may be made on behalf of the persons entitled to make the application by one or more of their number as they may appoint in writing for that purpose. No such application may be made by persons voting in favor of the amendment. The Companies Act does not state the grounds on which an annulment would be applied and we can find no judicial interpretation in Bermuda in which grounds for annulment have been considered.

APPRAISAL RIGHTS AND SHAREHOLDER SUITS. Under Bermuda law, in the event of a consolidation or amalgamation of two companies, a shareholder who is not satisfied that fair value has been offered for his or her shares may apply to the Bermuda courts to appraise the fair value of his or her shares. The amalgamation of a company with another company requires the approval of the amalgamation agreement by the board of directors and by the shareholders, and of the holders of each class of such shares.

Class actions and derivative actions are not available to shareholders under Bermuda law except in the circumstances described below. The Bermuda courts would ordinarily be expected to permit a shareholder to commence an action in the name of a company to remedy a wrong done to the company where the act complained of is alleged:

* to be beyond the corporate power of the company,
* to be illegal,

70

72

* to violate the company's memorandum of association or bye-laws, or
* to involve the fraud or dishonesty of a director or officer.

|  |  |  |
| --- | --- | --- |
| Furthermore, consideration would | be given | by the Bermuda courts to acts |
| that are alleged to constitute a fraud against | | the minority shareholders or, for |
| instance where an act requires the approval of | | a greater percentage of the |
| company's shareholders than those who | actually | approve it. |

When the affairs of a company are being conducted in a manner oppressive or prejudicial to the interests of some of the shareholders, one or more shareholders may apply to the Bermuda courts for an order to regulate the company's conduct of affairs in the future or order the purchase of the shares by any shareholder, by other shareholders or by the company.

Claims other than those involving the fraud or dishonesty of a director or officer may be asserted against us, but not against our officers and directors because of the waiver of these claims contained in our Bye-laws. However, claims arising under United States federal securities laws may be asserted against us and our officers and directors. For a description of the risks associated with asserting claims against us or our directors and officers, see the discussion in the "Risk Factors" section of this prospectus.

WARRANTS

We have issued the following warrants:

* a warrant to purchase 45,000 shares of Series D preferred stock, which will be replaced with a warrant to purchase 180,000 shares of common stock at the closing of this offering;
* a warrant to purchase 60,000 shares of common stock; and
* warrants to purchase 68,852 shares of Series D preferred stock that expire upon the closing of this offering if not exercised.

REGISTRATION RIGHTS

Pursuant to the terms of the Investor Rights Agreement dated September 10, 1999, with our preferred shareholders and warrant holders and their transferees receiving at least 200,000 shares, after this offering the holders of 27,044,912 shares of common stock will have rights with respect to the registration of their respective shares under the Securities Act. Under the terms of the agreement, if we propose to register any of our securities under the Securities Act, either for our own account or for the account of other security holders exercising registration rights, such holders are entitled to notice of such registration and are entitled to include their common stock in the registration. Six months following the effective date of this offering, these shareholders may also require us to file a registration statement under the Securities Act at our expense with respect to their shares of common stock, and we are required to use our best efforts to effect such registration. These shareholders have the right to request up to two such registration statements. Further, such shareholders may require us to file additional registration statements on Form S-3 or its equivalent at our expense. Each of these rights is subject to conditions and limitations, including the right of the underwriters of an offering to limit the number of shares included in such offering under various circumstances.

ANTI-TAKEOVER PROVISIONS

We intend to seek the approval of our shareholders at our annual general meeting on June 17, 2000, for an amendment to our Bye-laws. The amendment will implement provisions that may have

71

73

the effect of delaying, deferring or discouraging another person from acquiring control of us. These provisions include:

* following the completion of this offering, the approval of holders of two-thirds of the shares entitled to vote at an election of directors shall be required to adopt, amend or repeal our Bye-laws regarding the election and removal of directors;
* following the completion of this offering, our Board of Directors will be divided into three classes, each serving staggered three-year terms, which means that only one class of directors will be elected at each annual meeting of shareholders, with the other classes continuing for the remainder of their respective terms, and directors may only be removed for cause by the holders of two-thirds of the shares entitled to vote at an election of directors; and
* we will indemnify officers and directors against losses that they may incur in investigations and legal proceedings resulting from their services to us, which may include services in connection with takeover defense measures.

TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for our common stock is First Union National Bank.

LISTING

Our common stock has been approved for listing for quotation on the Nasdaq National Market under the trading symbol "MRVL".

72

74

CERTAIN FOREIGN ISSUER CONSIDERATIONS

There are no limitations on the rights of foreign nationals or persons non-resident in Bermuda who own our common stock to hold or vote their shares. Because we have been designated as a non-resident for Bermuda exchange control purposes, there are no restrictions in Bermuda on our ability to transfer funds in and out of Bermuda or to pay dividends to United States residents who are holders of our common stock other than in respect of local Bermuda currency.

In the case of an applicant acting in a special capacity such as an executor or trustee, at the request of the applicant, common stock certificates may record the capacity in which the applicant is acting. Notwithstanding the recording of any such special capacity, we are not bound to investigate or incur any responsibility in respect of the proper administration of any estate or trust. We will not take notice of any trust applicable to any of its shares whether or not we had notice of the trust.

Under Bermuda law, we are an exempted company. This means that we are exempted from the provisions of Bermuda law that stipulate that at least 60% of the equity must be beneficially owned by Bermudians. Consents under The Exchange Control Act, 1972 of Bermuda and the regulations under that Act have been obtained for the issue and subsequent transfer of the shares of common stock offered by this prospectus to and among persons not resident in Bermuda for exchange control purposes. For exchange control purposes, persons regarded as residents of Bermuda require specific consent under The Exchange Control Act 1972 to purchase shares. The Companies Act permits companies to adopt bye-law provisions relating to the transfer of shares. There are no limitations imposed by Bermuda law, our Memorandum of Association or our Bye-laws, on the right of foreign nationals or nonresidents of Bermuda to hold or vote shares of our common stock for purposes of Section 28 of the Companies Act, which requires that a filing state the minimum subscription that needs to be raised in an offering. There is no minimum subscription which must be raised in this offering.

As an exempted company, we may not, unless authorized by our Memorandum of Association or any other act, participate in certain business transactions, including:

* the acquisition or holding of land in Bermuda, except as required for our business and held by way of lease or tenancy for terms of not more than 50 years;
* the taking of mortgages on land in Bermuda; or
* the carrying on of business of any kind in Bermuda, except in furtherance of our business carried on outside Bermuda or under a license granted by the Bermuda Minister of Finance.

The Bermuda government actively encourages foreign investment in exempted entities which, like us, are based in Bermuda but do not operate in competition with local business. In addition to having no restrictions on the degree of foreign ownership, we are not subject to taxes on its income or dividends or to any foreign exchange controls in Bermuda. In addition, there is no capital gains tax in Bermuda, and we can accumulate, as required, without limitation.

We have been advised by our legal advisor in Bermuda, Conyers Dill & Pearman, that the United States and Bermuda do not currently have a treaty providing for the reciprocal recognition and enforcement of judgments in civil and commercial matters and that a final judgment for the payment of money rendered by any federal or state court in the United States based on civil liability, whether or not based solely on United States federal securities laws, would, therefore, not be automatically enforceable in Bermuda.

Nevertheless, a final and conclusive judgment obtained in a state court or federal court of the United States based upon a contractual obligation under which a sum of money is payable could be enforced by an action in the Supreme Court of Bermuda, without reexamination of the merits, under the common law doctrine of obligation. A final opinion as to the availability of this remedy could only be given when the facts surrounding the judgment were known but, on general principles, we would

73

75

expect an application to be successful on the basis of advice from our legal advisor in Bermuda, provided that the judgment:

* was final and conclusive;
* was not obtained by fraud;
* was not and its enforcement would not be contrary to public policy of Bermuda;
* was obtained in circumstances where the proceedings were not contrary to the rules of natural justice; and
* was the subject of the correct procedures under the law of Bermuda for its enforcement.

A Bermuda court may impose civil liability on us or our directors or officers in a suit brought in the Supreme Court of Bermuda against us or those persons with respect to a violation of United States securities law, provided that the facts surrounding the violation would constitute or give rise to a cause of action under Bermuda law.

COMPARISON OF BERMUDA AND DELAWARE LAW. The discussion that follows sets forth a comparison of various issues that affect shareholders under the law of the state of Delaware, the state most often chosen as the state of incorporation for U.S. public corporations, and Bermuda law. WE ARE INCORPORATED AS AN EXEMPTED BERMUDA COMPANY UNDER THE COMPANIES ACT, 1981 OF BERMUDA. DELAWARE LAW IS NOT APPLICABLE TO US AND IS PRESENTED HERE SOLELY TO PROVIDE A COMPARISON OF APPLICABLE BERMUDA LAW WITH THAT COMMONLY APPLICABLE TO U.S. PUBLIC CORPORATIONS.

INTERESTED DIRECTORS. Bermuda law and our Bye-laws provide that any transaction entered into by us in which a director has an interest is not voidable by us nor can the director be liable to us for any profit realized pursuant to the transaction provided that the nature of the director's interest is disclosed at the first opportunity at a meeting of our directors, or in writing to our directors. Under Delaware law, the law applicable to many U.S. public companies, a transaction with an interested director would not be voidable if:

* the material facts of the interested director's relationship or interests are disclosed or are known to the board of directors and the board in good faith authorizes the transaction by the affirmative vote of a majority of the disinterested directors;
* the material facts are disclosed or are known to the stockholders entitled to vote on the transaction and the transaction is specifically approved in good faith by vote of the majority of shares entitled to vote on the matter; or
* the transaction is fair to the corporation as of the time it is authorized, approved or ratified.

Under Delaware law, the interested director could be held liable for a transaction in which the director derived an improper personal benefit.

MERGERS AND SIMILAR ARRANGEMENTS. We may acquire the business of another Bermuda exempted company or a company incorporated outside Bermuda when the business acquired is within the business purpose set forth in our Memorandum of Association. We may, with the approval of a majority of votes cast at a general meeting of our shareholders at which a quorum is present, amalgamate with another Bermuda company or with a company incorporated outside Bermuda. In the case of an amalgamation, a shareholder may apply to a Bermuda court for a proper valuation of the shareholder's shares if the shareholder is not satisfied that a fair value has been paid for his or her shares. The Bermuda court ordinarily would not disapprove the transaction on the ground that fair value was not paid absent evidence of fraud or bad faith. Under Delaware law, the law applicable to many U.S. public companies, with certain exceptions, a merger, consolidation or sale of all or substantially all the assets of a corporation must be approved by the board of directors and a majority of the outstanding shares entitled to vote on the matter. Under Delaware law, a stockholder of a corporation participating in defined major corporate transactions may be entitled to appraisal rights

74

76

pursuant to which the stockholder may seek to receive cash in the amount of the fair value of the shares held by the stockholder, as determined by a court, instead of the consideration the stockholder would otherwise receive in the transaction.

TAKEOVERS. Bermuda law provides that where an offer is made for shares of a company and, within four months of the offer, the holders of not less than 90% of the shares which are the subject of the offer accept, the offeror may by notice require the nontendering shareholders to transfer their shares on the terms of the offer. Dissenting shareholders may apply to the Bermuda court within one month of the notice objecting to the transfer. The burden is on the dissenting shareholders to show that the court should exercise its discretion to enjoin the required transfer, which a court will be unlikely to do unless there is evidence of fraud or bad faith or collusion between the offeror and the holders of the shares who have accepted the offer as a means of unfairly forcing out minority shareholders. Delaware law, the law applicable to many U.S. public companies, provides that a parent corporation, by resolution of its board of directors and without any shareholder vote, may merge with any subsidiary of which it owns at least 90% of each class of capital stock. Upon that merger, dissenting stockholders of the subsidiary would have appraisal rights.

SHAREHOLDER'S SUIT. The rights of shareholders under Bermuda law are not as extensive as the rights of shareholders under legislation or judicial precedent in many United States jurisdictions. Class actions and derivative actions are available to shareholders under the laws of Bermuda only in limited circumstances. However, the Bermuda courts ordinarily would be expected to follow English case law precedent, which would permit a shareholder to commence an action in our name to remedy a wrong done to us where the act complained of is alleged to be beyond our corporate power or is illegal or would result in the violation of our Memorandum of Association or Bye-laws. Furthermore, consideration would be given by the court to acts that are alleged to constitute a fraud against the minority shareholders or where an act requires the approval of a greater percentage of the our shareholders than actually approved it. The winning party in that action generally would be able to recover a portion of its attorneys' fees incurred in connection with the action. Our Bye-laws provide that shareholders waive all claims or rights of action that they might have, individually or in our right, against any director or officer for any act or failure to act in the performance of that director's or officer's duties, except with respect to any fraud or dishonesty of that director or officer. We recently amended our Bye-laws to provide that the waiver is not applicable to claims arising under United States federal securities laws. The amendment will be submitted for shareholder approval on June 17, 2000. Class actions and derivative actions are available to stockholders under Delaware law for, among other things, breach of fiduciary duty, corporate waste and actions not taken in accordance with applicable law. In these actions, the court has discretion to permit the winning party to recover attorneys' fees incurred in connection with the action.

INDEMNIFICATION OF DIRECTORS. We may indemnify our directors or officers in their capacity as such in respect of their loss or liability for any negligence, default, breach of duty or breach of trust to us other than for his or her own fraud or dishonesty. Under Delaware law, the law applicable to many U.S. public companies, a corporation may indemnify a director or officer of the corporation against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred in defense of an action, suit or proceeding by reason of such position if:

* the director or officer acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and
* with respect to any criminal action or proceeding, the director or officer had no reasonable cause to believe his or her conduct was unlawful.

INSPECTION OF CORPORATE RECORDS. Members of the general public have the right to inspect our public documents available at the office of the Registrar of Companies in Bermuda, which will include our Memorandum of Association, and any alteration to our Memorandum of Association and documents relating to any increase or reduction of our authorized capital. Our shareholders have the additional right to inspect our Bye-laws, minutes of general meetings and audited financial statements,

75

77

which must be presented to the annual general meeting of shareholders. The register of our shareholders is also open to inspection by shareholders without charge, and to members of the public for a fee. We are required to maintain our share register in Bermuda but may establish a branch register outside Bermuda. We are required to keep at our registered office a register of our directors and officers which is open for inspection by members of the public without charge. Bermuda law does not, however, provide a general right for shareholders to inspect or obtain copies of any other corporate records. Delaware law permits any shareholder to inspect or obtain copies of a corporation's shareholder list and its other books and records for any purpose reasonably related to the person's interest as a shareholder.

TAXATION OF SHAREHOLDERS

BERMUDA TAX CONSIDERATIONS

In the opinion of Conyers Dill & Pearman, our special Bermuda counsel, under current Bermuda law, no income, withholding or other taxes or stamp or other duties will be imposed upon the issue, transfer or sale of our common stock or on any payments on the common stock. Furthermore, we have obtained from the Minister of Finance of Bermuda under the Exempted Undertakings Tax Protection Act 1966, as amended, an undertaking that, in the event that Bermuda enacts any legislation imposing tax computed on profits, income, any capital asset, gain or appreciation, or any tax in the nature of estate duty or inheritance tax, then the imposition of such tax will not be applicable to us or to any of our operations, or our shares, capital or common stock, until March 28, 2016. The undertaking does not, however, prevent the imposition of property taxes on any company owning real property or leasehold interests in Bermuda.

UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS

In the opinion of Fenwick & West LLP, our special United States federal income tax counsel, the following states the material United States federal income tax law that applies to the ownership and disposition of our common stock by prospective United States Holders, as defined below, as of the date of this prospectus. This summary deals only with common stock that is held as a capital asset within the meaning of Section 1221 of the Internal Revenue Code by a United States Holder, and does not address tax considerations applicable to United States Holders that are subject to special tax rules, such as dealers or traders in securities, financial institutions, insurance companies, tax-exempt entities, United States Holders subject to alternative minimum tax, United States Holders that hold common stock as part of a straddle, conversion transaction, constructive sale or other arrangement involving more than one position, United States Holders that have a principal place of business or tax home outside the United States or United States Holders whose functional currency is not the United States dollar. This summary does not address the tax consequences under state, local, estate, or other national, for example, non-United States, tax laws. In addition, the summary does not address the tax consequences to the United States Holders that own, or are deemed for United States federal income tax purposes to own, pursuant to complex attribution and constructive ownership rules, 10% or more of our voting stock or that of any of our non-United States subsidiaries. We refer to these persons as 10% Shareholders.

76

78

The discussion below is based upon United States federal income tax law and administrative practice as of the date of this prospectus; future legislation, regulations, administrative interpretations, or court decisions could change such laws either prospectively or retroactively, so as to result in United States federal income tax consequences different from those discussed below.

PROSPECTIVE INVESTORS SHOULD CONSULT THEIR OWN TAX ADVISORS AS TO THE TAX CONSEQUENCES OF AN INVESTMENT IN THE COMMON STOCK, INCLUDING THE APPLICATION TO THEIR PARTICULAR SITUATIONS OF THE TAX CONSIDERATIONS DISCUSSED BELOW, AS WELL AS THE APPLICATION OF STATE, LOCAL, ESTATE, FOREIGN OR OTHER FEDERAL TAX LAWS.

As used herein in this discussion, a United States Holder of common stock means a holder that is:

* a citizen or resident of the United States;
* a corporation, partnership or other entity created or organized in or under the laws of the United States or any political subdivision thereof;
* an estate the income of which is subject to United States federal income taxation regardless of its source; or
* a trust which is subject to the supervision of a court within the United States and the control of a United States person as described in Section 7701(a)(30) of the Internal Revenue Code.

TAXATION OF DISTRIBUTIONS

Subject to the passive foreign investment company, or PFIC, rules described below, to the extent paid out of current or accumulated earnings and profits, as determined under United States federal income tax principles, a distribution made with respect to our common stock will be includible for United States federal income tax purposes in the gross income of a United States Holder as ordinary income. These dividends will not be eligible for the dividends received deduction allowed to corporations under Section 243 of the Internal Revenue Code. To the extent that the amount of any distribution exceeds our earnings and profits, the distribution will first be treated as a tax-free return of capital to the extent of the United States Holder's adjusted tax basis in the common stock, and thereafter as capital gain. We do not anticipate paying cash dividends in the foreseeable future. See "Dividend Policy". For so long as we are a "United States-owned foreign corporation," distributions with respect to our common stock that are taxable as dividends will be treated with respect to most investors, including individual investors, for United States foreign tax credit purposes as foreign source "passive income," though treatment of corporations will vary depending on their circumstances. In addition, if 50% or more of our voting power or value is owned, directly or indirectly, by United States holders, then a portion of our distributions with respect to our common stock that are taxable as dividends would, subject to a de minimis exception, be characterized as United States source income for U.S., foreign tax credit purposes in the same ratio as our earnings and profits that are U.S. source bears to our total earnings and profits.

TAXATION OF CAPITAL GAINS

Subject to the PFIC rules described below, for United States federal income tax purposes, a United States Holder will recognize gain or loss on any sale or other disposition of common stock in an amount equal to the difference between the amount realized for the common stock and the United States Holder's adjusted tax basis in the common stock. The gain or loss will be capital gain or loss. Capital gain of individuals derived with respect to capital assets held for more than one year is eligible for reduced rates of taxation. The deductibility of capital losses is subject to the normal limitations on capital losses applicable to U.S. taxpayers. Except in limited circumstances, any gain or loss recognized by a United States Holder will be treated as United States source.

77

79

PASSIVE FOREIGN INVESTMENT COMPANY (PFIC)

We believe that we are not a PFIC and do not expect to become a PFIC in the future for United States federal income tax purposes, although there can be no assurance in this regard. Our conclusion is a factual determination made annually and thus is subject to change.

We will be classified as a PFIC with respect to a United States Holder if, for any taxable year in which the United States Holder held common stock, either:

* at least 75% of our gross income for the taxable year is passive income; or
* at least 50% of the average percentage of our assets by value produce or are held for the production of passive income.

For this purpose, passive income includes dividends, interest, royalties, rents, other than rents and royalties derived in the active conduct of a trade or business, annuities and gains from assets that produce passive income other than sales of inventory. Certain exceptions may apply. If we own, directly or indirectly, at least 25% by value of the stock of another corporation, we will be treated for purposes of the PFIC tests as owning our proportionate share of the assets of the other corporation, and as receiving directly our proportionate share of the other corporation's income. If we are classified as a PFIC in any year with respect to which a United States person is a shareholder, we will continue to be treated as a PFIC with respect to such shareholder in all succeeding years, regardless of whether we continue to meet the income or asset test described above, subject to possible shareholder elections that may apply.

If we were to be classified as a PFIC, the United States federal income tax consequences to a United States Holder with respect to our common stock would change significantly from the consequences presented in this discussion. For example, special rules would apply to direct and defined classes of indirect United States Holders upon disposition of the common stock, receipt of an excess distribution, as defined in Section 1291(b) of the Internal Revenue Code, specified nonrecognition transactions, or use of our common stock as security for a loan. Those United States Holders could be subject to tax as if the gain or distribution were ordinary income earned ratably over the holding period for the common stock, including an interest charge on the deferred tax, and other adverse tax consequences. Alternatively, a United States Holder of stock in a PFIC that is treated as marketable stock may make a mark-to-market election. If a United States Holder were to make a timely filed mark-to-market election with respect to our common stock owned, or treated as owned, at the close of the United States Holder's taxable year, the United States Holder would include as ordinary income in that taxable year any excess of the fair market value of the United States Holder's common stock as of the close of such year over its adjusted basis. The United States Holder would be allowed a deduction for such taxable year in the amount of any excess of the adjusted basis of the United States Holder's common stock over its fair market value at the close of the taxable year, limited to the amount of the net mark-to-market gains previously included by the United States Holder in income. The electing United States Holder's basis in the stock would be adjusted to reflect any such income or loss amounts. Any gain or loss on the sale of the common stock would be ordinary income or loss, except that any loss will be ordinary loss only to the extent of the previously included net mark-to-market gain. If the United States Holder were to make a timely qualified electing fund election, the rules described above would not apply. If a qualified electing fund election were made, the United States Holder would be currently taxable on the United States Holder's pro rata share of our ordinary earnings and profits and net capital gains, regardless of whether or not distributions were received. The United States Holder's basis in the common stock would be increased to reflect taxed but undistributed income. Distributions of income that had previously been taxed would result in a corresponding reduction of basis in the common stock and would not be taxed again as a distribution to the United States Holder. If we are treated as a PFIC, we intend to notify United States Holders and to provide to United States Holders such information as may be required to make a qualified electing fund election effective.

78

80

A United States Holder who owns our common stock during any year that we are a PFIC must file IRS Form 8621. United States Holders should consult their tax advisors concerning the United States federal income tax consequences of holding our common stock if we are a PFIC, including the advisability and availability of making any of the foregoing elections.

FOREIGN PERSONAL HOLDING COMPANY

A foreign corporation is a foreign personal holding company if at least 60% of its gross income for the taxable year is foreign personal holding company income, and if at any time during the taxable year more than 50% of the stock by vote or by value is owned, directly or indirectly, by or for not more than five individuals who are citizens or residents of the United States. We refer to such individuals as a United States Group. In some situations, the minimum percentage of foreign personal holding company income is 50%, rather than 60%. Foreign personal holding company income includes specific defined classes of passive income. Foreign personal holding companies are defined to exclude a number of specific classes of foreign corporations. If we or one of our non-United States subsidiaries were classified as a foreign personal holding company, then United States Holders including defined classes of indirect holders who owned common stock on the last day of the taxable year when the United States Group existed, would be taxed upon their pro rata shares of the undistributed foreign personal holding company income of Marvell or our non-United States subsidiaries. Information statements would be required on the returns of such United States Holders who owned 5% or more of the value of the stock on the last day on which the United States Group existed. If we or one of our non-United States subsidiaries were a foreign personal holding company and the United States Holders described above were required to include a dividend amount in their United States federal taxable income, adjustments would need to be made to our or our non-United States subsidiary's accumulated earnings and profits and paid in surplus, and to such United States Holders' respective bases in their common stock. In addition, United States Holders who acquire their common stock from decedents would not receive a stepped-up basis in that common stock. Instead, those United States Holders would have a tax basis equal to the lower of the fair market value of that common stock or the decedent's basis. We have no basis to believe at this time that the shareholder test will be met for any taxable year beginning after the offering. We intend to manage our affairs so as to minimize having income imputed to our United States Holders under these rules, to the extent such management of our affairs in this manner is consistent with our business goals, although there can be no assurance in this regard.

PERSONAL HOLDING COMPANY

A corporation classified as a personal holding company is subject to a 39.6% tax on its undistributed personal holding company income. Foreign corporations determine their liability for personal holding company tax by considering only (1) gross income derived from United States sources and (2) gross income that is effectively connected with a United States trade or business. A corporation will be classified as a personal holding company if (1) at any time during the last half of the corporation's taxable year, five or fewer individuals own more than 50% of the corporation's stock, by value, directly or indirectly and (2) the corporation receives at least 60% of its adjusted ordinary gross income from passive sources. However, if a corporation is a foreign personal holding company or a PFIC, it cannot be a personal holding company. We have no basis to believe at this time that we could meet the personal holding company shareholder test in a given taxable year beginning after the offering. We intend to manage our affairs so as to attempt to avoid or minimize the imposition of the personal holding company tax, to the extent management of our affairs in this manner is consistent with our business goals, although there can be no assurance in this regard.

CONTROLLED FOREIGN CORPORATIONS

If 10% Shareholders own, in the aggregate, more than 50%, measured by voting power or value, of our shares or any of our non-United States corporate subsidiaries, directly, indirectly, or by

79

81

attribution, we or any such non-United States subsidiary would be a controlled foreign corporation. If characterized as controlled foreign corporations, then a portion of our undistributed income and that of our non-United States subsidiaries may be includible in the taxable income of 10% Shareholders of those entities. If a 10% Shareholder has reported inclusions in income from a controlled foreign corporation, the 10% Shareholder may not have to include previously taxed amounts in income again upon distribution. We and our non-United States subsidiaries may be controlled foreign corporations or may become controlled foreign corporations in the future. If we or one of our non-United States subsidiaries is or becomes a controlled foreign corporation, the United States federal income tax consequences to a United States Holder who is a 10% Shareholder of owning or disposing of shares in such corporations change significantly from the consequences presented in this section.

TAXATION OF NON-UNITED STATES HOLDERS

For United States federal income tax purposes, a non-United States Holder will not be subject to tax or withholding on distributions made with respect to, and gains realized from the disposition of, our common stock unless such distributions and gains are effectively connected with the holder's conduct of a trade or business in the United States, or, in the case of gains, if the holder is an individual, the holder is present in the United States for 183 days in the taxable year of the sale and other conditions exist.

INFORMATION REPORTING AND BACKUP WITHHOLDING

UNITED STATES HOLDERS. Information reporting requirements will apply to dividends in respect of our common stock or the proceeds received on the sale, exchange, or redemption of the common stock paid within the United States, and in some cases, outside of the United States, to United States Holders other than exempt recipients, such as corporations, and a 31% backup withholding may apply to those amounts if the United States Holder fails to provide an accurate taxpayer identification number or to report dividends required to be shown on its United States federal income tax returns. The amount of any backup withholding from a payment to a United States Holder will be allowable as a credit against the United States Holder's United States federal income tax liability, provided that the required information or appropriate claim for refund is furnished to the IRS.

NON-UNITED STATES HOLDERS. Under current law, United States information reporting requirements and backup withholding will not apply to dividends paid to a non-United States Holder at an address outside the United States unless the payer has knowledge that the payee is a United States person. However, under recently finalized United States Treasury regulations effective for payments made after December 31, 2000, a non-United States Holder will be subject to backup withholding unless applicable certification requirements are met.

Information reporting and backup withholding will not apply to a payment of the proceeds of a sale of our common stock effected outside the United States by a foreign office for a non-United States Holder. However, payment of the proceeds of a sale of our common stock through a United States office of a broker is subject to both backup withholding and information reporting unless the beneficial owner certifies under penalties of perjury that it is a non-United States Holder and the payer does not have actual knowledge that the beneficial owner is a United States person or the holder otherwise establishes an exemption.

The amount of any backup withholding from a payment to a non-United States Holder will be allowable as a credit against such non-United States Holder's United States federal income tax liability, provided that the required information or appropriate claim for refund is furnished to the IRS.

Holders should consult their tax advisors regarding the application of information reporting and backup withholding to their particular situations, the availability of an exemption from reporting and withholding requirements, and the procedure for obtaining an exemption, if available.

80

82

SHARES ELIGIBLE FOR FUTURE SALE

The sale of a substantial amount of our common stock, including shares issued upon exercise of outstanding options and warrants, in the public market after this offering could adversely affect the prevailing market price of our common stock.

Upon completion of this offering, we will have outstanding an aggregate of 82,211,425 shares of our common stock, based on shares of common stock outstanding as of April 30, 2000. Of these shares, all of the 6,000,000 shares of our common stock sold in this offering will be freely tradable without restriction or further registration under the Securities Act, unless the shares are purchased by "affiliates" as that term is defined in Rule 144 under the Securities Act. Any shares purchased by an affiliate may not be resold except pursuant to an effective registration statement or an applicable exemption from registration, including an exemption under Rule 144 of the Securities Act. The remaining 76,211,425 shares of common stock held by existing shareholders are "restricted securities" as that term is defined in Rule 144 under the Securities Act. These restricted securities may be sold in the public market only if they are registered or if they qualify for an exemption from registration under Rule 144 or Rule 701 under the Securities Act. These rules are summarized below. Of the remaining 76,211,425 shares of common stock that constitute restricted securities, 75,344,205 shares are subject to contractual restrictions on resale under agreements with the underwriters and 867,220 shares are subject to contractual restrictions on resale under agreements with Marvell. The contractual restrictions under agreements with Marvell restrict shareholders from making sales or short sales of, granting options for the purchase of or disposing of shares, but do not restrict all transactions by those shareholders to hedge their shares. These restrictions are described more fully under the heading "Underwriting".

Upon the expiration of the contractual restrictions on resale described under the heading "Underwriting" and subject to the provisions of Rule 144 and Rule 701, approximately 78,184,042 shares of common stock, assuming the exercise of outstanding warrants and all outstanding vested stock options, will be available for sale in the public market 180 days after the date of this prospectus. The sale of these shares is subject, in the case of shares held by affiliates, to the volume restrictions contained in Rule 144.

RULE 144

In general, under Rule 144 as currently in effect, beginning 90 days after the date of this prospectus, a person who has beneficially owned shares of our common stock for at least one year from the later of the date those shares of common stock were acquired from us or from an affiliate of ours would be entitled to sell within any three-month period a number of shares that does not exceed the greater of:

1. one percent of the number of shares of common stock then outstanding, which will equal approximately 822,000 shares immediately after this offering; or
2. the average weekly trading volume of the common stock on the Nasdaq National Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale of any shares of common stock.

The sales of any shares of common stock under Rule 144 are also subject to manner of sale provisions and notice requirements and to the availability of current public information about us. Affiliates may sell shares not constituting restricted securities in accordance with the foregoing volume limitations and other restrictions, but without regard to the one-year holding period.

RULE 144(k)

In addition, under Rule 144(k), a person who is not one of our affiliates at any time during the three months preceding a sale, and who has beneficially owned the shares proposed to be sold for at least two years from the later of the date such shares of common stock were acquired from us or

81

83

from an affiliate of ours is entitled to sell those shares without complying with the manner of sale, public information, volume limitation or notice provisions of Rule 144. Therefore, unless otherwise restricted pursuant to the lock-up agreements or otherwise, those shares may be sold immediately upon the completion of this offering.

RULE 701

Each of our employees, consultants or advisors who purchased shares from us in connection with a compensatory stock plan or other written agreement under Rule 701 of the Securities Act is eligible to resell those shares 90 days after the effective date of this offering in reliance on Rule 144, but without compliance with some of the restrictions, including the holding period, contained in Rule 144.

REGISTRATION RIGHTS

Immediately after the completion of this offering, in accordance with an Investor Rights Agreement dated September 10, 1999, shareholders and warrantholders beneficially owning 27,044,912 shares of our common stock will have rights with respect to the registration of their shares under the Securities Act. Under the terms of the agreement, if we propose to register any of our securities under the Securities Act, either for our own account or for the account of other security holders exercising registration rights, such holders are entitled to notice of such registration and are entitled to include their common stock in the registration. Six months following the effective date of this offering, these shareholders may also require us to file a registration statement under the Securities Act at our expense with respect to their shares of common stock, and we are required to use our best efforts to effect such registration. These shareholders have the right to request up to two such registration statements. Further, such shareholders may require us to file additional registration statements on Form S-3 or its equivalent at our expense. Each of these rights are subject to conditions and limitations, including the right of the underwriters of an offering to limit the number of shares included in such offering under various circumstances.

STOCK OPTIONS

At April 30, 2000, options to purchase 11,492,809 shares of our common stock were outstanding under our stock option plans. Shortly after the effective date of this offering, we expect to file a registration statement under the Securities Act covering 16,718,079 shares of common stock reserved for issuance under our stock option plans. Accordingly, shares of our common stock issued under these plans will be eligible for sale in the public markets, subject to vesting restrictions and the 180 day lock-up agreements.

82

84

UNDERWRITING

Marvell and the underwriters named below have entered into an underwriting agreement with respect to the shares being offered. Subject to certain conditions, each underwriter has severally agreed to purchase the number of shares indicated in the following table. Goldman, Sachs & Co., Lehman Brothers Inc. and J.P. Morgan Securities Inc. are the representatives of the underwriters.

Underwriters Number of Shares

------------ ----------------

Goldman, Sachs & Co. .......................................

Lehman Brothers Inc. .......................................

J.P. Morgan Securities Inc. ................................

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Total............................................. 6,000,000

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If the underwriters sell more shares than the total number set forth in the table above, the underwriters have an option to buy up to an additional 900,000 shares from Marvell to cover such sales. They may exercise that option for 30 days. If any shares are purchased pursuant to this option, the underwriters will severally purchase shares in approximately the same proportion as set forth in the table above.

The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters by Marvell. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase 900,000 additional shares.

Paid by Marvell

No Exercise Full Exercise

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Per Share............................................. $ $

Total................................................. $ $

Shares sold by the underwriters to the public will initially be offered at the initial public offering price set forth on the cover of this prospectus. Any shares sold by the underwriters to securities dealers may be sold at a discount

of up to $ per share from the initial public offering price. Any such securities dealers may resell any shares purchased from the underwriters to

certain other brokers or dealers at a discount of up to $ per share from the initial public offering price. If all the shares are not sold at the initial public offering price, the representatives may change the offering price and the other selling terms.

Marvell, its directors, officers, and shareholders holding 75,344,205 shares have agreed with the underwriters not to sell, grant any option to purchase, make any short sale, dispose of or hedge any of their common stock or securities convertible into or exchangeable for shares of the common stock during the period from the date of this prospectus continuing through the date 180 days after the date of this prospectus, except with the prior written consent of Goldman, Sachs & Co. The agreement does not apply to any existing employee benefit plans. In addition, shareholders holding 867,220 shares have agreed with Marvell not to sell, make a short sale of, grant any option for the purchase of or otherwise dispose of any shares without the prior written consent of the underwriters. These agreements with Marvell do not restrict all transactions by those shareholders to hedge their shares, for example through the purchase of a put option or similar derivative security. Those hedging transactions, if they were to occur, could result in sales of additional shares in the open market by one or more third parties participating in the transactions. Marvell has agreed to take reasonable steps to enforce, and without the prior written consent of the underwriters not to waive, these agreements. See "Shares Eligible for Future Sale" for a discussion of certain transfer restrictions.

83

85

Prior to the offering, there has been no public market for the shares. The initial public offering price will be negotiated among Marvell and the representatives. Among the factors to be considered in determining the initial public offering price of the shares, in addition to prevailing market conditions, will be Marvell's historical performance, estimates of the business potential and earnings prospects of Marvell, an assessment of Marvell's management and the consideration of the above factors in relation to market valuation of companies in related businesses.

Marvell's common stock has been approved for listing on the Nasdaq National Market under the symbol "MRVL".

At Marvell's request, the underwriters have reserved up to 420,000 shares of common stock for sale at the initial public offering price to employees and other persons with preexisting strategic or other relationships with Marvell through a directed share program. The number of shares of common stock available for sale to the general public will be reduced to the extent that these persons purchase these reserved shares. Any shares not so purchased will be offered by the underwriters to the general public on the same basis as the other shares offered hereby.

In connection with the offering, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in this offering. Stabilizing transactions consist of certain bids or purchases made for the purpose of preventing or retarding a decline in the market price of the common stock while the offering is in progress.

The underwriters also may impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

These activities by the underwriters may stabilize, maintain or otherwise affect the market price of the common stock. As a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued by the underwriters at any time. These transactions may be effected on the Nasdaq National Market, in the over-the-counter market or otherwise.

A prospectus in electronic format may be made available on the web sites maintained by one or more underwriters. The underwriters may agree to allocate a number of shares to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the lead managers to underwriters that may make Internet distributions on the same basis as other allocations.

The underwriters do not expect sales to discretionary accounts to exceed five percent of the total number of shares offered.

Marvell estimates that its share of the total expenses of the offering, excluding underwriting discounts and commissions, will be approximately $1,525,000.

Marvell has agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act.

VALIDITY OF COMMON STOCK

Conyers Dill & Pearson, Bermuda, will pass upon the validity of the issuance of the shares of common stock offered by this prospectus for us. Appleby, Spurling & Kempe, Bermuda, will pass upon the validity of the issuance of the shares of common stock for the underwriters. Certain legal matters in connection with this offering will be passed for us by Gibson, Dunn & Crutcher LLP, San Francisco, California. The underwriters are being represented as to U.S. legal matters by Sullivan & Cromwell, Los Angeles, California.

84

86

EXPERTS

The financial statements as of January 31, 2000 and 1999 and for each of the three years in the period ended January 31, 2000 included in this prospectus have been so included in reliance on the report of PricewaterhouseCoopers LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

ADDITIONAL INFORMATION

We have filed with the Securities and Exchange Commission a registration statement on Form S-1, including exhibits and schedules, under the Securities Act with respect to the common stock to be sold in this offering. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules that are part of the registration statement. Any statements made in this prospectus as to the contents of any contract, agreement or other document are not necessarily complete. With respect to each such contract, agreement or other document filed as an exhibit to the registration statement, we refer you to the exhibit for a more complete description of the matter involved, and each statement in this prospectus shall be deemed qualified in its entirety by this reference. You may read and copy all or any portion of the registration statement or any reports, statements or other information in the files at the following public reference facilities of the SEC:

|  |  |  |
| --- | --- | --- |
| Washington, D.C. | New York, New York | Chicago, Illinois |
| Room 1024 | Seven World Trade Center | 500 West Madison Street |
| 450 Fifth Street, N.W. | Suite 1300 | Suite 1400 |
| Washington, D.C., 20549 | New York, New York 10048 | Chicago, Illinois 60661 |

You can request copies of these documents upon payment of a duplicating fee by writing to the SEC. You may call the SEC at 1-800-SEC-0330 for further information on the operation of its public reference rooms. Our filings, including the registration statement, will also be available to you on the Internet web site maintained by the SEC at http://www.sec.gov.

We intend to furnish our shareholders with annual reports containing financial statements audited by our independent auditors, and make available to our shareholders quarterly reports for the first three quarters of each year containing unaudited interim financial statements.

85

87

MARVELL TECHNOLOGY GROUP LTD.

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| --- | --- |
| INDEX TO CONSOLIDATED FINANCIAL STATEMENTS |  |
|  | PAGE |
|  | ---- |
| Report of Independent Accountants........................... | F-2 |
| Consolidated Balance Sheets................................. | F-3 |
| Consolidated Statements of Operations....................... | F-4 |
| Consolidated Statements of Shareholders' Equity (Deficit)... | F-5 |
| Consolidated Statements of Cash Flows....................... | F-6 |
| Notes to Consolidated Financial Statements.................. | F-7 |
| F-1 |  |

88

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Shareholders of

Marvell Technology Group Ltd.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, of shareholders' equity and of cash flows present fairly, in all material respects, the financial position of Marvell Technology Group Ltd. and its subsidiaries as of January 31, 1999 and 2000, and the results of its operations and its cash flows for the three years in the period ended January 31, 2000, in conformity with accounting principles generally accepted in the United States. These consolidated financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States which require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall consolidated financial statement presentation. We believe that our audits provide a reasonable basis for the opinion expressed above.

PRICEWATERHOUSECOOPERS LLP

San Jose, California

March 3, 2000 except for Note 11,

which is as of May 8, 2000

F-2

89

MARVELL TECHNOLOGY GROUP LTD.

CONSOLIDATED BALANCE SHEETS

(IN THOUSANDS, EXCEPT SHARE DATA)

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | PRO FORMA |
| JANUARY 31, | |  | SHAREHOLDERS' |
| ------------------- | | APRIL 30, | EQUITY AT |
| 1999 | 2000 | 2000 | APRIL 30, 2000 |
| -------- | -------- | --------- | -------------- |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  | (UNAUDITED) | | |
| ASSETS |  |  |  |  |  |  |  |  |
| Current assets: |  |  |  |  |  |  |  |  |
| Cash and cash equivalents............................... | $ | 5,515 | $ 16,600 | | $ 15,703 | |  |  |
| Restricted cash......................................... |  | -- |  | -- |  | 3,022 |  |  |
| Accounts receivable, net of allowance for doubtful |  |  |  |  |  |  |  |  |
| accounts of $100, $100 and $100 (unaudited)........... |  | 5,497 |  | 14,701 |  | 12,873 |  |  |
| Inventory, net.......................................... |  | 2,315 |  | 4,830 |  | 12,150 |  |  |
| Prepaid expenses and other current assets............... |  | 188 |  | 1,195 |  | 2,716 |  |  |
| Deferred income taxes................................... |  | 842 |  | 1,456 |  | 1,456 |  |  |
|  | -------- | | -------- | | -------- | |  |  |
| Total current assets............................. |  | 14,357 |  | 38,782 |  | 47,920 |  |  |
| Property and equipment, net............................... |  | 2,081 |  | 7,413 |  | 9,316 |  |  |
| Other noncurrent assets................................... |  | 125 |  | 305 |  | 306 |  |  |
|  | -------- | | -------- | | -------- | |  |  |
| Total assets..................................... | $ 16,563 | | $ 46,500 | | $ 57,542 | |  |  |
|  | ======== | | ======== | | ======== | |  |  |
| LIABILITIES AND SHAREHOLDERS' EQUITY (DEFICIT) |  |  |  |  |  |  |  |  |
| Current liabilities: |  |  |  |  |  |  |  |  |
| Notes payable to bank................................... | $ | 649 | $ | -- | $ | -- |  |  |
| Accounts payable........................................ |  | 3,735 |  | 5,698 |  | 10,105 |  |  |
| Accrued liabilities..................................... |  | 1,432 |  | 3,050 |  | 3,163 |  |  |
| Accrued employee compensation........................... |  | 476 |  | 1,474 |  | 1,627 |  |  |
| Income taxes payable.................................... |  | 1,189 |  | 5,875 |  | 6,420 |  |  |
| Deferred revenue........................................ |  | -- |  | -- |  | 108 |  |  |
| Capital lease obligations............................... |  | 11 |  | 74 |  | 64 |  |  |
|  | -------- | | -------- | | -------- | |  |  |
| Total current liabilities........................ |  | 7,492 |  | 16,171 |  | 21,487 |  |  |
| Notes payable to bank..................................... |  | 888 |  | -- |  | -- |  |  |
| Capital lease obligations, less current portion........... |  | 9 |  | 36 |  | 26 |  |  |
|  | -------- | | -------- | | -------- | |  |  |
| Total liabilities................................ |  | 8,389 |  | 16,207 |  | 21,513 |  |  |
|  | -------- | | -------- | | -------- | |  |  |
| Commitments (Note 9) |  |  |  |  |  |  |  |  |
| Mandatorily redeemable convertible preferred stock, $0.002 |  |  |  |  |  |  |  |  |
| par value; 8,000,000 shares authorized, 5,880,598, |  |  |  |  |  |  |  |  |
| 6,609,875 and 6,632,376 (unaudited) shares issued and |  |  |  |  |  |  |  |  |
| outstanding actual; 8,000,000 shares authorized and none |  |  |  |  |  |  |  |  |
| issued and outstanding pro forma (unaudited)............ |  | 17,524 |  | 22,353 |  | 22,451 |  |  |
| Shareholders' equity (deficit): |  |  |  |  |  |  |  |  |
| Common stock, $0.002 par value; 242,000,000 shares |  |  |  |  |  |  |  |  |
| authorized; 44,545,584, 48,931,560 and 49,681,921 |  |  |  |  |  |  |  |  |
| (unaudited) shares issued and outstanding; 242,000,000 |  |  |  |  |  |  |  |  |
| shares authorized, 76,211,425 shares issued and |  |  |  |  |  |  |  |  |
| outstanding pro forma (unaudited)..................... |  | 89 |  | 98 |  | 99 | $ | 152 |
| Additional paid-in capital.............................. |  | 1,692 |  | 17,580 |  | 24,649 |  | 47,047 |
| Deferred stock-based compensation....................... |  | (220) |  | (11,897) |  | (15,397) |  | (15,397) |
| Retained earnings (accumulated deficit)................. |  | (10,911) |  | 2,159 |  | 4,227 |  | 4,227 |
|  | -------- | | -------- | | -------- | | -------- | |
| Total shareholders' equity (deficit)............. |  | (9,350) |  | 7,940 |  | 13,578 | $ 36,029 | |
|  | -------- | | -------- | | -------- | | ======== | |
| Total liabilities and shareholders' equity....... | $ 16,563 | | $ 46,500 | | $ 57,542 | |  |  |
|  | ======== | | ======== | | ======== | |  |  |

The accompanying notes are an integral part of these Consolidated Financial Statements.

F-3

90

MARVELL TECHNOLOGY GROUP LTD.

CONSOLIDATED STATEMENTS OF OPERATIONS

(IN THOUSANDS, EXCEPT PER SHARE DATA)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  | THREE MONTHS | | |
|  |  | YEARS ENDED JANUARY 31, | | | |  | ENDED APRIL 30, | | |
|  |  | --------------------------- | |  |  | ----------------- | | | |
|  |  | 1998 | 1999 |  | 2000 |  | 1999 |  | 2000 |
|  |  | ------- | ------- | ------- | | ------- | | ------- | |
|  |  |  |  |  |  |  | (UNAUDITED) | | |
| Net revenue.................................. | | $ 625 | $21,253 | $81,375 | | $14,056 | | $29,664 | |
| Costs and expenses: |  |  |  |  |  |  |  |  |  |
| Cost of product revenue(1)................. | | 312 | 10,103 |  | 33,773 |  | 6,195 |  | 13,180 |
| Research and development(2) | ................ | 5,018 | 5,837 |  | 14,452 |  | 2,422 |  | 6,118 |
| Marketing and selling(3)................... | | 1,671 | 4,631 |  | 10,436 |  | 1,961 |  | 4,084 |
| General and administrative(4).............. | | 1,028 | 1,190 |  | 3,443 |  | 651 |  | 1,504 |
| Amortization of stock compensation......... | | -- | 42 |  | 2,175 |  | 80 |  | 2,261 |
|  |  | ------- | ------- | ------- | | ------- | | ------- | |
| Total costs and expenses........... | | 8,029 | 21,803 |  | 64,279 |  | 11,309 |  | 27,147 |
|  |  | ------- | ------- | ------- | | ------- | | ------- | |
| Operating income (loss)...................... | | (7,404) | (550) |  | 17,096 |  | 2,747 |  | 2,517 |
| Interest income.............................. | | 170 | 175 |  | 486 |  | 52 |  | 242 |
| Interest expense............................. | | (164) | (101) |  | (156) |  | (29) |  | (2) |
|  |  | ------- | ------- | ------- | | ------- | | ------- | |
| Income (loss) before income taxes............ | | (7,398) | (476) |  | 17,426 |  | 2,770 |  | 2,757 |
| Provision for income taxes................... | | 46 | 483 |  | 4,356 |  | 692 |  | 689 |
|  |  | ------- | ------- | ------- | | ------- | | ------- | |
| Net income (loss)............................ | | $(7,444) | $ (959) | $13,070 | | $ 2,078 | | $ 2,068 | |
|  |  | ======= | ======= | ======= | | ======= | | ======= | |
| Net income (loss) per share: |  |  |  |  |  |  |  |  |  |
| Basic net income (loss) per share.......... | | $ (0.24) | $ (0.03) | $ | 0.32 | $ | 0.06 | $ | 0.04 |
|  |  | ======= | ======= | ======= | | ======= | | ======= | |
| Diluted net income (loss) per share........ | | $ (0.24) | $ (0.03) | $ | 0.16 | $ | 0.03 | $ | 0.02 |
|  |  | ======= | ======= | ======= | | ======= | | ======= | |
| Weighted average shares -- basic........... | | 30,436 | 32,470 |  | 41,094 |  | 37,135 |  | 46,493 |
|  |  | ======= | ======= | ======= | | ======= | | ======= | |
| Weighted average shares -- diluted......... | | 30,436 | 32,470 |  | 81,545 |  | 78,538 |  | 84,796 |
|  |  | ======= | ======= | ======= | | ======= | | ======= | |
| Pro forma net income per share: | |  |  |  |  |  |  |  |  |
| Pro forma basic net income per share | |  |  |  |  |  |  |  |  |
| (unaudited)............................. | |  |  | $ | 0.20 |  |  | $ | 0.03 |
|  |  |  |  | ======= | |  |  | ======= | |
| Pro forma diluted net income per share | |  |  |  |  |  |  |  |  |
| (unaudited)............................. | |  |  | $ | 0.16 |  |  | $ | 0.02 |
|  |  |  |  | ======= | |  |  | ======= | |
| Weighted average shares -- | basic |  |  |  |  |  |  |  |  |
| (unaudited)............................. | |  |  |  | 66,157 |  |  |  | 72,978 |
|  |  |  |  | ======= | |  |  | ======= | |
| Weighted average shares -- | diluted |  |  |  |  |  |  |  |  |
| (unaudited)............................. | |  |  |  | 81,545 |  |  |  | 84,796 |
|  |  |  |  | ======= | |  |  | ======= | |

- ---------------

1. Excludes amortization of stock compensation of $0, $0, $11, $4 and $114.
2. Excludes amortization of stock compensation of $0, $27, $1,373, $50 and $922.
3. Excludes amortization of stock compensation of $0, $4, $211, $14 and $1,094.
4. Excludes amortization of stock compensation of $0, $11, $580, $12 and $131.

The accompanying notes are an integral part of these Consolidated Financial

Statements.

F-4

91

MARVELL TECHNOLOGY GROUP LTD.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (DEFICIT)

(IN THOUSANDS, EXCEPT SHARE DATA)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | COMMON STOCK | | ADDITIONAL | DEFERRED | | RETAINED |  |
|  | ------------------- | | PAID-IN | STOCK-BASED | | EARNINGS |  |
|  | SHARES | AMOUNT | CAPITAL | COMPENSATION | | (DEFICIT) | TOTAL |
|  | ---------- | ------ | ---------- | ------------ | | --------- | ------- |
| Balance at January 31, 1997.......... | 37,646,000 | $75 | $ 144 | $ | -- | $ (2,508) | $(2,289) |
| Common Stock options exercised....... | 1,788,000 | 4 | 67 |  | -- | -- | 71 |
| Issuance of warrants in connection |  |  |  |  |  |  |  |
| with Series D Mandatorily |  |  |  |  |  |  |  |
| Redeemable Convertible Preferred |  |  |  |  |  |  |  |
| Stock.............................. | -- | -- | 84 |  | -- | -- | 84 |
| Net loss............................. | -- | -- | -- |  | -- | (7,444) | (7,444) |
|  | ---------- | --- | ------- | -------- | | -------- | ------- |
| Balance at January 31, 1998.......... | 39,434,000 | 79 | 295 |  | -- | (9,952) | (9,578) |
| Common Stock options exercised....... | 5,486,592 | 11 | 1,081 |  | -- | -- | 1,092 |
| Common Stock repurchased............. | (375,008) | (1) | (12) |  | -- | -- | (13) |
| Issuance of warrants in connection |  |  |  |  |  |  |  |
| with Series D Mandatorily |  |  |  |  |  |  |  |
| Redeemable Convertible Preferred |  |  |  |  |  |  |  |
| Stock.............................. | -- | -- | 66 |  | -- | -- | 66 |
| Deferred stock-based compensation.... | -- | -- | 262 |  | (262) | -- | -- |
| Amortization of deferred stock-based |  |  |  |  |  |  |  |
| compensation....................... | -- | -- | -- |  | 42 | -- | 42 |
| Net loss............................. | -- | -- | -- |  | -- | (959) | (959) |
|  | ---------- | --- | ------- | -------- | | -------- | ------- |
| Balance at January 31, 1999.......... | 44,545,584 | 89 | 1,692 |  | (220) | (10,911) | (9,350) |
| Common stock options exercised....... | 4,437,376 | 9 | 2,070 |  | -- | -- | 2,079 |
| Common stock repurchased............. | (51,400) | -- | (34) |  | -- | -- | (34) |
| Deferred stock-based compensation.... | -- | -- | 13,852 |  | (13,852) | -- | -- |
| Amortization of deferred stock-based |  |  |  |  |  |  |  |
| compensation....................... | -- | -- | -- |  | 2,175 | -- | 2,175 |
| Net income........................... | -- | -- | -- |  | -- | 13,070 | 13,070 |
|  | ---------- | --- | ------- | -------- | | -------- | ------- |
| Balance at January 31, 2000.......... | 48,931,560 | 98 | 17,580 |  | (11,897) | 2,159 | 7,940 |
| Common stock options exercised |  |  |  |  |  |  |  |
| (unaudited)........................ | 1,906,361 | 2 | 1,683 |  | -- | -- | 1,685 |
| Common stock repurchased |  |  |  |  |  |  |  |
| (unaudited)........................ | (1,156,000) | (1) | (375) |  | -- | -- | (376) |
| Deferred stock-based compensation |  |  |  |  |  |  |  |
| (unaudited)........................ | -- | -- | 5,761 |  | (5,761) | -- | -- |
| Amortization of deferred stock-based |  |  |  |  |  |  |  |
| compensation (unaudited)........... | -- | -- | -- |  | 2,261 | -- | 2,261 |
| Net income (unaudited)............... | -- | -- | -- |  | -- | 2,068 | 2,068 |
|  | ---------- | --- | ------- | -------- | | -------- | ------- |
| Balance at April 30, 2000 |  |  |  |  |  |  |  |
| (unaudited)........................ | 49,681,921 | $99 | $24,649 | $(15,397) | | $ 4,227 | $13,578 |
|  | ========== | === | ======= | ======== | | ======== | ======= |

The accompanying notes are an integral part of these Consolidated Financial

Statements.

F-5

92

MARVELL TECHNOLOGY GROUP LTD.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(IN THOUSANDS)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  | THREE MONTHS | | |
|  |  | YEARS ENDED JANUARY 31, | | | | |  | ENDED APRIL 30, | | |
|  | ----------------------------- | |  |  |  |  | ------------------ | | | |
|  |  | 1998 |  | 1999 |  | 2000 |  | 1999 |  | 2000 |
|  | ------- | | ------- | | ------- | | ------- | | ------- | |
|  |  |  |  |  |  |  |  | (UNAUDITED) | | |
| CASH FLOWS FROM OPERATING ACTIVITIES: |  |  |  |  |  |  |  |  |  |  |
| Net income (loss)....................... | $(7,444) | | $ | (959) | $13,070 | | $ 2,078 | | $ 2,068 | |
| Adjustments to reconcile net income |  |  |  |  |  |  |  |  |  |  |
| (loss) to net cash provided by (used |  |  |  |  |  |  |  |  |  |  |
| in) operating activities: |  |  |  |  |  |  |  |  |  |  |
| Depreciation and amortization......... |  | 354 |  | 701 |  | 1,652 |  | 273 |  | 822 |
| Amortization of deferred stock |  |  |  |  |  |  |  |  |  |  |
| compensation....................... |  | -- |  | 42 |  | 2,175 |  | 80 |  | 2,261 |
| Changes in assets and liabilities: |  |  |  |  |  |  |  |  |  |  |
| Accounts receivable................ |  | (99) |  | (5,398) |  | (9,204) |  | (541) |  | 1,828 |
| Inventory.......................... |  | (265) |  | (2,050) |  | (2,515) |  | (511) |  | (7,320) |
| Prepaid expenses and other |  |  |  |  |  |  |  |  |  |  |
| assets........................... |  | (34) |  | (228) |  | (1,187) |  | (83) |  | (1,522) |
| Accounts payable................... |  | 252 |  | 3,264 |  | 1,963 |  | (1,019) |  | 4,407 |
| Accrued liabilities................ |  | 241 |  | 1,089 |  | 1,618 |  | 272 |  | 113 |
| Accrued compensation costs......... |  | 136 |  | 296 |  | 998 |  | 138 |  | 153 |
| Income taxes payable............... |  | 347 |  | 770 |  | 4,686 |  | 636 |  | 545 |
| Deferred revenue................... |  | -- |  | -- |  | -- |  | -- |  | 108 |
| Deferred income taxes.............. |  | (317) |  | (453) |  | (614) |  | -- |  | -- |
|  | ------- | | ------- | | ------- | | ------- | | ------- | |
| Net cash provided by (used in) |  |  |  |  |  |  |  |  |  |  |
| operating activities........... |  | (6,829) |  | (2,926) |  | 12,642 |  | 1,323 |  | 3,463 |
|  | ------- | | ------- | | ------- | | ------- | | ------- | |
| CASH FLOWS FROM INVESTING ACTIVITIES: |  |  |  |  |  |  |  |  |  |  |
| Increase in restricted cash............. |  | -- |  | -- |  | -- |  | -- |  | (3,022) |
| Cash used in purchase of property and |  |  |  |  |  |  |  |  |  |  |
| equipment............................. |  | (1,026) |  | (1,564) |  | (6,808) |  | (896) |  | (2,725) |
|  | ------- | | ------- | | ------- | | ------- | | ------- | |
| Net cash used in investing |  |  |  |  |  |  |  |  |  |  |
| activities..................... |  | (1,026) |  | (1,564) |  | (6,808) |  | (896) |  | (5,747) |
|  | ------- | | ------- | | ------- | | ------- | | ------- | |
| CASH FLOWS FROM FINANCING ACTIVITIES: |  |  |  |  |  |  |  |  |  |  |
| Proceeds from the issuance of |  |  |  |  |  |  |  |  |  |  |
| convertible preferred stock, net...... |  | 6,373 |  | 4,125 |  | 4,829 |  | 990 |  | 98 |
| Proceeds from the issuance of common |  |  |  |  |  |  |  |  |  |  |
| stock, net............................ |  | 71 |  | 1,079 |  | 2,045 |  | 389 |  | 1,309 |
| Principal payments of capital lease |  |  |  |  |  |  |  |  |  |  |
| obligations and notes payable to |  |  |  |  |  |  |  |  |  |  |
| bank.................................. |  | (45) |  | (211) |  | (3,579) |  | (165) |  | (20) |
| Proceeds from borrowings on notes |  |  |  |  |  |  |  |  |  |  |
| payable to bank....................... |  | -- |  | 1,705 |  | 1,956 |  | -- |  | -- |
|  | ------- | | ------- | | ------- | | ------- | | ------- | |
| Net cash provided by financing |  |  |  |  |  |  |  |  |  |  |
| activities..................... |  | 6,399 |  | 6,698 |  | 5,251 |  | 1,214 |  | 1,387 |
|  | ------- | | ------- | | ------- | | ------- | | ------- | |
| Net increase (decrease) in cash and cash |  |  |  |  |  |  |  |  |  |  |
| equivalents............................. |  | (1,456) |  | 2,208 |  | 11,085 |  | 1,641 |  | (897) |
| Cash and cash equivalents at beginning of |  |  |  |  |  |  |  |  |  |  |
| period.................................. |  | 4,763 |  | 3,307 |  | 5,515 |  | 5,515 |  | 16,600 |
|  | ------- | | ------- | | ------- | | ------- | | ------- | |
| Cash and cash equivalents at end of |  |  |  |  |  |  |  |  |  |  |
| period.................................. | $ 3,307 | | $ 5,515 | | $16,600 | | $ 7,156 | | $15,703 | |
|  | ======= | | ======= | | ======= | | ======= | | ======= | |
| SUPPLEMENTAL CASH FLOW INFORMATION: |  |  |  |  |  |  |  |  |  |  |
| Cash paid during the period for: |  |  |  |  |  |  |  |  |  |  |
| Interest.............................. | $ | 164 | $ | 101 | $ | 174 | $ | 29 | $ | 2 |
|  | ======= | | ======= | | ======= | | ======= | | ======= | |
| Income taxes.......................... | $ | 17 | $ | 166 | $ | 284 | $ | 55 | $ | 144 |
|  | ======= | | ======= | | ======= | | ======= | | ======= | |
| Acquisition of property and equipment |  |  |  |  |  |  |  |  |  |  |
| under capital lease obligations.... | $ | 93 | $ | -- | $ | 176 | $ | -- | $ | -- |
|  | ======= | | ======= | | ======= | | ======= | | ======= | |

The accompanying notes are an integral part of these Consolidated Financial

Statements.

F-6

93

MARVELL TECHNOLOGY GROUP LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 -- THE COMPANY AND ITS SIGNIFICANT ACCOUNTING POLICIES:

THE COMPANY

Marvell Technology Group Ltd., (the "Company"), a Bermuda exempted company, was incorporated on January 11, 1995. The Company engages in the design, development and sale of integrated circuits utilizing proprietary mixed signal and digital signal processing technology for the high-speed, high-density data storage and broadband data communications markets.

BASIS OF PRESENTATION

During fiscal 2000, the Company changed its fiscal year to the Saturday nearest January 31. In fiscal 1999 and 1998, the year ended on January 31. All years have been restated to reflect the current presentation. For presentation purposes, the consolidated financial statements and notes refer to January 31 as year end.

UNAUDITED INTERIM CONSOLIDATED FINANCIAL INFORMATION

The interim financial information for the three month periods ended April 30, 1999 and 2000 is unaudited and has been prepared on the same basis as the audited consolidated financial statements. The data disclosed in the financial statements as of April 30, 2000 and for the periods ended April 30, 2000 and 1999 are unaudited. In the opinion of management, such unaudited information includes all adjustments (consisting only of normal recurring adjustments) necessary for a fair presentation of the interim information. Results for the three months ended April 30, 2000 are not necessarily indicative of results for the entire fiscal year or future periods.

USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates, and such differences could affect the results of operations reporting in future periods.

PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated. The functional currency is the United States dollar.

FAIR VALUE OF FINANCIAL INSTRUMENTS

The fair value of a financial instrument is the amount at which the instrument could be exchanged in a current transaction between willing parties. The carrying amounts for cash and cash equivalents, accounts receivable, prepaid expenses and other current assets, accounts payable, accrued liabilities and accrued employee compensation approximate their respective fair values because of the short term maturity of these items. The carrying value of the Company's debt approximates fair market value because of prevailing interest rates.

F-7

94

MARVELL TECHNOLOGY GROUP LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

CASH EQUIVALENTS

The Company considers all highly liquid investments with a maturity of three months or less from the date of purchase to be cash equivalents. Cash and cash equivalents consist of cash on deposit with banks, money market funds and commercial deposits, the fair value of which approximates cost. At January 31, 1999 and 2000, approximately $704,000 and $14,792,000 of money market funds are included in cash and cash equivalents, respectively.

CONCENTRATION OF CREDIT RISK AND SIGNIFICANT CUSTOMERS

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash equivalents and accounts receivable. The Company places its cash primarily in checking and money market accounts. Cash equivalents are maintained with high quality institutions, the composition and maturities of which are regularly monitored by management. The Company believes that the concentration of credit risk in its trade receivables with respect to the data storage industry, as well as the limited customer base, located primarily in the Far East, is substantially mitigated by the Company's credit evaluation process, relatively short collection terms and the high level of credit worthiness of its customers. The Company performs ongoing credit evaluations of its customers' financial condition and limits the amount of credit extended when deemed necessary but generally requires no collateral.

The following table sets forth sales to customers comprising 10% or more of the Company's total revenue for the periods indicated:

|  |  |  |  |
| --- | --- | --- | --- |
|  | YEARS ENDED JANUARY 31, | | |
|  | ----------------------- | | |
| CUSTOMER | 1998 | 1999 | 2000 |
| -------- | ----- | ----- | ----- |
| A...................................................... | -- | 46% | 36% |
| B...................................................... | 21% | 43% | 24% |
| C...................................................... | -- | 7% | 14% |
| D...................................................... | -- | 2% | 14% |
| E...................................................... | -- | 1% | 10% |
| F...................................................... | 26% | -- | -- |
| G...................................................... | 25% | -- | -- |
| H...................................................... | 16% | -- | -- |

The Company's accounts receivable were concentrated with three customers at January 31, 1999 (representing 51%, 29% and 10% of aggregate gross receivables) and four customers at January 31, 2000 (representing 48%, 16%, 15% and 14% of aggregate gross receivables).

INVENTORY

Inventory is stated at the lower of cost or market, cost being determined under the first-in, first-out method. Appropriate consideration is given to obsolescence, excessive levels, deterioration and other factors in evaluating net realizable value.

PROPERTY AND EQUIPMENT

Property and equipment including capital leases and leasehold improvements are stated at cost less accumulated depreciation or amortization. Depreciation is computed using the straight-line method over the estimated useful lives of the assets, which ranges from three to four years. Assets held under capital leases and leasehold improvements are amortized over the term of the lease or their estimated useful lives, whichever is shorter.

F-8

95

MARVELL TECHNOLOGY GROUP LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Long-lived assets held and used by the Company are reviewed for impairment whenever events or changes in circumstances indicate that their net book value may not be recoverable. An impairment loss is recognized if the sum of the expected future cash flows (undiscounted and before interest) from the use of the asset is less than the net book value of the asset. The amount of the impairment loss will generally be measured as the difference between net book values of the assets and their estimated fair values. The Company believes that no long-lived assets were impaired at January 31, 1999 and 2000.

REVENUE RECOGNITION

Revenue from the sale of integrated circuits is recognized upon shipment, net of accruals for estimated sales returns and allowances. Revenue generated by sales to distributors under agreements allowing certain rights of return are deferred for financial reporting purposes until the products are sold by distributors. Net revenue for the year ended January 31, 1998 includes approximately $197,000 derived from a research and development contract, which was recognized on the percentage of completion basis. The associated costs are included in research and development expenses.

RESEARCH AND DEVELOPMENT

Research and development costs are expensed as incurred.

STOCK-BASED COMPENSATION

The Company's employee stock option plan is accounted for in accordance with Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" and complies with the disclosure provisions of Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123"). Expense associated with stock-based compensation is amortized on an accelerated basis over the vesting period of the individual award consistent with the method described in Financial Accounting Standards Board Interpretation No. 28, ("FIN 28"). Application of FIN 28 results in amortization of approximately 46% of the compensation in the first 12 months of vesting, 26% of the compensation in the second 12 months of vesting, 15% of the compensation in the third 12 months of vesting, 9% of the compensation in the fourth 12 months of vesting and 4% of the compensation in the fifth 12 months of vesting. The Company accounts for stock issued to non-employees in accordance with the provisions of SFAS 123 and Emerging Issues Task Force Consensus No. 96-18, "Accounting for Equity Instruments that are Offered to Other Than Employees for Acquiring of in Conjunction with Selling Goods or Services" ("EITF 96-18"). Under SFAS 123 and EITF 96-18, stock option awards issued to non-employees are accounted for at their fair value using the Black-Scholes method. The fair value of each non-employee stock awarded is remeasured at each period end until a commitment date is reached, which is generally the vesting date.

COMPREHENSIVE INCOME (LOSS)

The Company adopted Statement of Financial Accounting Standards No. 130 "Reporting Comprehensive Income" ("SFAS 130"). SFAS 130 establishes standards for reporting and displaying comprehensive income and its components in a full set of general-purpose financial statements. There was no difference between the Company's net income or loss and its total comprehensive net income or loss for the years ended January 31, 1998, 1999 and 2000.

F-9

96

MARVELL TECHNOLOGY GROUP LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

NET INCOME (LOSS) PER SHARE

The Company reports both basic net income (loss) per share, which is based upon the weighted average number of common shares outstanding excluding contingently issuable or returnable shares, and diluted net income (loss) per share, which is based on the weighted average number of common shares outstanding and dilutive potential common shares outstanding.

The following table sets forth the computation of basic and diluted net income (loss) per share of common stock (in thousands, except per share amounts):

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  | THREE MONTHS ENDED | | |
|  | YEARS ENDED JANUARY 31, | | | | ---------------------- | | | |
|  | ----------------------------- | |  |  | APRIL 30, | | APRIL 30, | |
|  | 1998 | 1999 |  | 2000 |  | 1999 |  | 2000 |
|  | ------- | ------- | ------- | | --------- | | --------- | |
|  |  |  |  |  |  | (UNAUDITED) | | |
| Numerator: |  |  |  |  |  |  |  |  |
| Net income (loss).................. | $(7,444) | $ (959) | $13,070 | | $ 2,078 | | $ 2,068 | |
|  | ======= | ======= | ======= | | ======= | | ======= | |
| Denominator: |  |  |  |  |  |  |  |  |
| Basic -- |  |  |  |  |  |  |  |  |
| Weighted-average shares of |  |  |  |  |  |  |  |  |
| common stock outstanding...... | 38,683 | 40,459 |  | 46,428 |  | 45,168 |  | 49,684 |
| Less: unvested common shares |  |  |  |  |  |  |  |  |
| subject to repurchase......... | (8,247) | (7,989) |  | (5,334) |  | (8,033) |  | (3,191) |
|  | ------- | ------- | ------- | | ------- | | ------- | |
| Denominator for basic |  |  |  |  |  |  |  |  |
| calculation.............. | 30,436 | 32,470 |  | 41,094 |  | 37,135 |  | 46,493 |
|  | ------- | ------- | ------- | | ------- | | ------- | |
| Effect of dilutive securities -- |  |  |  |  |  |  |  |  |
| Unvested common shares subject |  |  |  |  |  |  |  |  |
| to |  |  |  |  |  |  |  |  |
| repurchase.................... | -- | -- |  | 5,334 |  | 8,033 |  | 3,191 |
| Mandatorily redeemable |  |  |  |  |  |  |  |  |
| convertible preferred stock... | -- | -- |  | 25,063 |  | 23,522 |  | 26,485 |
| Mandatorily redeemable |  |  |  |  |  |  |  |  |
| convertible preferred stock |  |  |  |  |  |  |  |  |
| warrants...................... | -- | -- |  | 273 |  | 375 |  | 66 |
| Common stock warrants........... | -- | -- |  | 20 |  | -- |  | 12 |
| Stock options................... | -- | -- |  | 9,761 |  | 9,473 |  | 8,549 |
|  | ------- | ------- | ------- | | ------- | | ------- | |
| Denominator for diluted |  |  |  |  |  |  |  |  |
| calculation.............. | 30,436 | 32,470 |  | 81,545 |  | 78,538 |  | 84,796 |
|  | ======= | ======= | ======= | | ======= | | ======= | |
| Basic net income (loss) per share.... | $ (0.24) | $ (0.03) | $ | 0.32 | $ | 0.06 | $ | 0.04 |
|  | ======= | ======= | ======= | | ======= | | ======= | |
| Diluted net income (loss) per |  |  |  |  |  |  |  |  |
| share.............................. | $ (0.24) | $ (0.03) | $ | 0.16 | $ | 0.03 | $ | 0.02 |
|  | ======= | ======= | ======= | | ======= | | ======= | |

The following table sets forth potential shares of common stock, assuming conversion of preferred stock and preferred stock warrants that are not included in the diluted net loss per share calculation above because to do so would be anti-dilutive for the periods presented (in thousands):

|  |  |  |
| --- | --- | --- |
|  | JANUARY 31, | |
|  | ---------------- | |
|  | 1998 | 1999 |
|  | ------ | ------ |
| Unvested common stock subject to repurchase................. | 8,247 | 7,989 |
| Mandatorily Redeemable Convertible preferred stock.......... | 19,352 | 23,522 |
| Mandatorily Redeemable Convertible preferred stock |  |  |
| warrants.................................................. | 2,192 | 2,440 |
| Stock options............................................... | 12,738 | 12,896 |

F-10

97

MARVELL TECHNOLOGY GROUP LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

PRO FORMA NET INCOME PER SHARE (UNAUDITED)

Pro forma net income per share for the year ended January 31, 2000 and the three months ended April 30, 2000 is computed using the weighted average number of common shares outstanding, including the conversion of the Company's Series A, Series B, Series C, Series D and Series E mandatorily redeemable convertible preferred stock outstanding into shares of the Company's common stock effective upon the closing of the Company's initial public offering ("IPO") as if such conversion occurred on February 1, 1999 or at the date of original issuance, if later. The calculation of pro forma diluted net income per share includes incremental common shares issuable upon the exercise of stock options and common and preferred stock warrants.

PRO FORMA SHAREHOLDERS' EQUITY (UNAUDITED)

Effective upon the closing of the IPO, the outstanding Series A, Series B, Series C, Series D and Series E preferred stock will automatically convert into an aggregate of 26,529,504 shares of common stock. The pro forma effect of this transaction is unaudited and has been reflected in the accompanying pro forma shareholders' equity as of April 30, 2000.

RECENT ACCOUNTING PRONOUNCEMENTS

In June 1998, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 133 ("SFAS 133"), "Accounting for Derivative Instruments and Hedging Activities," as amended by Statement of Financial Accounting Standards No. 137, "Accounting for Derivative Instruments and Hedging Activities -- Deferral of the Effective Date of FASB Statement No. 133- an amendment of FASB Statement No. 133" ("SFAS 137"). SFAS 133 requires that all derivative instruments be recorded on the balance sheet at their fair market value. Changes in the fair market value of derivatives are recorded each period in current earnings or comprehensive income, depending on whether a derivative is designed as part of a hedge transaction, and if so, the type of hedge transaction. Substantially all of the Company's revenues and the majority of its costs are denominated in U.S. dollars, and to date the Company has not entered into any derivative contracts. The Company does not expect that the adoption of SFAS 133 will have a material effect on its financial statements. The effective date of SFAS 133 as amended by SFAS 137 is for fiscal quarters of fiscal years beginning after June 15, 2000.

In December 1999, the Securities and Exchange Commission staff released Staff Accounting Bulletin ("SAB") No. 101, "Revenue Recognition in Financial Statements," which provides guidance on the recognition, presentation and disclosure of revenue in financial statements. The application of SAB No. 101 did not have a material impact on the Company's financial statements.

F-11

98

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | MARVELL TECHNOLOGY GROUP LTD. | |  |  |
|  | NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) | | |  |
| NOTE 2 -- | BALANCE SHEET DETAILS (IN THOUSANDS): |  |  |  |
|  |  | JANUARY | 31, |  |
|  |  | ------------------ | | APRIL 30, |
|  |  | 1999 | 2000 | 2000 |
|  |  | ------- | ------- | ----------- |
|  |  |  |  | (UNAUDITED) |
| INVENTORY: |  |  |  |  |
| Work-in-process............................... | | $ 2,315 | $ 4,830 | $12,150 |
|  |  | ======= | ======= | ======= |
| PROPERTY AND EQUIPMENT: | |  |  |  |
| Machinery and equipment....................... | | $ 1,589 | $ 3,890 | $ 4,699 |
| Computer software............................. | | 1,285 | 3,981 | 5,598 |
| Furniture and fixtures........................ | | 203 | 1,633 | 1,688 |
| Leasehold improvements........................ | | 130 | 685 | 929 |
|  |  | ------- | ------- | ------- |
|  |  | 3,207 | 10,189 | 12,914 |
| Less: Accumulated depreciation and | |  |  |  |
| amortization............................... | | (1,126) | (2,776) | (3,598) |
|  |  | ------- | ------- | ------- |
|  |  | $ 2,081 | $ 7,413 | $ 9,316 |
|  |  | ======= | ======= | ======= |

Machinery and equipment include $144, $320 and $320 of assets under capital leases at January 31, 1999 and 2000 and April 30, 2000, respectively. Accumulated depreciation for such equipment was $53, $124 and $142 at January 31, 1999 and 2000 and April 30, 2000, respectively.

NOTE 3 -- LINE OF CREDIT AND NOTES PAYABLE TO BANK:

In May 1998 (and amended in July 1999), the Company entered into a loan and security agreement with a bank which provides for borrowings of up to $8,000,000 in the form of line of credit advances based on eligible accounts receivable and inventory, as defined, and $3,100,000 available in the form of equipment advances. The agreement expires on April 30, 2000. Borrowings accrue interest at the bank's prime rate plus 0.125%, which equaled 8.625% at January 31, 2000, and are secured by the tangible assets of the Company. In fiscal 1999 and 2000, the Company borrowed a total of approximately $3,600,000 under this agreement, which was fully repaid in fiscal 2000.

At January 31, 2000, no amounts were outstanding, and $8,000,000 was available, under the line of credit and equipment advance. The agreement requires the Company to comply with certain covenants and maintain certain financial ratios. The agreement prohibits the payment of cash dividends without prior bank approval.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| NOTE 4 -- | MANDATORILY REDEEMABLE CONVERTIBLE PREFERRED STOCK: | |  |  |  |  |
| Mandatorily redeemable convertible preferred stock at January 31, 2000 | | | |  |  |  |
| consisted of the following (in thousands): | |  |  |  |  |  |
|  | SHARES | | PROCEEDS | |  |  |
|  | ------------------------ | |  | NET OF | LIQUIDATION | |
|  | AUTHORIZED | OUTSTANDING | ISSUANCE COSTS | | AMOUNT | |
|  | ---------- | ----------- | -------------- | | ----------- | |
| Series A.................................. | 525 | 525 | $ | 350 | $ | 350 |
| Series B.................................. | 1,119 | 1,119 |  | 1,199 |  | 1,231 |
| Series C.................................. | 2,184 | 2,090 |  | 7,098 |  | 7,316 |
| Series D.................................. | 3,750 | 2,526 |  | 10,206 |  | 10,945 |
| Series E.................................. | 422 | 350 |  | 3,500 |  | 3,500 |
|  | ------ | ------ | ------- | | ------- | |
|  | 8,000 | 6,610 | $22,353 | | $23,342 | |
|  | ====== | ====== | ======= | | ======= | |

F-12

99

MARVELL TECHNOLOGY GROUP LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

The rights with respect to Series A, Series B, Series C, Series D and

Series E are as follows:

VOTING

Each share of the Series A, Series B, Series C, Series D and Series E has voting rights equal to that of common stock on an as if converted basis. The holders of a majority of the outstanding shares of Series B and Series C, respectively, voting as a class individually, shall be entitled to elect one member of the Board of Directors each.

DIVIDENDS

Each holder of outstanding Series A, Series B, Series C, Series D and Series E are entitled to receive noncumulative dividends as declared by the Board of Directors at a rate of $0.0468, $0.0772, $0.2452, $0.3032 and $0.70 per share, respectively, subject to anti-dilution. No dividends have been declared from inception through January 31, 2000.

LIQUIDATION

In the event of any liquidation, dissolution, winding up, or merger where

less than 50% of the voting power is maintained by existing shareholders of the

Company, the Series A, Series B, Series C, Series D and Series E shareholders

are entitled to receive prior and in preference to any distribution to the

holders of common stock, an amount per share equal to $0.67, $1.10, $3.50, $4.33

and $10.00, respectively, plus any declared but unpaid dividends. The remaining

assets shall be distributed pro rata to the holders of Series A, Series B,

Series C, Series D and Series E based on the number of shares held. However,

such incremental distribution is limited to an amount equal to $1.67, $2.75,

$8.75, $10.83 and $25.00 per share of Series A, Series B, Series C, Series D and

Series E, respectively. All remaining assets shall be distributed pro rata to

the holders of common stock.

CONVERSION

Each Series A, Series B, Series C, Series D and Series E share is convertible into four shares of common stock at the option of the holder, subject to adjustments for stock dividends, stock splits, combination of common stock, consolidations of common stock and the issuance of new common stock. Each share of Series A, Series B, Series C, Series D and Series E will be automatically converted upon (i) an initial public offering of the Company at not less than $3.25 per share with aggregate proceeds greater than $10,000,000, or (ii) the written consent of the respective shareholders of Series A, Series B, Series C, Series D and Series E of greater than fifty percent of the outstanding shares of Series A, Series B, Series C, Series D and Series E.

At January 31, 2000, the Company has reserved 32,000,000 shares of common stock for issuance upon conversion of the mandatorily redeemable convertible preferred stock.

F-13

100

MARVELL TECHNOLOGY GROUP LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

The following is a summary of activity in mandatorily redeemable convertible preferred stock (in thousands):

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | TOTAL |
|  |  | SHARES | AMOUNT |
|  |  | ------ | ------- |
| Balance at January 31, 1997................................. | | 3,357 | $ 7,176 |
| Issuance of Series D Mandatorily Redeemable Convertible | |  |  |
| Preferred Stock........................................... | | 1,481 | 6,289 |
|  |  | ------ | ------- |
| Balance at January 31, 1998................................. | | 4,838 | 13,465 |
| Issuance of Series D Mandatorily Redeemable Convertible | |  |  |
| Preferred Stock........................................... | | 1,043 | 4,059 |
|  |  | ------ | ------- |
| Balance at January 31, 1999................................. | | 5,881 | 17,524 |
| Issuance of Series E Mandatorily Redeemable Convertible | |  |  |
| Preferred Stock........................................... | | 350 | 3,500 |
| Issuance of Series C and Series D Mandatorily Redeemable | |  |  |
| Convertible Preferred Stock upon exercise of warrants..... | | 379 | 1,329 |
|  |  | ------ | ------- |
| Balance at January 31, 2000................................. | | 6,610 | 22,353 |
| Issuance of Series D Mandatorily Redeemable Convertible | |  |  |
| Preferred Stock upon exercise of warrants (unaudited)..... | | 22 | 98 |
|  |  | ------ | ------- |
| Balance at April 30, 2000 (unaudited)....................... | | 6,632 | $22,451 |
|  |  | ====== | ======= |
| NOTE 5 -- | PREFERRED AND COMMON STOCK WARRANTS: |  |  |

At January 31, 2000, the Company has reserved 136,353 and 60,000 shares of Preferred Stock and Common Stock, respectively, for the issuance of shares upon the exercise of warrants.

In connection with the issuance of Series C, the Company issued warrants to purchase 471,428 shares of Series C at $3.50 per share. Warrants to purchase 377,142 shares of Series C were exercised in April and May 2000, and 94,286 warrants expired during fiscal 2000.

During fiscal 1998, in connection with the issuance of Series D, the Company received bridge financing of approximately $2,200,000 for which it issued warrants to purchase 93,473 shares of Series D at $4.33 per share. The warrants are exercisable after December 10, 1997 for $4.33 per share, subject to anti-dilution, and are exercisable on a net basis. The warrants expire upon the earlier of (i) closing of an initial public offering of the Company's common stock, (ii) the sale of all or substantially all of its assets or acquisition of the Company by another entity, or (iii) June 27, 2000. The Company valued the warrants under the "Black-Scholes" formula at approximately $84,000. The warrant value has been recorded as interest expense.

During fiscal 1999, in connection with the Company's Loan and Security Agreement with a bank, the Company issued warrants to purchase 45,000 shares of Series D at $4.33 per share. The warrants are exercisable after May 21, 1998 for $4.33 per share, subject to anti-dilution, and are exercisable on a net basis. The warrants expire upon the earlier of (i) one year after the closing of an initial public offering of the Company's common stock, or (ii) May 21, 2003. The Company valued the warrants under the "Black-Scholes" formula at approximately $66,000. The warrant value has been recorded as interest expense.

In July 1999, in connection with the Company's Loan and Security Agreement with a bank, the Company issued warrants to purchase 60,000 shares of Common Stock at $1.50 per share. The warrants are exercisable after July 16, 1999 for $1.50 per share, subject to anti-dilution, and are exercisable on a net basis. The warrants expire upon the earlier of (i) one year after the closing of an initial public offering of the Company's common stock, or (ii) July 16, 2004. The Company valued the warrants under the "Black-Scholes" formula at approximately $23,000. The warrant value has been recorded as interest expense.

F-14

101

MARVELL TECHNOLOGY GROUP LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

NOTE 6 -- COMMON STOCK:

In April 1995, the Company adopted the 1995 Stock Option Plan, (the "Option Plan"). The Option Plan, as amended, has 29,500,000 shares of common stock reserved for issuance thereunder.

THE OPTION PLAN

The Option Plan allows for the issuance of incentive and nonqualified stock options to employees and consultants of the Company.

Options granted under the Option Plan are generally for periods not to exceed ten years, and generally must be issued at prices not less than 100% and 85%, for incentive and nonqualified stock options, respectively, of the fair market value of the stock on the date of grant as determined by the Board of Directors. Incentive stock options granted to shareholders who own greater than 10% of the outstanding stock are for periods not to exceed five years, and must be issued at prices not less than 110% of the fair market value of the stock on the date of grant. The options vest 20% one year after the vesting commencement date and the remaining shares vest one-sixtieth per month over the remaining forty-eight months. Options granted under the Plan may be exercised prior to vesting. The Company has the right to repurchase such shares at their original purchase price if the optionee is terminated from service prior to vesting. Such right expires as the options vest over a five year period.

1997 DIRECTORS' STOCK OPTION PLAN

In August 1997, the Company adopted the 1997 Directors' Stock Option Plan (the "Directors' Plan"). The Directors' Plan has 900,000 shares of common stock reserved thereunder. Under the Directors' Plan, an outside director is granted 180,000 options upon appointment to the Board of Directors. These options vest 20% one year after the vesting commencement date and remaining shares vest one-sixtieth per month over the remaining forty-eight months. An outside director is also granted 36,000 options on the date of each annual meeting of the shareholders. These options vest one-twelfth per month over twelve months after the fourth anniversary of the vesting commencement date. Options granted under the Directors' Plan may be exercised prior to vesting. The Company has the right to repurchase such shares at their original purchase price if the director is terminated or resigns from the Board of Directors prior to vesting. Such right expires as the options vest over a five year period.

F-15

102

MARVELL TECHNOLOGY GROUP LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Aggregate activity under both the Option Plan and the Directors' Plan was as follows:

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | WEIGHTED |
|  |  |  | AVERAGE |
|  |  |  | OPTIONS |
|  | SHARES | OPTIONS | PRICE |
|  | AVAILABLE | OUTSTANDING | PER SHARE |
|  | --------- | ----------- | --------- |
|  | (IN THOUSANDS) | |  |
| Balance at January 31, 1997................................ | 1,156 | 7,698 | $0.04 |
| Additional shares authorized............................... | 9,900 | -- | -- |
| Options granted............................................ | (7,641) | 7,641 | $0.18 |
| Options canceled........................................... | 813 | (813) | $0.04 |
| Options exercised.......................................... | -- | (1,788) | $0.04 |
|  | ------ | ------ |  |
| Balance at January 31, 1998................................ | 4,228 | 12,738 | $0.12 |
| Additional shares authorized............................... | 6,400 | -- | -- |
| Options granted............................................ | (6,677) | 6,677 | $0.49 |
| Options canceled........................................... | 1,032 | (1,032) | $0.13 |
| Shares repurchased......................................... | 375 | -- | $0.03 |
| Options exercised.......................................... | -- | (5,487) | $0.20 |
|  | ------ | ------ |  |
| Balance at January 31, 1999................................ | 5,358 | 12,896 | $0.28 |
| Additional shares authorized............................... | 3,600 | -- |  |
| Options granted............................................ | (5,289) | 5,289 | $1.80 |
| Options canceled........................................... | 1,363 | (1,363) | $0.39 |
| Shares repurchased......................................... | 51 | -- | $0.66 |
| Options exercised.......................................... | -- | (4,437) | $0.44 |
|  | ------ | ------ |  |
| Balance at January 31, 2000................................ | 5,083 | 12,385 | $0.87 |
| Options granted (unaudited)................................ | (1,152) | 1,152 | $5.00 |
| Options canceled (unaudited)............................... | 138 | (138) | $1.62 |
| Shares repurchased (unaudited)............................. | 1,156 | -- | $0.32 |
| Options exercised (unaudited).............................. | -- | (1,906) | $0.88 |
|  | ------ | ------ |  |
| Balance at April 30, 2000 (unaudited)...................... | 5,225 | 11,493 | $1.27 |
|  | ====== | ====== |  |

At January 31, 2000, options to purchase 11,047,560 shares were vested and 5,334,148 unvested shares remain subject to the Company's repurchase rights under the Option Plan and the Directors Plan.

ISSUANCE OF COMMON STOCK TO FOUNDERS

In January 1995, the Company issued 36,000,000 shares of its common stock ("the Founders' Shares") to its founders. Each founder has granted the Company a call right on 50% of his or her shares, exercisable in the event such founder's employment terminated for any reason. The call right expires at a rate of 1/60 per month. At January 31, 2000, Founders' Shares subject to call aggregated 300,000.

OTHER STOCK OPTIONS

In October 1995 and July 1996, the Company granted to a director nonqualified common stock options to purchase 3,000,000 shares of common stock in total. One-half of the common stock options vest ratably over the five year vesting period. The remaining common stock options vest 20% one year after the date of grant and the remaining shares vest one-sixtieth per month over the

F-16

103

MARVELL TECHNOLOGY GROUP LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

remaining forty-eight months. In 1995, the director exercised 1,500,000 shares, of which 225,000 shares are subject to repurchase as of January 31, 2000 in the event he ceases to be a director.

In January 1998, the Company granted to a director a nonqualified common stock option to purchase 450,000 shares of common stock at an exercise price of $0.25. The option vests 20% one year after the vesting commencement date and remaining shares vest one-sixtieth per month over the remaining forty-eight months.

Information relating to stock options outstanding under the Option Plan and the Directors' Plan at January 31, 2000 was as follows:

|  |  |  |  |
| --- | --- | --- | --- |
|  | OPTIONS OUTSTANDING | | |
|  | -------------------------------------- | | |
|  |  | WEIGHTED |  |
|  |  | AVERAGE |  |
|  |  | REMAINING | WEIGHTED |
|  | NUMBER | CONTRACTUAL | EXERCISE |
|  | OUTSTANDING | LIFE | PRICE |
|  | ----------- | ----------- | -------- |
| Range of exercise prices: |  |  |  |
| $0.03 - $0.04................. | 2,325,904 | 6.16 | $0.04 |
| $0.05 - $0.25................. | 2,636,248 | 7.50 | $0.16 |
| $0.33 - $0.88................. | 1,969,872 | 8.61 | $0.42 |
| $1.06 - $2.00................. | 4,433,900 | 9.40 | $1.43 |
| $2.50 - $3.00................. | 1,020,000 | 9.98 | $3.00 |
|  | ---------- |  |  |
|  | 12,385,924 |  |  |
|  | ========== |  |  |
|  |  | OPTIONS VESTED | |
|  |  | --------------------- | |
|  |  |  | WEIGHTED |
|  |  |  | AVERAGE |
|  |  | NUMBER | EXERCISE |
|  |  | VESTED | PRICE |
|  |  | ---------- | -------- |
| Range of exercise prices: |  |  |  |
| $0.03 - $0.04............................... | | 4,761,000 | $0.04 |
| $0.05 - $0.25............................... | | 4,635,992 | $0.14 |
| $0.33 - $0.88............................... | | 1,460,568 | $0.39 |
| $1.06 - $1.25............................... | | 190,000 | $1.06 |
|  |  | ---------- |  |
|  |  | 11,047,560 |  |
|  |  | ========== |  |
|  | F-17 |  |  |

104

MARVELL TECHNOLOGY GROUP LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

CERTAIN PRO FORMA DISCLOSURES

Had compensation expense for the Company's option grants been determined based on the fair value at the grant dates, as prescribed in SFAS 123, the Company's net income (loss) would have been as follows:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | YEARS ENDED JANUARY 31, | | | | |
|  | ----------------------------------------- | | | | | |
|  |  | 1998 |  | 1999 |  | 2000 |
|  | ----------- | | ----------- | | ----------- | |
| Net income (loss): |  |  |  |  |  |  |
| As reported................................... | $ | (7,444,000) | $ | (959,000) | $ | 13,070,000 |
| Pro forma..................................... | $ | (7,505,000) | $ | (1,572,000) | $ | 11,857,000 |
| Basic net income (loss) per share: |  |  |  |  |  |  |
| As reported................................... | $ | (0.24) | $ | (0.03) | $ | 0.32 |
| Pro forma..................................... | $ | (0.25) | $ | (0.05) | $ | 0.29 |
| Diluted net income (loss) per share: |  |  |  |  |  |  |
| As reported................................... | $ | (0.24) | $ | (0.03) | $ | 0.16 |
| Pro forma..................................... | $ | (0.25) | $ | (0.05) | $ | 0.15 |

For the purpose of above noted SFAS 123 pro forma disclosure the fair value of each option grant has been estimated on the date of grant using the minimum value method as prescribed by SFAS 123. The following table summarizes the estimated fair value of options and assumptions used in the SFAS 123 calculations:

|  |  |  |  |
| --- | --- | --- | --- |
|  | YEARS ENDED JANUARY 31, | | |
|  | ----------------------- | | |
|  | 1998 | 1999 | 2000 |
|  | ----- | ----- | ----- |
| Estimated fair value....................................... | $0.04 | $0.38 | $2.96 |
| Expected life (years)...................................... | 5 | 5 | 5 |
| Risk-free interest rate.................................... | 6.0% | 4.5% | 6.1% |
| Dividend yield............................................. | -- | -- | -- |
| Volatility................................................. | -- | -- | -- |

STOCK COMPENSATION

During the years ended January 31, 1999 and 2000, and the three months ended April 30, 2000, the Company granted options to employees and directors and recognized unearned stock compensation of approximately $262,000, $13,852,000 and $5,761,000 (unaudited), respectively. Such unearned stock compensation is being amortized using an accelerated method over the vesting period of five years and may decrease due to employees that terminate service prior to vesting.

NOTE 7 -- BENEFIT PLAN:

Effective January 1, 1994, the Company adopted a 401(k) plan which allows all employees to participate by making salary deferred contributions to the 401(k) plan ranging from 1% to 20% of eligible earnings. The Company may make discretionary contributions to the 401(k) plan upon approval by the Board of Directors. No company contributions were made to the 401(k) plan from inception through January 31, 2000.

F-18

105

MARVELL TECHNOLOGY GROUP LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

NOTE 8 -- INCOME TAXES:

The provision for income taxes for the years ended January 31, 1998, 1999

|  |  |  |  |
| --- | --- | --- | --- |
| and 2000 consists of the following (in thousands): |  |  |  |
|  | YEAR ENDED JANUARY 31, | | |
|  | ------------------------ | | |
|  | 1998 | 1999 | 2000 |
|  | ----- | ----- | ------ |
| Current tax expense |  |  |  |
| Federal............................................... | $ 354 | $ 571 | $ 387 |
| State................................................. | 1 | 1 | 1 |
| Foreign............................................... | 8 | 364 | 4,582 |
|  | ----- | ----- | ------ |
| Total current tax expense..................... | 363 | 936 | 4,970 |
|  | ----- | ----- | ------ |
| Deferred income tax |  |  |  |
| Federal............................................... | (218) | (298) | (380) |
| State................................................. | (99) | (155) | (234) |
|  | ----- | ----- | ------ |
| Total deferred income tax expense............. | (317) | (453) | (614) |
|  | ----- | ----- | ------ |
| Total provision for income taxes.............. | $ 46 | $ 483 | $4,356 |
|  | ===== | ===== | ====== |

Deferred tax assets (liabilities) consists of the following (in thousands):

|  |  |  |  |
| --- | --- | --- | --- |
|  | AS OF JANUARY 31, | | |
|  | ---------------------- | | |
|  | 1998 | 1999 | 2000 |
|  | ---- | ---- | ------ |
| Research and development credits................... | $363 | $598 | $1,281 |
| California investment credits...................... | -- | 29 | 29 |
| Reserves and accruals.............................. | 47 | 213 | 324 |
| Depreciation....................................... | -- | 2 | -- |
|  | ---- | ---- | ------ |
| Total deferred tax assets.......................... | 410 | 842 | 1,634 |
|  | ---- | ---- | ------ |
| Deferred tax liabilities........................... | (21) | -- | (178) |
|  | ---- | ---- | ------ |
| Net deferred tax assets............................ | $389 | $842 | $1,456 |
|  | ==== | ==== | ====== |

Reconciliation of the statutory federal income tax to the Company's effective tax:

|  |  |  |  |
| --- | --- | --- | --- |
|  | YEARS ENDED JANUARY 31, | | |
|  | ------------------------- | | |
|  | 1998 | 1999 | 2000 |
|  | ------ | ------ | ----- |
| Provision (benefit) at federal statutory rate....... | (34.0%) | (34.0%) | 35.0% |
| Non-U.S. losses..................................... | 38.4 | 262.2 | -- |
| Difference in U.S. and non-U.S. taxes............... | -- | (8.5) | (8.2) |
| State taxes, net of federal benefit................. | (0.9) | (23.5) | (0.9) |
| General business credits............................ | (3.0) | (88.8) | (5.4) |
| Non-cash stock compensation......................... | -- | 3.3 | 4.4 |
| Other............................................... | 0.1 | 0.7 | 0.1 |
|  | ----- | ----- | ---- |
| Effective tax rate........................ | 0.6% | 111.4% | 25.0% |
|  | ===== | ===== | ==== |

F-19

106

MARVELL TECHNOLOGY GROUP LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

The U.S. and non-U.S. components of income (loss) before income taxes are:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | YEARS ENDED JANUARY 31, | | | |
|  | ----------------------------- | | | | |
|  |  | 1998 |  | 1999 | 2000 |
|  | ------- | | ------- | | ------- |
| U.S. operations..................................... | $ | 247 | $ | 580 | $ 1,222 |
| Non-U.S. operations................................. |  | (7,645) |  | (1,056) | 16,204 |
|  | ------- | | ------- | | ------- |
|  | $ | (7,398) | $ | (476) | $17,426 |
|  | ======= | | ======= | | ======= |

As of January 31, 2000, the Company had federal research tax credit carryforwards for U.S. federal income tax return purposes of approximately $800,000 that expire through 2020. As of January 31, 2000, the Company had unused California research tax credits of approximately $700,000 that will carryforward indefinitely until utilized.

Federal and state tax laws impose restrictions on the utilization of tax credit carryforwards in the event of an "ownership change" as defined by the Internal Revenue Code.

Pending approval from the Economic Development Board of Singapore, the Company's Singapore operations are expected to enjoy, effective July 1, 1999, a tax holiday from Singapore taxes on certain non-investment income. The Company will be required to comply with certain conditions for minimum levels of investment, headcount and the nature of its activities at its Singapore operations to maintain the tax holiday. The tax holiday would have had an immaterial impact on the Company's net income in fiscal 2000.

NOTE 9 -- COMMITMENTS

The Company is obligated under noncancelable operating leases for its facilities and under capital leases for certain equipment. The capital leases expire in fiscal year 2002 and include a buyout option.

Future minimum lease payments under the operating and capital leases are as follows (in thousands):

|  |  |  |
| --- | --- | --- |
|  | OPERATING | CAPITAL |
|  | LEASES | LEASES |
|  | --------- | ------- |
| 2001........................................................ | $1,372 | $ 75 |
| 2002........................................................ | 1,357 | 36 |
| 2003........................................................ | 52 | -- |
|  | ------ | ---- |
| Total minimum lease payments................................ | $2,781 | 111 |
|  | ====== |  |
| Less: amount representing interest.......................... |  | (1) |
|  |  | ---- |
| Present value of minimum lease payments..................... |  | 110 |
| Less: current portion....................................... |  | (74) |
|  |  | ---- |
| Long-term lease obligation.................................. |  | $ 36 |
|  |  | ==== |

Rent expense on the operating leases for the years ended January 31, 1998, 1999 and 2000 was approximately $105,000, $214,000 and $859,000, respectively.

PURCHASE COMMITMENTS

The Company's manufacturing relationships with foundries allow for the cancellation of all outstanding purchase orders, but requires repayment of all expenses incurred to date. As of

F-20

107

MARVELL TECHNOLOGY GROUP LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

January 31, 2000, foundries had incurred approximately $5,600,000 of manufacturing expenses on the Company's outstanding purchase orders.

NOTE 10 -- SEGMENT AND GEOGRAPHIC INFORMATION:

The Company has adopted Statement of Financial Accounting Standards No. 131 "Disclosure about Segments of an Enterprise and Related Information" ("SFAS 131"). Based on its operating management and financial reporting structure, the Company has determined that it has one reportable business segment: the design, development and sale of integrated circuits.

The following is a summary of product revenue by geographic area based on the location of shipments (in thousands):

|  |  |  |  |
| --- | --- | --- | --- |
|  | YEARS ENDED JANUARY 31, | | |
|  | -------------------------- | | |
|  | 1998 | 1999 | 2000 |
|  | ---- | ------- | ------- |
| Japan.................................................. | $ -- | $11,197 | $36,284 |
| Singapore.............................................. | -- | 14 | 25,234 |
| Korea.................................................. | -- | 9,680 | 4,342 |
| Philippines............................................ | -- | 2 | 10,921 |
| United States.......................................... | 625 | 276 | 309 |
| Others................................................. | -- | 84 | 4,285 |
|  | ---- | ------- | ------- |
|  | $625 | $21,253 | $81,375 |
|  | ==== | ======= | ======= |

All sales are denominated in United States dollars. For all periods presented, substantially all of the Company's long-lived assets were located in the United States.

NOTE 11 -- SUBSEQUENT EVENTS:

INITIAL PUBLIC OFFERING

On March 21, 2000, the Company's Board of Directors authorized management of the Company to file a Registration Statement with the Securities and Exchange Commission permitting the Company to sell its common stock to the public.

STOCK DIVIDEND

On March 17, 2000, the Company's shareholders approved two 100% common stock dividends. All references throughout the consolidated financial statements to number of shares, per share amounts and stock option data have been restated to reflect the common stock dividends. Additionally, on January 21, 2000, the authorized common shares was proposed to be increased to 242,000,000 by the Board of Directors. This increase was approved on March 17, 2000 by the Company's shareholders and took effect on that date.

RESTRICTED CASH

In March 2000, the Company invested $3,000,000 in a certificate of deposit with a U.S. financial institution as security for a standby letter of credit with a supplier for the same amount. This standby letter of credit expires on September 1, 2000.

EMPLOYEE STOCK PURCHASE PLAN

On May 8, 2000, the Board of Directors authorized the establishment of the 2000 Employee Stock Purchase Plan with 1,000,000 shares reserved for issuance. The plan will become effective upon the closing of the IPO, and is subject to approval by the shareholders of the Company.

F-21

108

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* ------------------------------------------------------

No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus. You must not rely on any unauthorized information or representations. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.

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TABLE OF CONTENTS

Page

----

Prospectus Summary 3

Risk Factors 7

Special Note Regarding Forward-Looking

Statements 22

Use of Proceeds 23

Dividend Policy 23

Capitalization 24

Dilution 25

Selected Consolidated Financial

Data 27

Management's Discussion and Analysis

of Financial Condition and Results

of Operations 29

Business 39

Management 56

Certain Transactions 64

Principal Shareholders 66

Description of Capital Stock 68

Certain Foreign Issuer

Considerations 73

Taxation of Shareholders 76

Shares Eligible for Future Sale 81

Underwriting 83

Validity of Common Stock 84

Experts 85

Additional Information 85

Index to Consolidated Financial

Statements F-1

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Through and including , 2000 (the 25th day after the date of

this prospectus), all dealers effecting transactions in these securities,

whether or not participating in this offering, may be required to deliver a

prospectus. This is in addition to a dealer's obligation to deliver a prospectus

when acting as an underwriter and with respect to an unsold allotment or

subscription.

* ------------------------------------------------------
* ------------------------------------------------------
* ------------------------------------------------------
* ------------------------------------------------------

6,000,000 Shares

MARVELL TECHNOLOGY

GROUP LTD.

Common Stock

------------------------

LOGO

------------------------

GOLDMAN, SACHS & CO.

LEHMAN BROTHERS

J.P. MORGAN & CO.

Representatives of the Underwriters

* ------------------------------------------------------
* ------------------------------------------------------

109

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth the various expenses in connection with the sale and distribution of the securities being registered, other than the underwriting discounts and commissions. All amounts shown are estimates, except the Securities and Exchange Commission Registration Fee and the National Association of Securities Dealers, Inc. Filing Fee.

|  |  |
| --- | --- |
| Securities and Exchange Commission Registration Fee......... | $ 19,800 |
| National Association of Securities Dealers Filing Fee....... | 8,000 |
| Nasdaq National Market Listing Fee.......................... | 95,000 |
| Blue Sky Fees and Expenses.................................. | 15,000 |
| Transfer Agent and Registrar Fees........................... | 10,000 |
| Accounting Fees and Expenses................................ | 300,000 |
| Legal Fees and Expenses..................................... | 800,000 |
| Printing Expenses........................................... | 250,000 |
| Miscellaneous............................................... | 27,200 |
|  | ---------- |
| Total..................................................... | $1,525,000 |
|  | ========== |

ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Bermuda law permits a company to indemnify its directors and officers, except for any act of fraud or dishonesty. Marvell has provided in its Bye-laws that the directors and officers and the liquidators and trustees, if any, of Marvell will be indemnified and secured harmless to the full extent permitted by law out of the assets of Marvell from and against all actions, costs, charges, losses, damages and expenses incurred by reason of any act done, concurred in or omitted in or about the execution of their duties of supposed duties, or in their respective offices or trusts, and none of them shall be answerable for the acts, receipts, neglects or defaults of the others of them or for joining in any receipts for the sake of conformity, or for any bankers or other persons with whom any moneys or effects belonging to Marvell shall or may be lodged or deposited for safe custody, or for insufficiency or deficiency of any security upon which any moneys of or belonging to Marvell shall be placed out on or invested, or for any other loss, misfortune or damage which may happen in the execution of their respective offices or trusts, or in relation thereto, other than in the case of any fraud or dishonesty. In addition, Marvell has provided in its Bye-laws that each shareholder of Marvell agrees to waive any claim or right of action, individually or in the right of Marvell, against any director or officer of Marvell on account of any action taken by such director or officer, or the failure of such director or officer to take any action, in the performance of his duties with or for Marvell, other than with respect to any matter involving any fraud or dishonesty on behalf of such director or officer. We recently amended our Bye-laws to provide that the waiver is not applicable to claims arising under United States federal securities laws. The amendment will be submitted for shareholder approval on June 17, 2000.

Bermuda law also permits Marvell to purchase insurance for the benefit of its directors and officers against any liability incurred by them for the failure to exercise the requisite care, diligence and skill in the exercise of their powers and the discharge of their duties, or indemnifying them in respect of any loss arising or liability incurred by them by reason of negligence, default, breach of duty or breach of trust. Marvell plans to purchase indemnification insurance for its officers and directors.

II-1

110

ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES.

From January 1, 1997 through June 6, 2000, we have issued and sold the following unregistered securities:

1. In June 1997, we issued convertible promissory notes in the

aggregate principal amount of $2,211,250 to six investors for $2,211,250 in cash. In conjunction with the issuance of the convertible promissory notes, we issued warrants to purchase 76,544 shares of Series D preferred stock to such investors at an exercise price of $4.33 per share, which warrants expire, if not earlier exercised, on the earlier of June 27, 2000 or the consummation of this offering. The number of shares subject to such warrant equaled 15% of the principal amount of each purchaser's note divided by the exercise price, which was $6.50 prior to the June 1998 stock split. In December 1997, these noteholders converted the convertible promissory notes into 510,288 shares of Series D Preferred at a conversion price of $4.33 per share.

1. In December 1997, as partial consideration for acting as our placement agents, we issued warrants to InveStar Capital, Inc. and Hambrecht & Quist LLC to purchase an aggregate of 16,929 shares of Series D preferred stock at an exercise price of $4.33 per share, which warrants expire, if not earlier exercised, on the earlier of June 27, 2000 or the consummation of this offering.
2. During the period December 1997 through March 2000, we sold an aggregate of 2,548,288 shares of Series D preferred stock to 54 accredited investors pursuant to Rule 506 of Regulation D. We sold the shares at a purchase price of $4.33 per share for an aggregate consideration of $11,042,506 in cash.
3. In May 1998, in connection with a loan agreement we issued a warrant to our bank to purchase up to 45,000 shares of Series D preferred stock at an exercise price of $4.33 per share.
4. In June 1999, in connection with a loan agreement we issued a warrant to our bank to purchase up to 60,000 shares of common stock at an exercise price of $1.50.
5. In September 1999, we sold an aggregate of 350,000 shares of Series E preferred stock to an investor at a purchase price of $10.00 per share for an aggregate consideration of $3,500,000 in cash.
6. As of June 6, 2000, 18,054,831 shares of common stock had been issued to our employees, directors and consultants upon exercise of options at exercise prices ranging from $0.03 to $10.00 per share and 14,283,309 shares of common were issuable upon exercise of outstanding options under our stock option plans at exercise prices ranging from $0.03 to $10.00 per share.

All share numbers and exercise prices for common stock have been adjusted to reflect the 50% stock dividend in June 1998 and the two 100% common stock dividends approved by our shareholders on March 17, 2000. All share numbers and exercise prices for preferred stock have been adjusted to reflect the 50% stock dividend in June 1998. Although the number of shares of Series D preferred stock and the Series E preferred stock were not affected by the two 100% common stock dividends approved by our shareholders on March 17, 2000, all of the 2,548,288 outstanding shares of Series D preferred stock and the 350,000 shares of Series E preferred stock will automatically convert on a four-for-one basis into shares of common stock upon the consummation of this offering.

The sales and issuances of securities listed above were deemed to be exempt from registration under Section 4(2) of the Securities Act, Regulation D thereunder as transactions not involving a public offering or by virtue of Rule 701 as transactions pursuant to compensatory benefit plans and contracts relating to compensation. All of the foregoing securities are deemed restricted securities for purposes of the Securities Act.

II-2

111

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

The following exhibits are filed herewith:

|  |  |
| --- | --- |
| EXHIBIT |  |
| NUMBER | EXHIBIT TITLE |
| - ------- | ------------- |
| 1.1 | Form of Underwriting Agreement |
| 3.1 | Memorandum of Association\* |
| 3.2 | Amended and Restated Bye-laws |
| 4.1 | Specimen Common Stock Certificate\* |
| 5.1 | Opinion of Conyers Dill & Pearman\* |
| 8.1 | Tax Opinion of Fenwick & West LLP\* |
| 10.1 | 1995 Stock Option Plan |
| 10.2 | 1997 Directors' Stock Option Plan\* |
| 10.3 | 2000 Employee Stock Purchase Plan |
| 10.4 | Sublease between Netscape Communications, Inc. and Marvell |
|  | Semiconductor, Inc. dated October 1, 1998\* |
| 10.5 | First Amendment to Sublease between Netscape Communications, |
|  | Inc. and Marvell Semiconductor, Inc. dated October 1, 1999\* |
| 10.6 | Investor Rights Agreement dated September 10, 1999 |
| 10.7 | Wafer Purchase Agreement by and between Marvell Technology |
|  | Group Ltd. and Taiwan Semiconductor Manufacturing |
|  | Corporation dated June 30, 1997\* |
| 10.8 | Master Development, Purchasing and License Agreement between |
|  | Intel Corporation and Marvell Semiconductor, Inc.+\* |
| 21.1 | Subsidiaries\* |
| 23.1 | Consent of Conyers Dill & Pearman (contained in Exhibit |
|  | 5.1)\* |
| 23.2 | Consent of Fenwick & West LLP (contained in Exhibit 8.1)\* |
| 23.3 | Consent of PricewaterhouseCoopers LLP |
| 24.1 | Power of Attorney\* |
| 27.1 | Financial Data Schedule\* |

* ---------------

\* Previously Filed

* Portions redacted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission.

Other financial statement schedules are omitted because the information called for is not required or is shown either in the financial statements or the notes thereto.

ITEM 17. UNDERTAKINGS.

1. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described under "Item

14 -- Indemnification of Directors and Officers" above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

II-3

112

1. The undersigned Registrant hereby undertakes that:
   1. For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or

(4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

* 1. For the purposes of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

1. The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

II-4

113

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Sunnyvale, State of California, on the 7th day of June, 2000.

MARVELL TECHNOLOGY GROUP LTD.

By: /s/ SEHAT SUTARDJA

------------------------------------

Dr. Sehat Sutardja

Chief Executive Officer

SIGNATURE

---------

/s/ SEHAT SUTARDJA

- ------------------------------------------------

Dr. Sehat Sutardja

TITLE DATE

----- ----

Co-Chairman of the Board, June 7, 2000

President and Chief Executive Officer

(Principal Executive Officer)

\*

- ------------------------------------------------

George Hervey

Chief Financial Officer and June 7, 2000

Vice President of Finance (Principal

Financial and Accounting Officer)

\*

- ------------------------------------------------

Weili Dai

\*

- ------------------------------------------------

Dr. Pantas Sutardja

\*

- ------------------------------------------------

Diosdado Banatao

\*

- ------------------------------------------------

Herbert Chang

\*

- ------------------------------------------------

Dr. John M. Cioffi

\*

- ------------------------------------------------

Dr. Paul R. Gray

\*

Executive Vice President

and Director

Chief Technology Officer

and Director

Co-Chairman of the Board

Director

Director

Director

Director

June 7, 2000

June 7, 2000

June 7, 2000

June 7, 2000

June 7, 2000

June 7, 2000

June 7, 2000

- ------------------------------------------------

Ron Verdoorn

\*By: /s/ SEHAT SUTARDJA

------------------------------------------

Dr. Sehat Sutardja

As attorney-in-fact pursuant to

power of attorney previously

filed with the Securities and

Exchange Commission.

II-5

114

|  |  |
| --- | --- |
|  | EXHIBIT INDEX |
| EXHIBIT |  |
| NUMBER | EXHIBIT TITLE |
| - ------- | ------------- |
| 1.1 | Form of Underwriting Agreement |
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| 21.1 | Subsidiaries\* |
| 23.1 | Consent of Conyers Dill & Pearman (contained in Exhibit |
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| 24.1 | Power of Attorney\* |
| 27.1 | Financial Data Schedule\* |

* ---------------

\* Previously Filed

* Portions redacted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission.

1

MARVELL TECHNOLOGY GROUP LTD.

COMMON STOCK

------------

UNDERWRITING AGREEMENT

, 2000

-----------

Goldman, Sachs & Co.,

J. P. Morgan Securities Inc.

Lehman Brothers Inc.

As representatives of the several Underwriters

named in Schedule I hereto,

c/o Goldman, Sachs & Co.,

2765 Sand Hill Road,

Menlo Park, California 94025.

Ladies and Gentlemen:

Marvell Technology Group Ltd., a Bermuda corporation (the "Company"), proposes, subject to the terms and conditions stated herein, to issue and sell to the Underwriters named in Schedule I hereto (the "Underwriters") an aggregate of ........ shares (the "Firm Shares") and, at the election of the Underwriters,

up to ........ additional shares (the "Optional Shares") of common stock, par

value $\_\_\_\_ per share ("Stock") of the Company (the Firm Shares and the Optional

Shares that the Underwriters elect to purchase pursuant to Section 2 hereof being collectively called the "Shares").

1. The Company represents and warrants to, and agrees with, each of the Underwriters that:
2. A registration statement on Form S-1 (File No. 333-....) (the "Initial Registration Statement") in respect of the Shares has been filed with the Securities and Exchange Commission (the "Commission"); the Initial Registration Statement and any post-effective amendment thereto, each in the form heretofore delivered to you, and, excluding exhibits thereto, for each of the other Underwriters, have been declared effective by the Commission in such form; other than a registration statement, if any, increasing the size of the offering (a "Rule 462(b) Registration Statement"), filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended (the "Act"), which became effective upon filing, no other document with respect to the Initial Registration Statement has heretofore been filed with the Commission; and no stop order suspending the effectiveness of the Initial Registration Statement, any post-effective amendment thereto or the Rule 462(b) Registration Statement, if any, has been issued and no proceeding for that purpose has been initiated or threatened by the Commission (any preliminary prospectus included in the Initial Registration Statement or filed with the Commission pursuant to Rule 424(a) of the rules and regulations of the

2

Commission under the Act is hereinafter called a "Preliminary Prospectus"; the various parts of the Initial Registration Statement and the Rule 462(b) Registration Statement, if any, including all exhibits thereto and including the information contained in the form of final prospectus filed with the Commission pursuant to Rule 424(b) under the Act in accordance with Section 5(a) hereof and deemed by virtue of Rule 430A under the Act to be part of the Initial Registration Statement at the time it was declared effective, each as amended at the time such part of the Initial Registration Statement became effective or such part of the Rule 462(b) Registration Statement, if any, became or hereafter becomes effective, are hereinafter collectively called the "Registration Statement"; and such final prospectus, in the form first filed pursuant to Rule 424(b) under the Act, is hereinafter called the "Prospectus";

1. No order preventing or suspending the use of any Preliminary Prospectus has been issued by the Commission, and each Preliminary Prospectus, at the time of filing thereof, conformed in all material respects to the requirements of the Act and the rules and regulations of the Commission thereunder, and did not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that this representation and warranty shall not apply to any statements or omissions made in reliance upon and in conformity with information furnished in writing to the Company by an Underwriter through Goldman, Sachs & Co. expressly for use therein;
2. The Registration Statement conforms, and the Prospectus and any further amendments or supplements to the Registration Statement or the Prospectus will conform, in all material respects to the requirements of the Act and the rules and regulations of the Commission thereunder and do not and will not, as of the applicable effective date as to the Registration Statement and any amendment thereto, and as of the applicable filing date as to the Prospectus and any amendment or supplement thereto, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; provided, however, that this representation and warranty shall not apply to any statements or omissions made in reliance upon and in conformity with information furnished in writing to the Company by an Underwriter through Goldman, Sachs & Co. expressly for use therein;
3. Neither the Company nor any of its subsidiaries has sustained since the date of the latest audited financial statements included in the Prospectus any material loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, otherwise than as set forth or contemplated in the Prospectus; and, since the respective dates as of which information is given in the Registration Statement and the Prospectus, there has not been any change in the capital stock (other than grants of options under the Company's option plans described in the Registration Statement, and exercises of such options or options described in the Registration Statement) or long-term debt of the Company or any of its subsidiaries or any material adverse change, or any development involving a prospective material adverse change, in or affecting the general affairs, management, financial position, stockholders' equity or results of operations of the Company and its subsidiaries, otherwise than as set forth or contemplated in the Prospectus;
4. The Company and its subsidiaries have good and marketable title in fee simple to all real property and good and marketable title to all personal property owned by them, in each case free and clear of all liens, encumbrances and defects except such as are described in the Prospectus or such as do not materially affect the value of such property and do not interfere in any material respect with the use made and proposed to be made of such property by the Company and its subsidiaries; and

3

any real property and buildings held under lease by the Company and its subsidiaries are held by them under valid, subsisting and enforceable leases with such exceptions as are not material and do not interfere in any material respect with the use made and proposed to be made of such property and buildings by the Company and its subsidiaries;

1. The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of Bermuda, with power and authority (corporate and other) to own its properties and conduct its business as described in the Prospectus, and has been duly qualified as a foreign corporation for the transaction of business and is in good standing under the laws of each other jurisdiction in which it owns or leases properties or conducts any business so as to require such qualification, or is subject to no material liability or disability by reason of the failure to be so qualified in any such jurisdiction; and each subsidiary of the Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of its jurisdiction of incorporation;
2. The Company has an authorized capitalization as set forth in the Prospectus, and all of the issued shares of capital stock of the Company have been duly and validly authorized and issued, are fully paid and non-assessable and conform to the description thereof contained in the Prospectus; and all of the issued shares of capital stock of each subsidiary of the Company have been duly and validly authorized and issued, are fully paid and non-assessable and (except for directors' qualifying shares) are owned directly or indirectly by the Company, free and clear of all liens, encumbrances, equities or claims; the holders of outstanding shares of capital stock of the Company are not entitled to preemptive or other rights to acquire the Shares; except as described in the Registration Statement, there are no outstanding securities convertible into or exchangeable for, or warrants, rights or options to purchase from the Company, or obligations of the Company to issue, the Stock or any other class of capital stock of the Company;
3. The unissued Shares to be issued and sold by the Company to the Underwriters hereunder have been duly and validly authorized and, when issued and delivered against payment therefor as provided herein, will be duly and validly issued and fully paid and non-assessable and will conform to the description of the Stock contained in the Prospectus;
4. The issue and sale of the Shares by the Company and the compliance by the Company with all of the provisions of this Agreement and the consummation of the transactions herein contemplated will not conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries is bound or to which any of the property or assets of the Company or any of its subsidiaries is subject, nor will such action result in any violation of the provisions of the memorandum of association or articles or certificate of incorporation or by-laws, or other organizational documents, of the Company or any of its subsidiaries or any statute or any order, rule or regulation of any court or Governmental Agency (as defined herein) or body having jurisdiction over the Company or any of its subsidiaries or any of their properties; and no consent, approval, authorization, order, registration or qualification of or with any such court or Governmental Agency or body is required for the issue and sale of the Shares or the consummation by the Company of the transactions contemplated by this Agreement, except the registration under the Act of the Shares and such consents, approvals, authorizations, registrations or qualifications as may be required under state securities or Blue Sky laws in connection with the purchase and distribution of the Shares by the Underwriters;
5. Neither the Company nor any of its subsidiaries is in violation of its memorandum of association or articles or certificate of incorporation or by-laws, or other organizational documents, or

4

in default in the performance or observance of any material obligation, agreement, covenant or condition contained in any material indenture, mortgage, deed of trust, loan agreement, lease or other material agreement or instrument to which it is a party or by which it or any of its properties may be bound;

1. No stamp or other issuance or transfer taxes or duties and no capital gains, income, withholding or other taxes are payable by or on behalf of the Underwriters to any potential subdivision or taxing authority thereof or therein in connection with the execution of this agreement, the sale and delivery by the Company of the Shares or the issuance of the Shares;
2. The statements set forth in the Prospectus under the caption "Description of Capital Stock", insofar as they purport to constitute a summary of the terms of the Stock, under the caption "Taxation", and under the caption "Underwriting", insofar as they purport to describe the provisions of the laws and documents referred to therein, are accurate and fair in all material respects;
3. Other than as set forth in the Prospectus, there are no legal or governmental proceedings pending to which the Company or any of its subsidiaries is a party or of which any property of the Company or any of its subsidiaries is the subject which, if determined adversely to the Company or any of its subsidiaries, would individually or in the aggregate have a material adverse effect on the current or future consolidated financial position, stockholders' equity or results of operations of the Company and its subsidiaries; and, to the best of the Company's knowledge, no such proceedings are threatened or contemplated by any Governmental Agency (as defined herein) or threatened by others;
4. Neither the Company nor any of its subsidiaries is and, after giving effect to the offering and sale of the Shares, will be an "investment company", as such term is defined in the Investment Company Act of 1940, as amended (the "Investment Company Act");
5. PricewaterhouseCoopers LLP, who have certified certain financial statements of the Company and its subsidiaries, are independent public accountants as required by the Act and the rules and regulations of the Commission thereunder;
6. Except as described in the Prospectus, the Company and its subsidiaries own, possess or have the right to employ the patents, patent rights, licenses, inventions, copyrights, know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, software, systems or procedures), trademarks, service marks and trade names, inventions, computer programs, technical data and information (collectively, the "Intellectual Property Rights") presently being employed to conduct their businesses as now conducted; and the expected expiration of any such Intellectual Property Rights would not, individually or in the aggregate, result in a material adverse effect or any development that could reasonably be expected to result in a material adverse effect on the current or future consolidated financial position, stockholders' equity or results of operations of the Company and its subsidiaries. Except as described in the Prospectus, the Intellectual Property Rights presently employed by the Company and its subsidiaries in connection with the businesses now operated by them or which are proposed to be operated by them, as described in the Prospectus, are owned or licensed, to the Company's knowledge, free and clear of and without violating any right, claimed rights, charge, encumbrance, pledge, security interest, restriction or lien of any kind of any other person, and neither the Company nor any of its subsidiaries has received any notice of infringement of or conflict with asserted rights of others with respect to any of the foregoing except as would not reasonably be expected to individually or in the aggregate, result in a material adverse effect, or any development that could reasonably be expected to result in a material adverse effect on the current or future consolidated financial position, stockholders' equity or

5

results of operations of the Company and its subsidiaries, whether or not arising from transactions in the ordinary course of business. Except as described in the Prospectus, to the Company's knowledge, the Intellectual Property Rights the Company employs in connection with the business and operations of the Company and its subsidiaries do not infringe on the rights of any person, except as could not reasonably be expected to individually or in the aggregate result in a material adverse effect, or any development that could reasonably be expected to result in a material adverse effect on the current or future consolidated financial position, stockholders' equity or results of operations of the Company and its subsidiaries, whether or not arising from transactions in the ordinary course of business;

1. The Company has reviewed its operations and that of its subsidiaries and any third parties with which the Company or any of its subsidiaries has a material relationship to evaluate the extent to which the business or operations of the Company or any of its subsidiaries has been or will be affected by the Year 2000 Problem. As a result of such review, the Company has no reason to believe, and does not believe, that the Year 2000 Problem has had or will have a material adverse effect on the general affairs, management, the past, current or future consolidated financial position, business prospects, stockholders' equity or results of operations of the Company and its subsidiaries or has resulted or will result in any material loss or interference with the Company's business or operations. The "Year 2000 Problem" as used herein means any significant risk that computer hardware or software used in the receipt, transmission, processing, manipulation, storage, retrieval, retransmission or other utilization of data or in the operation of mechanical or electrical systems of any kind is not functioning or will not, in the case of dates or time periods occurring after December 31, 1999, function at least as effectively as in the case of dates or time periods occurring prior to January 1, 2000;
2. All consents, approvals, authorizations, orders, registrations, clearances and qualifications of or with any court or governmental agency or body (hereinafter referred to as a "Governmental Agency") having jurisdiction over the Company or any of its subsidiaries or any of their properties or any stock exchange authorities (hereinafter referred to as "Governmental Authorizations") required for the execution and delivery by the Company of this Agreement to be duly and validly authorized have been obtained or made and are in full force and effect;
3. The Company and each of its subsidiaries have all licenses, franchises, permits, authorizations, approvals and orders and other concessions of and from all Governmental Agencies that are necessary to own or lease their properties and conduct their businesses as described in the Prospectus; and
4. The Company is not a Passive Foreign Investment Company ("PFIC") within the meaning of Section 1296 of the United States Internal Revenue Code of 1986, as amended, and is not likely to become a PFIC.
5. Subject to the terms and conditions herein set forth, (a) the Company agrees to issue and sell to each of the Underwriters, and each of the Underwriters agrees, severally and not jointly, to purchase from the Company, at a purchase price per share of $................, the number of Firm Shares set forth opposite the name of such Underwriter in Schedule I hereto and (b) in the event and to the extent that the Underwriters shall exercise the election to purchase Optional Shares as provided below, the Company agrees to issue and sell to each of the Underwriters, and each of the Underwriters agrees, severally and not jointly, to purchase from the Company, at the purchase price per share set forth in clause (a) of this Section 2, that portion of the number of Optional Shares as to which such election shall have been exercised (to be adjusted by you so as to eliminate fractional shares) determined by multiplying such number of Optional Shares by a fraction, the numerator of

6

which is the maximum number of Optional Shares which such Underwriter is entitled to purchase as set forth opposite the name of such Underwriter in Schedule I hereto and the denominator of which is the maximum number of Optional Shares that all of the Underwriters are entitled to purchase hereunder.

The Company hereby grants to the Underwriters the right to purchase at their election up to ................... Optional Shares, at the purchase price

per share set forth in the paragraph above, for the sole purpose of covering sales of shares in excess of the number of Firm Shares. Any such election to purchase Optional Shares may be exercised only by written notice from you to the Company, given within a period of 30 calendar days after the date of this Agreement, setting forth the aggregate number of Optional Shares to be purchased and the date on which such Optional Shares are to be delivered, as determined by you but in no event earlier than the First Time of Delivery (as defined in Section 4 hereof) or, unless you and the Company otherwise agree in writing, earlier than two or later than ten business days after the date of such notice.

1. Upon the authorization by you of the release of the Firm Shares, the several Underwriters propose to offer the Firm Shares for sale upon the terms and conditions set forth in the Prospectus.
2. (a) The Shares to be purchased by each Underwriter hereunder, in definitive form, and in such authorized denominations and registered in such names as Goldman, Sachs & Co. may request upon at least forty-eight hours' prior notice to the Company shall be delivered by or on behalf of the Company to Goldman, Sachs & Co., through the facilities of the Depository Trust Company ("DTC"), for the account of such Underwriter, against payment by or on behalf of such Underwriter of the purchase price therefor by wire transfer of Federal (same-day) funds to the account specified by the Company to Goldman, Sachs & Co. at least forty-eight hours in advance. The Company will cause the certificates representing the Shares to be made available for checking and packaging at least twenty-four hours prior to the Time of Delivery (as defined below) with respect thereto at the office of DTC or its designated custodian (the "Designated Office"). The time and date of such delivery and payment shall be, with respect to the Firm Shares, 9:30 a.m., New York City time, on ............., 2000 or such other time and date as Goldman, Sachs & Co. and the Company may agree upon in writing, and, with respect to the Optional Shares, 9:30 a.m., New York time, on the date specified by Goldman, Sachs & Co. in the written notice given by Goldman, Sachs & Co. of the Underwriters' election to purchase such Optional Shares, or such other time and date as Goldman, Sachs & Co. and the Company may agree upon in writing. Such time and date for delivery of the Firm Shares is herein called the "First Time of Delivery", such time and date for delivery of the Optional Shares, if not the First Time of Delivery, is herein called the "Second Time of Delivery", and each such time and date for delivery is herein called a "Time of Delivery".
3. The documents to be delivered at each Time of Delivery by or on behalf of the parties hereto pursuant to Section 7 hereof, including the cross receipt for the Shares and any additional documents requested by the Underwriters pursuant to Section 7(n) hereof, will be delivered at the offices of Gibson, Dunn & Crutcher LLP, 1530 Page Mill Road, Palo Alto, California (the "Closing Location"), and the Shares will be delivered at the Designated Office, all at such Time of Delivery. A meeting will be held at the Closing Location at 3:00 p.m., Pacific time, on the New York Business Day next preceding such Time of Delivery, at which meeting the final drafts of the documents to be delivered pursuant to the preceding sentence will be available for review by the parties hereto. For the purposes of this Section 4, "New York Business Day" shall mean each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in New York are generally authorized or obligated by law or executive order to close.

7

1. The Company agrees with each of the Underwriters:
   1. To prepare the Prospectus in a form approved by you and to file such Prospectus pursuant to Rule 424(b) under the Act not later than the Commission's close of business on the second business day following the execution and delivery of this Agreement, or, if applicable, such earlier time as may be required by Rule 430A(a)(3) under the Act; to make no further amendment or any supplement to the Registration Statement or Prospectus which shall be disapproved by you promptly after reasonable notice thereof; to advise you, promptly after it receives notice thereof, of the time when any amendment to the Registration Statement has been filed or becomes effective or any supplement to the Prospectus or any amended Prospectus has been filed and to furnish you with copies thereof; to advise you, promptly after it receives notice thereof, of the issuance by the Commission of any stop order or of any order preventing or suspending the use of any Preliminary Prospectus or prospectus, of the suspension of the qualification of the Shares for offering or sale in any jurisdiction, of the initiation or threatening of any proceeding for any such purpose, or of any request by the Commission for the amending or supplementing of the Registration Statement or Prospectus or for additional information; and, in the event of the issuance of any stop order or of any order preventing or suspending the use of any Preliminary Prospectus or prospectus or suspending any such qualification, promptly to use its best efforts to obtain the withdrawal of such order;
   2. Promptly from time to time to take such action as you may reasonably request to qualify the Shares for offering and sale under the securities laws of such jurisdictions as you may request and to comply with such laws so as to permit the continuance of sales and dealings therein in such jurisdictions for as long as may be necessary to complete the distribution of the Shares, provided that in connection therewith the Company shall not be required to qualify as a foreign corporation or to file a general consent to service of process in any jurisdiction;
   3. Prior to 10:00 A.M., New York City time, on the New York Business Day next succeeding the date of this Agreement and from time to time, to furnish the Underwriters with copies of the Prospectus in New York City in such quantities as you may reasonably request, and, if the delivery of a prospectus is required at any time prior to the expiration of nine months after the time of issue of the Prospectus in connection with the offering or sale of the Shares and if at such time any event shall have occurred as a result of which the Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made when such Prospectus is delivered, not misleading, or, if for any other reason it shall be necessary during such period to amend or supplement the Prospectus in order to comply with the Act, to notify you and upon your request to prepare and furnish without charge to each Underwriter and to any dealer in securities as many copies as you may from time to time reasonably request of an amended Prospectus or a supplement to the Prospectus which will correct such statement or omission or effect such compliance, and in case any Underwriter is required to deliver a prospectus in connection with sales of any of the Shares at any time nine months or more after the time of issue of the Prospectus, upon your request but at the expense of such Underwriter, to prepare and deliver to such Underwriter as many copies as you may request of an amended or supplemented Prospectus complying with Section 10(a)(3) of the Act;

8

1. To make generally available to its securityholders as soon as practicable, but in any event not later than eighteen months after the effective date of the Registration Statement (as defined in Rule 158(c) under the Act), an earnings statement of the Company and its subsidiaries (which need not be audited) complying with Section 11(a) of the Act and the rules and regulations thereunder (including, at the option of the Company, Rule 158);
2. During the period beginning from the date hereof and continuing to and including the date 180 days after the date of the Prospectus, (i) not to offer, sell, contract to sell or otherwise dispose of, except as provided hereunder, any securities of the Company that are substantially similar to the Shares, including but not limited to any securities that are convertible into or exchangeable for, or that represent the right to receive, Stock or any such substantially similar securities (other than pursuant to stock option plans existing on, or upon the conversion or exchange of convertible or exchangeable securities outstanding as of, the date of this Agreement) without the prior written consent of Goldman, Sachs & Co., (ii) to take reasonable steps to enforce (including, without limitation, through the issuance of stop transfer instructions to the Company's transfer agent), and, without the prior written consent of Goldman, Sachs & Co., not to waive or amend any agreements between the Company and any holder of such securities restricting such holder from effecting any offer, sale or other disposition of such securities, and (iii) to require that any recipient of securities of the Company issued pursuant to the Company's stock option plans or upon the conversion or exchange of convertible or exchangeable securities execute an agreement in favor of the Underwriters prohibiting the sale, transfer, or disposition of such securities during such 180-day period without the prior written consent of Goldman, Sachs & Co. The Company represents and warrants that it has the valid and enforceable right to restrict the sale, transfer or disposition of all such securities of the Company in accordance with the foregoing.
3. To furnish to its stockholders as soon as practicable after the end of each fiscal year an annual report (including a balance sheet and statements of income, stockholders' equity and cash flows of the Company and its consolidated subsidiaries certified by independent public accountants) and, as soon as practicable after the end of each of the first three quarters of each fiscal year (beginning with the fiscal quarter ending after the effective date of the Registration Statement), to make available to its stockholders consolidated summary financial information of the Company and its subsidiaries for such quarter in reasonable detail;
4. During a period of five years from the effective date of the Registration Statement, to furnish to you copies of all reports or other communications (financial or other) furnished to stockholders, and to deliver to you (i) as soon as they are available, copies of any reports and financial statements furnished to or filed with the Commission or any national securities exchange on which any class of securities of the Company is listed; and (ii) such additional information concerning the business and financial condition of the Company as you may from time to time reasonably request (such financial statements to be on a consolidated basis to the extent the accounts of the Company and its subsidiaries are consolidated in reports furnished to its stockholders generally or to the Commission);
5. To use the net proceeds received by it from the sale of the Shares pursuant to this Agreement in the manner specified in the Prospectus under the caption "Use of Proceeds";
6. To use its best efforts to list for quotation the Shares on the National Association of Securities Dealers Automated Quotations National Market System ("NASDAQ");

9

* + 1. To file with the Commission such information on Form 10-Q or Form 10-K as may be required by Rule 463 under the Act;
    2. If the Company elects to rely upon Rule 462(b), the Company shall file a Rule 462(b) Registration Statement with the Commission in compliance with Rule 462(b) by 10:00 P.M., Washington, D.C. time, on the date of this Agreement, and the Company shall at the time of filing either pay to the Commission the filing fee for the Rule 462(b) Registration Statement or give irrevocable instructions for the payment of such fee pursuant to Rule 111(b) under the Act; and
    3. Not to (and to cause its subsidiaries not to) take, directly or indirectly, any action which is designed to or which constitutes or which might reasonably be expected to cause or result in stabilization or manipulation of the price of any security of the Company.
  1. The Company covenants and agrees with the several Underwriters that the Company will pay or cause to be paid the following: (i) the fees, disbursements and expenses of the Company's counsel and accountants in connection with the registration of the Shares under the Act and all other expenses in connection with the preparation, printing and filing of the Registration Statement, any Preliminary Prospectus and the Prospectus and amendments and supplements thereto and the mailing and delivering of copies thereof to the Underwriters and dealers; (ii) the cost of word processing any Agreement among Underwriters, this Agreement, the Blue Sky Memorandum, closing documents (including any compilations thereof) and any other documents in connection with the offering, purchase, sale and delivery of the Shares; (iii) all expenses in connection with the qualification of the Shares for offering and sale under state securities laws as provided in Section 5(b) hereof, including the fees and disbursements of counsel for the Underwriters in connection with such qualification and in connection with the Blue Sky survey (iv) all fees and expenses in connection with listing the Shares on the NASDAQ; (v) the filing fees incident to, and the fees and disbursements of counsel for the Underwriters, not in excess of $20,000, in connection with, securing any required review by the National Association of Securities Dealers, Inc. of the terms of the sale of the Shares; (vi) the cost of preparing stock certificates;

1. the cost and charges of any transfer agent or registrar; and (viii) all other costs and expenses incident to the performance of its obligations hereunder which are not otherwise specifically provided for in this Section. It is understood, however, that, except as provided in this Section, and Sections 8 and 11 hereof, the Underwriters will pay all of their own costs and expenses, including the fees of their counsel, stock transfer taxes on resale of any of the Shares by them, and any advertising expenses connected with any offers they may make.
   1. The obligations of the Underwriters hereunder, as to the Shares to be delivered at each Time of Delivery, shall be subject, in their discretion, to the condition that all representations and warranties and other statements of the Company herein are, at and as of such Time of Delivery, true and correct, the condition that the Company shall have performed all of its obligations hereunder theretofore to be performed, and the following additional conditions:
      1. The Prospectus shall have been filed with the Commission pursuant to Rule 424(b) within the applicable time period prescribed for such filing by the rules and regulations under the Act and in accordance with Section 5(a) hereof; if the Company has elected to rely upon Rule 462(b), the Rule 462(b) Registration Statement shall have become effective by 10:00 P.M., Washington, D.C. time, on the date of this Agreement; no stop order suspending the effectiveness of the Registration Statement or any part thereof shall have been issued and no proceeding for that purpose shall have been initiated or threatened by the Commission; and all requests for additional information on the part of the Commission shall have been complied with to your reasonable satisfaction;

10

1. Sullivan & Cromwell, counsel for the Underwriters, shall have furnished to you such written opinion or opinions (a draft of each such opinion is attached as Annex II(a) hereto), dated such Time of Delivery, with respect to such matters as you may reasonably request, and such counsel shall have received such papers and information as they may reasonably request to enable them to pass upon such matters;
2. Appleby Spurling & Kempe, Bermuda counsel for the Underwriters, shall have furnished to you such written opinion or opinions (a draft of each such opinion is attached as Annex II(b) hereto), dated such time of Delivery, with respect to such matters as you may reasonably request, and such counsel shall have received such papers and information as they may reasonably request to enable them to pass upon such matters.
3. Thor Buell, General Counsel of the Company, shall have furnished to you a letter (a draft of such letter is attached as Annex II(c) hereto), dated such Time of Delivery, in form and substance satisfactory to you, to the effect that:
   * 1. To such counsel's knowledge and other than as set forth in the Prospectus, there are no legal or governmental proceedings pending to which the Company or any of its subsidiaries is a party or of which any property of the Company or any of its subsidiaries is the subject which, if determined adversely to the Company or any of its subsidiaries, would individually or in the aggregate have a material adverse effect on the current or future consolidated financial position, stockholders' equity or results of operations of the Company and its subsidiaries; and, to the best of such counsel's knowledge, no such proceedings are threatened or contemplated by any Governmental Agency or threatened by others;
   1. Conyers Dill & Pearman, Bermuda counsel for the Company, shall have furnished to you their written opinion (a draft of such opinion is attached as Annex II(d) hereto), dated such Time of Delivery, in form and substance satisfactory to you, to the effect that:
      1. The form of certificates for the Shares conforms to the requirements of Bermuda law;
4. The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of Bermuda with power and authority (corporate and other) to own its properties and conduct its business as described in the Prospectus;
5. The Company and each of its subsidiaries have all franchises, permits, authorizations, approvals and orders and other licenses and concessions of and from all Governmental Agencies that are necessary to own or lease their properties and conduct their businesses as described in the Prospectus except for such licenses, permits, authorizations, concessions, approvals and orders the failure to obtain which will not have a material adverse effect on the financial condition or results of operations of the Company and its subsidiaries;
6. The Company has an authorized capitalization as set forth in the Prospectus, and all of the issued shares of capital stock of the Company (including the Shares being delivered at such Time of Delivery) have been duly and validly authorized and issued and are fully paid and non-assessable; and the Shares conform to the description of the Stock contained in the Prospectus; the holders of

11

outstanding shares of capital stock of the Company are not entitled to preemptive or other rights to acquire the Shares;

1. To such counsel's actual knowledge and other than as set forth in the Prospectus, there are no legal or governmental proceedings pending to which the Company or any of its subsidiaries is a party or of which any property of the Company or any of its subsidiaries is the subject which, if determined adversely to the Company or any of its subsidiaries, would individually or in the aggregate have a material adverse effect on the current or future consolidated financial position, stockholders' equity or results of operations of the Company and its subsidiaries; and, to such counsel's actual knowledge, no such proceedings are threatened or contemplated by any Governmental Agency or threatened by others;
2. This Agreement has been duly authorized, executed and delivered by the Company;
3. The issue and sale of the Shares being delivered at such Time of Delivery by the Company and the compliance by the Company with all of the provisions of this Agreement and the consummation of the transactions herein contemplated will not conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument identified to such counsel by the Company as material or the officers' certificate of the Company attached to such opinion, nor will such action result in any violation of the provisions of the memorandum of association of the Company or any statute, rule or regulation known to such counsel of any court or Governmental Agency or body having jurisdiction over the Company or any of its properties, or any order identified by the Company on such officers' certificate;
4. No Governmental Authorization of or with any Governmental Agency is required in Bermuda for the issue and sale of the Shares by the Company or the consummation by the Company of the transactions contemplated by this Agreement;
5. The choice of laws of the State of New York to govern this Agreement is a proper, valid and binding choice of law and will be recognized and applied by the Courts of Bermuda, assuming that such choice of law is a valid and binding choice of law under the laws of the State of New York;
6. The Company's agreement to the choice of law provisions set forth in Section 14 hereof will be recognized by the courts of Bermuda; the Company can sue and be sued in its own name under the laws of Bermuda; the irrevocable submission of the Company to the exclusive jurisdiction of a New York Court, the waiver by the Company of any objection to the venue of a proceeding of a New York Court and the agreement of the Company that this Agreement shall be governed by and construed in accordance with the laws of the State of New York are legal, valid and binding; service of process effected in the manner set forth in Section 14 hereof will be effective, insofar as the law of Bermuda is concerned, to confer valid personal jurisdiction over the Company; and judgment obtained in a New York Court arising out of or in relation to the obligations of the Company under this Agreement would be enforceable against the Company in the courts of Bermuda;

12

1. A final and conclusive judgment of the United States Federal or New York State courts under which a sum of money is payable, not being a sum payable in respect of taxes or other charges of a like nature, in respect of a fine or other penalty, or multiple damages, would be enforced as a debt against the Company by an action in the Supreme Court of Bermuda without re-examination of the merits of the case under the Common Law Doctrine of Obligation, provided that such judgment was not obtained by fraud or that its enforcement would not be contrary to public policy in Bermuda, or that the proceedings in which the same was obtained were not contrary to natural justice;
2. The statements set forth in the Prospectus under the caption "Description of Capital Stock", insofar as they purport to constitute a summary of the terms of the Stock and to describe the provisions of the laws of Bermuda and documents referred to therein, are accurate and fair in all material respects;
3. The statements in the Prospectus under the captions "Service of Process and Enforcement of Liabilities" and "Taxation", insofar as they purport to describe the provisions of the laws of Bermuda referred to therein, are accurate in all material respects and to the extent such statements relate to matters of law or regulation or to the provisions of documents therein described, are accurate and fair in all material respects, and nothing has been omitted from such statements which would make the same misleading in any material respect;
4. No stamp or other issuance or transfer taxes or duties and no capital gains, income, withholding or other taxes are payable by or on behalf of you to the Bermuda government or to any political subdivision or taxing authority thereof or therein in connection with the execution of this Agreement or the issuance of the Shares.
5. Insofar as matters of Bermuda law are concerned, the Registration Statement and the filing of the Registration Statement with the Commission have been duly authorized by and on behalf of the Company;
6. The Company is not entitled to any immunity on the basis of sovereignty or otherwise in respect of its obligations under this Agreement and could not successfully interpose any such immunity as a defense to any suit or action brought or maintained in respect of its obligations under this Agreement; and the waiver by the Company of immunity to jurisdiction (including the waiver of sovereign immunity to which the Company may become entitled subsequent to the date of this Agreement) and immunity to pre-judgment attachment, post-judgment attachment and execution in any suit, action or proceeding against it arising out of or based on this Agreement is a valid and binding obligation of the Company under Bermuda law;
7. The indemnification and contribution provisions set forth in Section 8 hereof do not contravene the public policy or laws of Bermuda; and

In giving such opinion, such counsel may state that with respect to all matters of United States federal and New York law they have relied upon the opinions of United States counsel for the Company delivered pursuant to paragraph (f) of this Section 7.

13

1. Gibson, Dunn & Crutcher LLP, counsel for the Company, shall have furnished to you their written opinion in the form set forth in Annex II(e) hereto, dated such Time of Delivery, in form and substance satisfactory to you.
2. Eric Janofsky, patent counsel for the Company, shall have furnished to you their written opinion (a draft of such opinion is attached as Annex II(f) hereto), dated such Time of Delivery, in a form and substance satisfactory to you, to the effect that:
   1. To the best of such counsel's knowledge, neither the Company nor any of its subsidiaries has received notice of any claim of infringement of any patent, except as set forth in such opinion; and
   2. Such counsel has reviewed the Registration Statement and Prospectus, the amendments and supplements thereto, and insofar as they concern patents, patent rights or patent licenses, such counsel has no reason to believe that either the Registration Statement or the Prospectus or any amendment or supplement thereto (including particularly the information in the Prospectus under the caption "Risk Factors-\_\_\_\_) contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements therein not misleading.

In rendering such opinion, such counsel (i) shall state that they have represented the Company as to patent matters, are knowledgeable about its technologies and have discussed such technologies with scientists and researchers for the Company and (ii) may state that insofar as such opinion relates to factual matters, it is based upon certificates by officers of the Company, provided that such counsel shall state that they believe that both you and they are justified in relying upon such certificates.

* 1. On the date of the Prospectus at a time prior to the execution of this Agreement, at 9:30 a.m., New York City time, on the effective date of any post-effective amendment to the Registration Statement filed subsequent to the date of this Agreement and also at each Time of Delivery, PricewaterhouseCoopers LLP shall have furnished to you a letter or letters, dated the respective dates of delivery thereof, in form and substance satisfactory to you, to the effect set forth in Annex I hereto (the executed copy of the letter delivered prior to the execution of this Agreement is attached as Annex I(a) hereto and a draft of the form of letter to be delivered on the effective date of any post-effective amendment to the Registration Statement and as of each Time of Delivery is attached as Annex I(b) hereto);
  2. (i) Neither the Company nor any of its subsidiaries shall have sustained since the date of the latest audited financial statements included in the Prospectus any loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, otherwise than as set forth or contemplated in the Prospectus, and (ii) since the respective dates as of which information is given in the Prospectus there shall not have been any change in the capital stock or long-term debt of the Company or any of its subsidiaries or any change, or any development involving a prospective change, in or affecting the general affairs, management, financial position, stockholders' equity or results of operations of the Company and its subsidiaries, otherwise than as set forth or contemplated in the Prospectus, the effect of which, in any such case described in clause

1. or (ii), is, in the judgment of the Representatives so material and adverse as to make it impracticable or inadvisable to proceed with the public offering or the delivery of the Shares being delivered at such Time of Delivery on the terms and in the manner contemplated in the Prospectus;

14

* 1. On or after the date hereof there shall not have occurred any of the following: (i) a suspension or material limitation in trading in securities generally on the New York Stock Exchange or on NASDAQ;

1. a suspension or material limitation in trading in the Company's securities on NASDAQ; (iii) a general moratorium on commercial banking activities declared by Federal or New York State or California State authorities; (iv) a change or development involving a prospective change in Bermuda or Singapore taxation affecting the Company or the Shares or the transfer thereof or the imposition of exchange controls by the United States, Bermuda or Singapore, if such change, development involving a prospective change or imposition is, in the judgment of the Representatives, so material and adverse as to make it impracticable or inadvisable to proceed with the public offering or the delivery of the Shares being delivered at such Time of Delivery on the terms and in the manner contemplated in the Prospectus; (v) the outbreak or escalation of hostilities involving the United States or the declaration by the United States of a national emergency or war, if the effect of any such event specified in this clause (v) in the judgment of the Representatives makes it impracticable or inadvisable to proceed with the public offering or the delivery of the Shares being delivered at such Time of Delivery on the terms and in the manner contemplated in the Prospectus; or (vi) the occurrence of any material adverse change in the existing financial, political or economic conditions in the United States, the United Kingdom, Bermuda, Singapore or elsewhere which, in the judgment of the Representatives, would materially and adversely affect the financial markets or the market for the Shares and other equity securities;
   1. The Shares to be sold at such Time of Delivery shall have been duly listed for quotation on NASDAQ;
   2. The Company has obtained and delivered to the Underwriters executed copies of an agreement from each of its directors and officers and each stockholder listed on Schedule II hereto, substantially to the effect set forth in Subsection 5(e)(i) hereof in form and substance satisfactory to you;
   3. The Company shall have complied with the provisions of Section 5(c) hereof with respect to the furnishing of prospectuses on the New York Business Day next succeeding the date of this Agreement;
   4. The Company shall have furnished or caused to be furnished to you at such Time of Delivery certificates of officers of the Company reasonably satisfactory to you as to the accuracy of the representations and warranties of the Company herein at and as of such Time of Delivery, as to the performance by the Company of all of its obligations hereunder to be performed at or prior to such Time of Delivery, and as to such other matters as you may reasonably request; and
   5. On or after the date hereof (i) no downgrading shall have occurred in the rating accorded the Company's debt securities or preferred stock by any "nationally recognized statistical rating organization", as that term is defined by the Commission for purposes of Rule 436(g)(2) under the Act, and (ii) no such organization shall have publicly announced that it has under surveillance or review, with possible negative implications, its rating of any of the Company's debt securities or preferred stock.
2. (a) The Company will indemnify and hold harmless each Underwriter against any losses, claims, damages or liabilities, joint or several, to which such Underwriter may become subject, under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material

15

fact contained in any Preliminary Prospectus, the Registration Statement or the Prospectus, or any amendment or supplement thereto, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse each Underwriter for any legal or other expenses reasonably incurred by such Underwriter in connection with investigating or defending any such action or claim as such expenses are incurred; provided, however, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in any Preliminary Prospectus, the Registration Statement or the Prospectus or any such amendment or supplement in reliance upon and in conformity with written information furnished to the Company by any Underwriter through Goldman, Sachs & Co. expressly for use therein.

* 1. Each Underwriter will indemnify and hold harmless the Company against any losses, claims, damages or liabilities to which the Company may become subject, under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in any Preliminary Prospectus, the Registration Statement or the Prospectus, or any amendment or supplement thereto, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in any Preliminary Prospectus, the Registration Statement or the Prospectus or any such amendment or supplement in reliance upon and in conformity with written information furnished to the Company by such Underwriter through Goldman, Sachs
* Co. expressly for use therein; and will reimburse the Company for any legal or other expenses reasonably incurred by the Company in connection with investigating or defending any such action or claim as such expenses are incurred.
  1. Promptly after receipt by an indemnified party under subsection (a) or (b) above of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under such subsection, notify the indemnifying party in writing of the commencement thereof; but the omission so to notify the indemnifying party shall not relieve it from any liability which it may have to any indemnified party otherwise than under such subsection. In case any such action shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel satisfactory to such indemnified party (who shall not, except with the consent of the indemnified party, be counsel to the indemnifying party), and, after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under such subsection for any legal expenses of other counsel or any other expenses, in each case subsequently incurred by such indemnified party, in connection with the defense thereof other than reasonable costs of investigation. No indemnifying party shall, without the written consent of the indemnified party, effect the settlement or compromise of, or consent to the entry of any judgment with respect to, any pending or threatened action or claim in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified party is an actual or potential party to such action or claim) unless such settlement, compromise or judgment (i) includes an unconditional release of the indemnified party from all liability arising out of such action or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of any indemnified party.

16

* 1. If the indemnification provided for in this Section 8 is unavailable to or insufficient to hold harmless an indemnified party under subsection (a) or

1. above in respect of any losses, claims, damages or liabilities (or actions in respect thereof) referred to therein, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (or actions in respect thereof) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other from the offering of the Shares. If, however, the allocation provided by the immediately preceding sentence is not permitted by applicable law or if the indemnified party failed to give the notice required under subsection (c) above, then each indemnifying party shall contribute to such amount paid or payable by such indemnified party in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company on the one hand and the Underwriters on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities (or actions in respect thereof), as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company bear to the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover page of the Prospectus. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company on the one hand or the Underwriters on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this subsection (d) were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above in this subsection (d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities (or actions in respect thereof) referred to above in this subsection (d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this subsection (d), no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Shares underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages which such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations in this subsection (d) to contribute are several in proportion to their respective underwriting obligations and not joint.
   1. The obligations of the Company under this Section 8 shall be in addition to any liability which the Company may otherwise have and shall extend, upon the same terms and conditions, to each person, if any, who controls any Underwriter within the meaning of the Act; and the obligations of the Underwriters under this Section 8 shall be in addition to any liability which the respective Underwriters may otherwise have and shall extend, upon the same terms and conditions, to each officer and director of the Company (including any person who, with his or her consent, is named in the Registration Statement as about to become a director of the Company) and to each person, if any, who controls the Company within the meaning of the Act.

17

1. (a) If any Underwriter shall default in its obligation to purchase the Shares which it has agreed to purchase hereunder at a Time of Delivery, you may in your discretion arrange for you or another party or other parties to purchase such Shares on the terms contained herein. If within thirty-six hours after such default by any Underwriter you do not arrange for the purchase of such Shares, then the Company shall be entitled to a further period of thirty-six hours within which to procure another party or other parties satisfactory to you to purchase such Shares on such terms. In the event that, within the respective prescribed periods, you notify the Company that you have so arranged for the purchase of such Shares, or the Company notifies you that it has so arranged for the purchase of such Shares, you or the Company shall have the right to postpone such Time of Delivery for a period of not more than seven days, in order to effect whatever changes may thereby be made necessary in the Registration Statement or the Prospectus, or in any other documents or arrangements, and the Company agrees to file promptly any amendments to the Registration Statement or the Prospectus which in your opinion may thereby be made necessary. The term "Underwriter" as used in this Agreement shall include any person substituted under this Section with like effect as if such person had originally been a party to this Agreement with respect to such Shares.
2. If, after giving effect to any arrangements for the purchase of the Shares of a defaulting Underwriter or Underwriters by you and the Company as provided in subsection (a) above, the aggregate number of such Shares which remains unpurchased does not exceed one-eleventh of the aggregate number of all the Shares to be purchased at such Time of Delivery, then the Company shall have the right to require each non-defaulting Underwriter to purchase the number of Shares which such Underwriter agreed to purchase hereunder at such Time of Delivery and, in addition, to require each non-defaulting Underwriter to purchase its pro rata share (based on the number of Shares which such Underwriter agreed to purchase hereunder) of the Shares of such defaulting Underwriter or Underwriters for which such arrangements have not been made; but nothing herein shall relieve a defaulting Underwriter from liability for its default.
3. If, after giving effect to any arrangements for the purchase of the Shares of a defaulting Underwriter or Underwriters by you and the Company as provided in subsection (a) above, the aggregate number of such Shares which remains unpurchased exceeds one-eleventh of the aggregate number of all the Shares to be purchased at such Time of Delivery, or if the Company shall not exercise the right described in subsection (b) above to require non-defaulting Underwriters to purchase Shares of a defaulting Underwriter or Underwriters, then this Agreement (or, with respect to the Second Time of Delivery, the obligations of the Underwriters to purchase and of the Company to sell the Optional Shares) shall thereupon terminate, without liability on the part of any non-defaulting Underwriter or the Company, except for the expenses to be borne by the Company and the Underwriters as provided in Section 6 hereof and the indemnity and contribution agreements in Section 8 hereof; but nothing herein shall relieve a defaulting Underwriter from liability for its default.
4. The respective indemnities, agreements, representations, warranties and other statements of the Company and the several Underwriters, as set forth in this Agreement or made by or on behalf of them, respectively, pursuant to this Agreement, shall remain in full force and effect, regardless of any investigation (or any statement as to the results thereof) made by or on behalf of any Underwriter or any controlling person of any Underwriter, or the Company, or any officer or director or controlling person of the Company, and shall survive delivery of and payment for the Shares.
5. If this Agreement shall be terminated pursuant to Section 9 hereof, the Company shall not then be under any liability to any Underwriter except as provided in Sections 6 and 8 hereof; but,

18

if for any other reason, any Shares are not delivered by or on behalf of the Company as provided herein, the Company will reimburse the Underwriters through you for all out-of-pocket expenses approved in writing by you, including fees and disbursements of counsel, reasonably incurred by the Underwriters in making preparations for the purchase, sale and delivery of the Shares not so delivered, but the Company shall then be under no further liability to any Underwriter except as provided in Sections 6 and 8 hereof.

1. In all dealings hereunder, you shall act on behalf of each of the Underwriters, and the parties hereto shall be entitled to act and rely upon any statement, request, notice or agreement on behalf of any Underwriter made or given by you jointly or by Goldman, Sachs & Co. on behalf of you as the representatives.

All statements, requests, notices and agreements hereunder shall be in writing, and if to the Underwriters shall be delivered or sent by mail, telex or facsimile transmission to you as the representatives in care of Goldman, Sachs & Co., 32 Old Slip, 21st Floor, New York, New York 10005, Attention: Registration Department; and if to the Company shall be delivered or sent by mail to the address of the Company set forth in the Registration Statement, Attention: Secretary, with a copy to Gibson, Dunn & Crutcher LLP, One Montgomery Street, Suite 2600, San Francisco, California 94104, Attention: Kenneth R. Lamb, provided, however, that any notice to an Underwriter pursuant to Section 8(c) hereof shall be delivered or sent by mail, telex or facsimile transmission to such Underwriter at its address set forth in its Underwriters' Questionnaire, or telex constituting such Questionnaire, which address will be supplied to the Company by you upon request. Any such statements, requests, notices or agreements shall take effect upon receipt thereof.

1. This Agreement shall be binding upon, and inure solely to the benefit of, the Underwriters, the Company and, to the extent provided in Sections 8 and 10 hereof, the officers and directors of the Company and each person who controls the Company or any Underwriter, and their respective heirs, executors, administrators, successors and assigns, and no other person shall acquire or have any right under or by virtue of this Agreement. No purchaser of any of the Shares from any Underwriter shall be deemed a successor or assign by reason merely of such purchase.
2. The Company irrevocably (i) agrees that any legal suit, action or proceeding arising out of or based upon this Agreement or the transactions contemplated hereby may be instituted in any New York Court (ii) waives, to the fullest extent it may effectively do so, any objection which it may now or hereafter have to the laying of venue of any such proceeding and (iii) submits to the exclusive jurisdiction of such courts in any such suit, action or proceeding. The Company irrevocably waives any immunity to jurisdiction to which it may otherwise be entitled or become entitled (including sovereign immunity, immunity to pre-judgment attachment, post-judgment attachment and execution) in any legal suit, action or proceeding against it arising out of or based on this Agreement or the transactions contemplated hereby which is instituted in any New York Court. The Company has appointed \_\_\_\_\_\_\_\_, New York, New York, as its authorized agent (the "Authorized Agent") upon whom process may be served in any such action arising out of or based on this Agreement or the transactions contemplated hereby which may be instituted in any New York Court by any Underwriter or by any person who controls any Underwriter, expressly consents to the jurisdiction of any such court in respect of any such action, and waives any other requirements of or objections to personal jurisdiction with respect thereto. Such appointment shall be irrevocable. The Company represents and warrants that the Authorized Agent has agreed to act as such agent for service of process and agrees to take any and all action, including the filing of any and all documents and instruments, that may be necessary to continue such appointment in full force and effect as aforesaid. Service of

19

process upon the Authorized Agent and written notice of such service to the Company shall be deemed, in every respect, effective service of process upon the Company.

1. Time shall be of the essence of this Agreement. As used herein, the term "business day" shall mean any day when the Commission's office in Washington, D.C. is open for business.
2. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK.
3. This Agreement may be executed by any one or more of the parties hereto in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same instrument.
4. In respect of any judgment or order given or made for any amount due hereunder that is expressed and paid in a currency (the "judgment currency") other than United States dollars, the Company will indemnify each Underwriter against any loss incurred by such Underwriter as a result of any variation as between (i) the rate of exchange at which the United States dollar amount is converted into the judgment currency for the purpose of such judgment or order and (ii) the rate of exchange at which an Underwriter is able to purchase United States dollars with the amount of the judgment currency actually received by such Underwriter. The foregoing indemnity shall constitute a separate and independent obligation of the Company and shall continue in full force and effect notwithstanding any such judgment or order as aforesaid. The term "rate of exchange" shall include any premiums and costs of exchange payable in connection with the purchase of or conversion into United States dollars.

20

If the foregoing is in accordance with your understanding, please sign and return to us seven counterparts hereof, and upon the acceptance hereof by you, on behalf of each of the Underwriters, this letter and such acceptance hereof shall constitute a binding agreement between each of the Underwriters and the Company. It is understood that your acceptance of this letter on behalf of each of the Underwriters is pursuant to the authority set forth in a form of Agreement among Underwriters, the form of which shall be submitted to the Company for examination upon request, but without warranty on your part as to the authority of the signers thereof.

Very truly yours,

Marvell Technology Group Ltd.

By:

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Name:

Title:

Accepted as of the date hereof:

Goldman, Sachs & Co.

J. P. Morgan Securities Inc.

Lehman Brothers Inc.

By:

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(Goldman, Sachs & Co.)

On behalf of each of the Underwriters

21

SCHEDULE I

UNDERWRITER

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TOTAL NUMBER OF

FIRM SHARES

TO BE PURCHASED

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NUMBER OF OPTIONAL

SHARES TO BE

PURCHASED IF

MAXIMUM OPTION

EXERCISED

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Goldman, Sachs & Co...................................

Lehman Brothers Inc.

J.P. Morgan Securities Inc.

Total..................................

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22

SCHEDULE II

STOCKHOLDERS SUBJECT TO LOCK-UP AGREEMENTS

23

ANNEX I

Pursuant to Section 7(h) of the Underwriting Agreement, the accountants shall furnish letters to the Underwriters to the effect that:

1. They are independent certified public accountants with respect to the Company and its subsidiaries within the meaning of the Act and the applicable published rules and regulations thereunder;
2. In their opinion, the financial statements and any supplementary financial information and schedules (and, if applicable, financial forecasts and/or pro forma financial information) examined by them and included in the Prospectus or the Registration Statement comply as to form in all material respects with the applicable accounting requirements of the Act and the related published rules and regulations thereunder; and, if applicable, they have made a review in accordance with standards established by the American Institute of Certified Public Accountants of the unaudited consolidated interim financial statements, selected financial data, pro forma financial information, financial forecasts and/or condensed financial statements derived from audited financial statements of the Company for the periods specified in such letter, as indicated in their reports thereon, copies of which have been separately furnished to the representatives of the Underwriters (the "Representatives");
3. They have made a review in accordance with standards

established by the American Institute of Certified Public Accountants of the unaudited condensed consolidated statements of income, consolidated balance sheets and consolidated statements of cash flows included in the Prospectus as indicated in their reports thereon copies of which have been separately furnished to the Representatives and on the basis of specified procedures including inquiries of officials of the Company who have responsibility for financial and accounting matters regarding whether the unaudited condensed consolidated financial statements referred to in paragraph (vi)(A)(i) below comply as to form in all material respects with the applicable accounting requirements of the Act and the related published rules and regulations, nothing came to their attention that cause them to believe that the unaudited condensed consolidated financial statements do not comply as to form in all material respects with the applicable accounting requirements of the Act and the related published rules and regulations;

1. The unaudited selected financial information with respect to the consolidated results of operations and financial position of the Company for the five most recent fiscal years included in the Prospectus agrees with the corresponding amounts (after restatements where applicable) in the audited consolidated financial statements for such five fiscal years which were included or incorporated by reference in the Company's Annual Reports on Form 10-K for such fiscal years;
2. They have compared the information in the Prospectus under selected captions with the disclosure requirements of Regulation S-K and on the basis of limited procedures specified in such letter nothing came to their attention as a result of the foregoing procedures that caused them to believe that this information does not conform in all material respects with the disclosure requirements of Items 301, 302, 402 and 503(d), respectively, of Regulation S-K;
3. On the basis of limited procedures, not constituting an examination in accordance with generally accepted auditing standards, consisting of a reading of the unaudited financial statements and other information referred to below, a reading of the latest available interim financial statements of the Company and its subsidiaries, inspection of the minute books of

24

the Company and its subsidiaries since the date of the latest audited financial statements included in the Prospectus, inquiries of officials of the Company and its subsidiaries responsible for financial and accounting matters and such other inquiries and procedures as may be specified in such letter, nothing came to their attention that caused them to believe that:

* 1. (i) the unaudited consolidated statements of income, consolidated balance sheets and consolidated statements of cash flows included in the Prospectus do not comply as to form in all material respects with the applicable accounting requirements of the Act and the related published rules and regulations, or (ii) any material modifications should be made to the unaudited condensed consolidated statements of income, consolidated balance sheets and consolidated statements of cash flows included in the Prospectus for them to be in conformity with generally accepted accounting principles;
  2. any other unaudited income statement data and balance sheet items included in the Prospectus do not agree with the corresponding items in the unaudited consolidated financial statements from which such data and items were derived, and any such unaudited data and items were not determined on a basis substantially consistent with the basis for the corresponding amounts in the audited consolidated financial statements included in the Prospectus;
  3. the unaudited financial statements which were not included in the Prospectus but from which were derived any unaudited condensed financial statements referred to in clause

1. and any unaudited income statement data and balance sheet items included in the Prospectus and referred to in clause (B) were not determined on a basis substantially consistent with the basis for the audited consolidated financial statements included in the Prospectus;
   1. any unaudited pro forma consolidated condensed financial statements included in the Prospectus do not comply as to form in all material respects with the applicable accounting requirements of the Act and the published rules and regulations thereunder or the pro forma adjustments have not been properly applied to the historical amounts in the compilation of those statements;
   2. as of a specified date not more than five days prior to the date of such letter, there have been any changes in the consolidated capital stock (other than issuances of capital stock upon exercise of options and stock appreciation rights, upon earn-outs of performance shares and upon conversions of convertible securities, in each case which were outstanding on the date of the latest financial statements included in the Prospectus) or any increase in the consolidated long-term debt of the Company and its subsidiaries, or any decreases in consolidated net current assets or stockholders' equity or other items specified by the Representatives, or any increases in any items specified by the Representatives, in each case as compared with amounts shown in the latest balance sheet included in the Prospectus, except in each case for changes, increases or decreases which the Prospectus discloses have occurred or may occur or which are described in such letter; and
   3. for the period from the date of the latest financial statements included in the Prospectus to the specified date referred to in clause (E) there were any decreases

25

in consolidated net revenues or operating profit or the total or per share amounts of consolidated net income or other items specified by the Representatives, or any increases in any items specified by the Representatives, in each case as compared with the comparable period of the preceding year and with any other period of corresponding length specified by the Representatives, except in each case for decreases or increases which the Prospectus discloses have occurred or may occur or which are described in such letter; and

* 1. In addition to the examination referred to in their report(s) included in the Prospectus and the limited procedures, inspection of minute books, inquiries and other procedures referred to in paragraphs

1. and (vi) above, they have carried out certain specified procedures, not constituting an examination in accordance with generally accepted auditing standards, with respect to certain amounts, percentages and financial information specified by the Representatives, which are derived from the general accounting records of the Company and its subsidiaries, which appear in the Prospectus, or in Part II of, or in exhibits and schedules to, the Registration Statement specified by the Representatives, and have compared certain of such amounts, percentages and financial information with the accounting records of the Company and its subsidiaries and have found them to be in agreement.

26

Schedule II(e)

Pursuant to Section 7(f) of this Agreement, Gibson, Dunn & Crutcher LLP, counsel for the Company, shall have furnished to the Underwriters their written opinion in the form set forth below, dated such Time of Delivery, in form and substance satisfactory to the Underwriters, to the effect that:

1. This Agreement has been duly delivered by the Company;
2. Each subsidiary of the Company incorporated under the laws of United States and identified on Exhibit 21.1 of the Registration Statement (each, a "United States Subsidiary") has been duly incorporated and is validly existing as a corporation in good standing under the laws of its jurisdiction of incorporation; and all of the issued shares of capital stock of each such subsidiary have been duly and validly authorized and issued, are fully paid and non-assessable, and (except for directors' qualifying shares) are owned directly or indirectly by the Company;
3. The issue and sale of the Shares being delivered at such Time of Delivery by the Company and the compliance by the Company with all of the provisions of this Agreement and the consummation of the transactions herein contemplated will not conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument identified to such counsel as material in a certificate executed and delivered by an officer of the Company to which any United States Subsidiary is a party or by which any United States Subsidiary is bound or to which any of the property or assets of any United States Subsidiary is subject, nor will such action result in any violation of the provisions of the articles or certificate of incorporation or by-laws, of any United States Subsidiary or any statute or any order, rule or regulation known to such counsel of any court or United States Federal or New York Governmental Agency or body having jurisdiction over the Company or any of its subsidiaries or any of their properties;
4. No Governmental Authorization of any court or Governmental Agency or body is required for the issue and sale of the Shares or the consummation by the Company of the transactions contemplated by this Agreement, except the registration under the Act of the Shares, and such consents, approvals, authorizations, registrations or qualifications as may be required under state securities or Blue Sky laws in connection with the purchase and distribution of the Shares by the Underwriters;
5. The statements set forth in the Prospectus under the caption "Taxation", insofar as they purport to describe the provisions of the laws referred to therein, are accurate and fair in all material respects;
6. Neither the Company nor any of its subsidiaries is an "investment company", as such term is defined in the Investment Company Act;
7. Under the laws of the State of New York relating to personal jurisdiction, the Company has, pursuant to Section 14 of this Agreement, validly and irrevocably submitted to the personal jurisdiction of any state or federal court located in the Borough of Manhattan, The City of New York, New York (each a "New York Court")

27

in any action arising out of or relating to this Agreement or the transactions contemplated hereby, has validly and irrevocably waived any objection to the venue of a proceeding in any such court, and has validly and irrevocably appointed the Authorized Agent (as defined herein) as its authorized agent for the purpose described in Section 14 hereof; and service of process effected on such agent in the manner set forth in Section 14 hereof will be effective to confer valid personal jurisdiction over the Company.

Such counsel shall also state that the Registration Statement and the Prospectus and any further amendments and supplements thereto made by the Company prior to such Time of Delivery (other than the financial statements, related schedules and other financial or statistical data therein, as to which such counsel need express no opinion) comply as to form in all material respects with the requirements of the Act and the rules and regulations thereunder; although they do not assume any responsibility for the accuracy, completeness or fairness of the statements contained in the Registration Statement or the Prospectus, except for those referred to in the opinion in subsection (v) of this section 7(f), they have no reason to believe that, as of its effective date, the Registration Statement or any further amendment thereto made by the Company prior to such Time of Delivery (other than the financial statements, related schedules and other financial or statistical data therein, as to which such counsel need express no opinion) contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading or that, as of its date, the Prospectus or any further amendment or supplement thereto made by the Company prior to such Time of Delivery (other than the financial statements, related schedules and other financial or statistical data therein, as to which such counsel need express no opinion) contained an untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading or that, as of such Time of Delivery, either the Registration Statement or the Prospectus or any further amendment or supplement thereto made by the Company prior to such Time of Delivery (other than the financial statements, related schedules and other financial or statistical data therein, as to which such counsel need express no opinion) contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; and they do not know of any contracts or other documents of a character required to be filed as an exhibit to the Registration Statement which are not filed as required.

In rendering such opinion, such counsel may state that they express no opinion as to the laws of any jurisdiction, other than the federal laws of the United States and the laws of the states of California and New York, and may rely on one or more officers' certificates of the Company and its subsidiaries as to factual matters.

1

EXHIBIT 3.2

AMENDED & RESTATED

B Y E - L A W S

of

MARVELL TECHNOLOGY GROUP LTD.

2

TABLE OF CONTENTS

Bye-Law

* Interpretation
* Board of Directors
* Management of the Company
* Power to appoint managing director or chief executive officer

5Power to appoint manager

6Power to authorize specific actions

7Power to appoint attorney

8Power to delegate to a committee

9Power to appoint and dismiss employees

10Power to borrow and charge property

11Exercise of power to purchase shares of or discontinue the Company

12Election of Directors

13Defects in appointment of Directors

14Alternate Directors

15Removal of Directors

16Vacancies of the Board

17Notice of meetings of the Board

18Quorum at meetings of the Board

19Meetings of the Board

20Unanimous written resolutions

21Contracts and disclosure of Directors' interests

22Remuneration of Directors

23Officers of the Company

24Appointment of Officers

25Remuneration of Officers

26Duties of Officers

27Chairman of meetings

28Register of Directors and Officers

29Obligations of Board to keep minutes

30Indemnification of Directors and Officers of the Company

31Waiver of claim by Member

32Notice of annual general meeting

33Notice of special general meeting

34Advance Notice

35Accidental omission of notice of general meeting

36Meeting called on requisition of members

37Short notice

38Postponement of meetings

39Quorum for general meeting

40Adjournment of meetings

41Attendance at meetings

i

3

1. Written resolutions
2. Attendance of Directors
3. Voting at meetings
4. Voting on show of hands
5. Decision of chairman
6. Demand for a poll
7. Seniority of joint holders voting
8. Proxies and Corporate Representations
9. Rights of shares
10. Power to issue shares
11. Variation of rights, alteration of share capital and purchase of shares of the Company
12. Registered holder of shares
13. Death of a joint holder
14. Share certificates
15. Calls on shares
16. Forfeiture of Shares
17. Contents of Register of Members
18. Inspection of Register of Members
19. Determination of record dates
20. Instrument of transfer
21. Restriction on transfer
22. Transfers by joint holders
23. Representative of deceased Member
24. Registration on death or bankruptcy
25. Declaration of dividends by Board
26. Other distributions
27. Reserve fund
28. Payment of dividends and deduction of amounts due to the Company
29. Issue of bonus shares
30. Records of account
31. Financial year end
32. Financial statements
33. Appointment of Auditor
34. Remuneration of Auditor
35. Vacation of office of Auditor
36. Access to books of the Company
37. Report of the Auditor
38. Business Combinations
39. Service of notices and other documents
40. Service and delivery of notice
41. The seal
42. Manner in which seal is to be affixed
43. Winding-up/distribution by liquidator
44. Alteration of Bye-laws

ii

4

Schedules

Form A-Bye-law 58

Form B-Bye-law 65

iii

5

INTERPRETATION

1. Interpretation
   1. In these Bye-laws the following words and expressions shall, where not inconsistent with the context, have the following meanings respectively:
      1. "Act" means the Companies Act 1981 as amended from time to time;
      2. "Alternate Director" means an alternate Director appointed in accordance with these Bye-laws;
      3. "Auditor" includes any individual or partnership;
      4. "Board" means the Board of Directors appointed or elected pursuant to these Bye-laws and acting by resolution in accordance with the Act and these Bye-laws or the Directors present at a meeting of Directors at which there is a quorum;
      5. "Business Combination" means any scheme of arrangement, reconstruction, amalgamation takeover or similar business combination involving the Company or any subsidiaries and any other person;
      6. "Cause" means:
         1. conviction on indictment of an indictable offence involving the management of the Company; or
         2. persistent breaches of the Act;
      7. "Clear Days" means, in relation to the period of a notice, that period excluding the day on which the notice is given or served, or deemed to be given or served, and the day for which it is given or on which it is to take effect;
      8. "Company" means the company for which these Bye-laws are approved and confirmed;
      9. "Director" means a director of the Company and shall include an Alternate Director;

1

6

1. "Member" means the person registered in the Register of Members as the holder of shares in the Company and, when two or more persons are so registered as joint holders of shares, means the person whose name stands first in the Register of Members as one of such joint holders or all of such persons as the context so requires;
2. "notice" means written notice as further defined in these Bye-laws unless otherwise specifically stated;
3. "Officer" means any person appointed by the Board to hold an office in the Company;
4. "Register" means the Register of Members of the Company and includes any branch register;
5. "Registered Office" means the registered office for the time being of the Company;
6. "Register of Directors and Officers" means the Register of Directors and Officers referred to in these Bye-laws;
7. "Register of Members" means the Register of Members referred to in these Bye-laws;
8. "Secretary" means the person appointed to perform any or all the duties of secretary of the Company and includes any deputy or assistant secretary;
9. "Special Resolution" means a resolution passed by both (i) a majority of not less than 66-2/3% of votes cast by such Members as, being entitled so to do, vote in person or by proxy or by duly authorized corporate representative and (ii) a majority of

66-2/3% in number of the Members present in person or by proxy or by duly authorized corporate representative at a general meeting of which not less than twenty-one (21) clear days' notice (save where a longer period is required by these Bye-Laws), specifying the intention to propose the resolution as a Special Resolution, has been duly given provided that when shares are held by members of another company, firm or partnership, association or other body corporate or unincorporate and such persons act in concert, or when shares are held by or for a group of Members who act in concert, such persons shall be deemed to be one Member.

2

7

1. In these Bye-laws, where not inconsistent with the context:
   1. words denoting the plural number include the singular number and vice versa;
   2. words denoting the masculine gender include the feminine gender;
   3. words importing persons include companies, associations or bodies of persons whether corporate or not;
   4. the word:
      1. "may" shall be construed as permissive;
      2. "shall" shall be construed as imperative; and
   5. unless otherwise provided herein words or expressions defined in the Act shall bear the same meaning in these Bye-laws.
2. Expressions referring to writing or written shall, unless the contrary intention appears, include facsimile, printing, lithography, photography and other modes of representing words in a visible form.
3. Headings used in these Bye-laws are for convenience only and are not to be used or relied upon in the construction hereof.

BOARD OF DIRECTORS

1. Board of Directors

The business of the Company shall be managed and conducted by the Board.

3

8

1. Management of the Company
   1. In managing the business of the Company, the Board may exercise all such powers of the Company as are not, by statute or by these Bye-laws, required to be exercised by the Company in general meeting subject, nevertheless, to these Bye-laws, the provisions of any statute and to such regulations as may be prescribed by the Company in general meeting.
   2. No regulation or alteration to these Bye-laws made by the Company in general meeting shall invalidate any prior act of the Board which would have been valid if that regulation or alteration had not been made.
   3. The Board may provide that the Company pays all expenses incurred in promoting and incorporating the Company.
2. Power to appoint managing director or chief executive officer

The Board may from time to time appoint one or more Directors to the office of managing director or chief executive officer of the Company who shall, subject to the control of the Board, supervise and administer all of the general business and affairs of the Company.

1. Power to appoint manager

The Board may appoint a person to act as manager of the Company's day to day business and may entrust to and confer upon such manager such powers and duties as it deems appropriate for the transaction or conduct of such business.

4

9

1. Power to authorize specific actions

The Board may from time to time and at any time authorize any company, firm, person or body of persons to act on behalf of the Company for any specific purpose and in connection therewith to execute any agreement, document or instrument on behalf of the Company.

1. Power to appoint attorney

The Board may from time to time and at any time by power of attorney appoint any company, firm, person or body of persons, whether nominated directly or indirectly by the Board, to be an attorney of the Company for such purposes and with such powers, authorities and discretions (not exceeding those vested in or exercisable by the Board) and for such period and subject to such conditions as it may think fit and any such power of attorney may contain such provisions for the protection and convenience of persons dealing with any such attorney as the Board may think fit and may also authorize any such attorney to sub-delegate all or any of the powers, authorities and discretions so vested in the attorney. Such attorney may, if so authorized under the seal of the Company, execute any deed or instrument under such attorney's personal seal with the same effect as the affixation of the seal of the Company.

1. Power to delegate to a committee

The Board may delegate any of its powers to a committee appointed by the Board which may consist partly or entirely of non-Directors and every such committee shall conform to such directions as the Board may impose on them. The meeting and proceedings of any such committee shall be governed by the provisions of these Bye-Laws regulating the meetings and proceedings of the Board, so far as the same are applicable and are not superseded by directions imposed by the Board.

5

10

1. Power to appoint and dismiss employees

The Board may appoint, suspend or remove any manager, secretary, clerk, agent or employee of the Company and may fix their remuneration and determine their duties.

1. Power to borrow and charge property

The Board may exercise all the powers of the Company to borrow money and to mortgage or charge its undertaking, property and uncalled capital, or any part thereof, and may issue debentures, debenture stock and other securities whether outright or as security for any debt, liability or obligation of the Company or any third party.

1. Exercise of power to purchase shares of or discontinue the Company
   1. The Board may exercise all the powers of the Company to purchase all or any part of its own shares pursuant to Section 42A of the Act.
   2. The Board may exercise all the powers of the Company to discontinue the Company to a named country or jurisdiction outside Bermuda pursuant to Section 132G of the Act.
2. Election of Directors
   1. The Board shall consist of not less than two Directors or such number in excess thereof as the Board may from time to time determine.
   2. The Board shall consist of three classes of Directors which shall be known as Class 1, Class 2 and Class 3. Class 1 shall retire at the first annual general meeting after the general meeting at which the Bye-laws are adopted; Class 2 shall retire at the second annual general meeting after the general meeting at which the Bye-laws are adopted and Class 3 shall retire at the third annual general meeting after the general meeting at which the Bye-laws are adopted. This sequence shall be repeated thereafter. Each director in a Class shall be eligible for re-election at the annual general meeting of the Company at which such Class retires to hold office for three years or until successors

6

11

are elected or appointed.

1. Any additional Directors elected so as to increase the total number of Directors then in office shall be elected to such Class as will ensure that the number of Directors in each Class remains equal and if that is not possible to the Class which is retiring at the annual general meeting at which such Director is elected or, if any such Director is elected otherwise than at an annual general meeting to the Class which was elected at the most recent prior annual general meeting.
2. If at the meeting at which a Director retires by rotation, the Company does not fill the vacancy so created, the retiring Director shall, if willing to act, be deemed to have been reappointed unless at the meeting it is resolved not to fill the vacancy or unless a resolution for the reappointment of the Director is put to the meeting and lost.
3. No person other than a Director retiring by rotation shall be appointed or reappointed a Director at any general meeting unless:
   1. he is recommended by the Board; or
   2. not less than 60 nor more than 90 clear days before the date appointed for the meeting, notice executed by a Member qualified to vote at the meeting has been given to the Company of the intention of that Member to propose that person for appointment or reappointment as a Director; or
   3. the appointment or reappointment is approved by a Special Resolution of the Members
4. The appointment or re-appointment of any person proposed as a Director shall be effected by a separate resolution.

7

12

* 1. The Board may appoint one or more persons willing to act to be a Director, either to fill a vacancy or vacancies or, as an additional Director or Directors. A Director so appointed shall hold office only until the next following annual general meeting, and shall not be taken into account in determining the Directors who are to retire by rotation at the meeting, and shall then be eligible for re-election.
  2. The terms of this Bye-law are subject to the terms of Bye-law 50(2) and upon the terms of Bye-law 50(2) expiring as described therein then those directors appointed thereunder shall become Class 2 Directors.

1. Defects in appointment of Directors

All acts done bona fide by any meeting of the Board or by a committee of

the Board or by any person acting as a Director shall, notwithstanding that it be afterwards discovered that there was some defect in the appointment of any Director or person acting as aforesaid, or that they or any of them were disqualified, be as valid as if every such person had been duly appointed and was qualified to be a Director.

1. Alternate Directors
   1. Any general meeting of the Company may elect a person or persons to act as a Director in the alternative to any one or more of the Directors of the Company or may authorize the Board to appoint such Alternate Directors. Unless the Members otherwise resolve, any Director may appoint a person or persons to act as a Director in the alternative to himself or herself by notice in writing deposited with the Secretary. Any person so appointed shall have all the rights and powers of the Director or Directors for whom such person is appointed in the alternative provided that such person shall not be counted more than once in determining whether or not a quorum is present.
   2. An Alternate Director shall be entitled to receive notice of all meetings of the Board and to attend and vote at any such meeting at which a Director for whom such

8

13

Alternate Director was appointed in the alternative is not personally present and generally to perform at such meeting all the functions of such Director for whom such Alternate Director was appointed.

* 1. An Alternate Director shall cease to be such if the Director for whom such Alternate Director was appointed ceases for any reason to be a Director but may be re-appointed by the Board as alternate to the person appointed to fill the vacancy in accordance with these Bye-laws.

1. Removal of Directors
   1. The Members may, at any special general meeting convened and held in accordance with these Bye-laws only, remove a Director for Cause provided that:
      1. the notice of any such meeting convened for the purpose of removing a Director shall contain a statement of the intention so to do and be served on such Director not less than 14 days before the meeting and at such meeting such Director shall be entitled to be heard on the motion for such Director's removal;
      2. the resolution is passed as a Special Resolution;
      3. no more than one third of the Directors for the time being in office shall be removed at any general meeting.
   2. A vacancy on the Board created by the removal of a Director under the provisions of subparagraph (1) of this Bye-law may be filled by the Members at the meeting at which such Director is removed and, in the absence of such election or appointment, the Board may fill the vacancy.
2. Vacancies on the Board

9

14

* 1. The Board shall have the power from time to time and at any time to appoint any person as a Director to fill a vacancy on the Board occurring as the result of the death, disability, disqualification or resignation of any Director and to appoint an Alternate Director to any Director so appointed.
  2. The Board may act notwithstanding any vacancy in its number but, if and so long as its number is reduced below the number fixed by these Bye-laws as the quorum necessary for the transaction of business at meetings of the Board, the continuing Directors or Director may act for the purpose of (i) summoning a general meeting of the Company or (ii) preserving the assets of the Company.
  3. The office of Director shall be vacated if the Director:
     1. is removed from office pursuant to these Bye-laws or is prohibited from being a Director by law;
     2. is or becomes bankrupt or makes any arrangement or composition with his creditors generally;
     3. is or becomes of unsound mind or dies; or
     4. resigns his or her office by notice in writing to the Company.

1. Notice of meetings of the Board
   1. A Director may, and the Secretary on the requisition of a Director shall, at any time summon a meeting of the Board.
   2. Notice of a meeting of the Board shall be deemed to be duly given to a Director if it is given to such Director verbally in person or by telephone or otherwise communicated or sent to such Director by post, cable, telex, telecopier, facsimile or other

10

15

mode of representing words in a legible and non-transitory form at such Director's last known address or any other address given by such Director to the Company for this purpose.

1. Quorum at meetings of the Board

The quorum necessary for the transaction of business at a meeting of the Board may be fixed by the Directors and, unless so fixed, shall be a majority of the Directors.

1. Meetings of the Board
   1. The Board may meet for the transaction of business, adjourn and otherwise regulate its meetings as it sees fit.
   2. Directors may participate in any meeting of the Board by means of such telephone, electronic or other communication facilities as permit all persons participating in the meeting to communicate with each other simultaneously and instantaneously, and participation in such a meeting shall constitute presence in person at such meeting.
   3. A resolution put to the vote at a meeting of the Board shall be carried by the affirmative votes of a majority of the votes cast and in the case of an equality of votes the resolution shall fail. Notwithstanding the foregoing, a resolution to approve any of the following shall require the affirmative vote of at least four directors:
      1. the issue of shares in the capital of the Company or any obligations, charges or debts convertible into shares or involving rights to vote under any circumstances;
      2. the winding up, dissolution or termination of the corporate existence of the Company;
      3. borrowing of any amount by the Company which exceeds in the aggregate $1,000,000 or the mortgage, pledge or grant of a security interest in any property of the Company which exceeds in the aggregate $1,000,000;

11

16

* 1. entering into or material modification by the Company of any contract or commitment which requires payment in excess of $1,000,000 in the aggregate; and
  2. purchasing, acquiring, selling or disposing of any tangible or intangible asset for amounts in excess of $1,000,000.

1. Unanimous written resolutions

A resolution in writing signed by all the Directors which may be in

counterparts, shall be as valid as if it had been passed at a meeting of the Board duly called and constituted, such resolution to be effective on the date on which the last Director signs the resolution. For the purposes of this Bye-law only, "Director" shall not include an Alternate Director except that an Alternate Director may sign such a resolution on behalf of a principal Director.

1. Contracts and disclosure of Directors' interests
   1. Any Director, or any Director's firm, partner or any company with whom any Director is associated, may act in a professional capacity for the Company and such Director or such Director's firm, partner or such company shall be entitled to remuneration for professional services as if such Director were not a Director, provided that nothing herein contained shall authorize a Director or Director's firm, partner or such company to act as Auditor of the Company.
   2. A Director who is directly or indirectly interested in a contract or proposed contract or arrangement with the Company shall declare the nature of such interest as required by the Act.
   3. Following a declaration being made pursuant to this Bye-law, and unless disqualified by the chairman of the relevant Board meeting, a Director may vote in respect of any contract or proposed contract or arrangement in which such Director is interested and may be counted in the quorum at such meeting.

12

17

1. Remuneration of Directors

The remuneration, (if any) of the Directors shall be determined by the Company in general meeting and shall be deemed to accrue from day to day. The Directors may also be paid all travel, hotel and other expenses properly incurred by them in attending and returning from meetings of the Board, any committee appointed by the Board, general meetings of the Company, or in connection with the business of the Company or their duties as Directors generally.

OFFICERS

1. Officers of the Company

The Officers of the Company shall consist of a President and a Vice President or a Chairman and a deputy Chairman, a Secretary and such additional Officers as the Board may from time to time determine all of whom shall be deemed to be Officers for the purposes of these Bye-laws.

1. Appointment of Officers
   1. The Board shall, as soon as possible after the statutory meeting of Members and after each annual general meeting appoint a President and Vice President or a Chairman and Deputy Chairman who shall be Directors.
   2. The Secretary and additional Officers, if any, shall be appointed by the Board from time to time.
2. Remuneration of Officers

The Officers shall receive such remuneration as the Board may from time to time determine.

26. Duties of Officers

13

18

The Officers shall have such powers and perform such duties in the management, business and affairs of the Company as may be delegated to them by the Board from time to time.

1. Chairman of meetings

Unless otherwise agreed by a majority of those attending and entitled to attend and vote thereat, the Chairman, if there be one, and if not the President shall act as chairman at all meetings of the Members and of the Board at which such person is present. In their absence the Deputy Chairman or Vice President, if present, shall act as chairman and in the absence of all of them a chairman shall be appointed or elected by those present at the meeting and entitled to vote.

1. Register of Directors and Officers
   1. The Board shall cause to be kept in one or more books at its registered office a Register of Directors and Officers and shall enter therein the following particulars with respect to each Director and the President, each Vice-President, the Chairman, and each Deputy Chairman, provided that each such person is a Director and the Secretary, that is to say:
      1. first name and surname; and
      2. address.
   2. The Board shall, within the period of fourteen days from the occurrence of:
      1. any change among its Directors, the President, any Vice-President, the Chairman, and any Deputy Chairman, provided that each such person is a Director, and in the Secretary; or
      2. any change in the particulars contained in the Register of Directors and Officers,

14

19

cause to be entered on the Register of Directors and Officers the particulars of such change and the date on which such change occurred.

1. The Register of Directors and Officers shall be open to inspection at the office of the Company on every business day, subject to such reasonable restrictions as the Board may impose, so that not less than two hours in each business day be allowed for inspection.

MINUTES

1. Obligations of Board to keep minutes

The Board shall cause minutes to be duly entered in books provided for the purpose:

1. of all elections and appointments of Officers;
2. of the names of the Directors present at each meeting of the Board and of any committee appointed by the Board; and
3. of all resolutions and proceedings of general meetings of the Members, meetings of the Board, meetings of managers and meetings of committees appointed by the Board.

INDEMNITY

1. Indemnification of Directors and Officers of the Company

The Directors, Secretary and other Officers (such term to include any person appointed to any committee by the Board) for the time being of the Company and the liquidator or trustees (if any) for the time being acting in relation to any of the affairs of the Company and every one of them, and their heirs, executors and administrators, shall be

15

20

indemnified and secured harmless out of the assets of the Company from and against all actions, costs, charges, losses, damages and expenses which they or any of them, their heirs, executors or administrators, shall or may incur or sustain by or by reason of any act done, concurred in or omitted in or about the execution of their duty, or supposed duty, or in their respective offices or trusts, and none of them shall be answerable for the acts, receipts, neglects or defaults of the others of them or for joining in any receipts for the sake of conformity, or for any bankers or other persons with whom any moneys or effects belonging to the Company shall or may be lodged or deposited for safe custody, or for insufficiency or deficiency of any security upon which any moneys of or belonging to the Company shall be placed out on or invested, or for any other loss, misfortune or damage which may happen in the execution of their respective offices or trusts, or in relation thereto, provided that this indemnity shall not extend to any matter in respect of any fraud or dishonesty which may attach to any of said persons.

1. Waiver of claim by Member

Each Member agrees to waive any claim or right of action such Member might have, whether individually or by or in the right of the Company, against any Director or Officer on account of any action taken by such Director or Officer, or the failure of such Director or Officer to take any action in the performance of his duties with or for the Company, provided that such waiver shall not extend to any matter in respect of any fraud or dishonesty which may attach to such Director or Officer or to any matter arising under United States federal securities laws.

16

21

MEETINGS

1. Notice of annual general meeting

The annual general meeting of the Company shall be held in each year other than the year of incorporation at such time and place as the President or the Chairman or any two Directors or any Director and the Secretary or the Board shall appoint. At least five days notice of such meeting shall be given to each Member stating the date, place and time at which the meeting is to be held, that the election of Directors will take place thereat, and as far as practicable, the other business to be conducted at the meeting.

1. Notice of special general meeting

The President or the Chairman or any two Directors or any Director and the Secretary or the Board may convene a special general meeting of the Company whenever in their judgment such a meeting is necessary, upon not less than five days' notice which shall state the date, time, place and the general nature of the business to be considered at the meeting.

1. Advance notice

Not less than sixty nor more than ninety days advance notice in writing shall at all times be required for the nomination, other than by or at the direction of the Board, of candidates for election as directors, as well as any other proposals, statements or resolutions to be put forward by Members for consideration at an annual general meeting or special general meeting. In the case of an annual general meeting such notice must be received by the Company not less than sixty nor more than ninety days prior to the anniversary of the prior year's annual general meeting. The notice must contain the name and business background of the person to be nominated as director and all material information on the proposal, statement or resolution to be put to the meeting and details of the Member submitting the proposal, statement or resolution as well as other information

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which may from time to time be specified by the Board. The notice shall be exclusive of the day on which it is served or deemed to be served and of the day for which it is given.

1. Accidental omission of notice of general meeting

The accidental omission to give notice of a general meeting to, or the non-receipt of notice of a general meeting by, any person entitled to receive notice shall not invalidate the proceedings at that meeting.

1. Meeting called on request of Members

Notwithstanding anything herein, the Board shall, on the request of Members holding at the date of the deposit of the request not less than one-tenth of such of the paid-up share capital of the Company as at the date of the deposit carries the right to vote at general meetings of the Company, forthwith proceed to convene a special general meeting of the Company and the provisions of section 74 of the Act shall apply.

1. Short notice

A general meeting of the Company shall, notwithstanding that it is called by shorter notice than that specified in these Bye-laws, be deemed to have been properly called if it is so agreed by (i) all the Members entitled to attend and vote thereat in the case of an annual general meeting; and (ii) by a majority in number of the Members having the right to attend and vote at the meeting, being a majority together holding not less than 95% in nominal value of the shares giving a right to attend and vote thereat in the case of a special general meeting.

1. Postponement of meetings

The Secretary may postpone any general meeting called in accordance with the provisions of these Bye-laws (other than a meeting requisitioned under these Bye-laws) provided that notice of postponement is given to each Member before the time for such meeting. Fresh notice of the date, time and place for the postponed meeting shall be given to each Member in accordance with the provisions of these Bye-laws.

18

23

1. Quorum for general meeting

At any general meeting of the Company two persons present in person and representing in person or by proxy in excess of 50% of the total issued voting shares in the Company throughout the meeting shall form a quorum for the transaction of business, provided that if the Company shall at any time have only one Member, one Member present in person or by proxy shall form a quorum for the transaction of business at any general meeting of the Company held during such time. If within half an hour from the time appointed for the meeting a quorum is not present, the meeting shall stand adjourned to the same day one week later, at the same time and place or to such other day, time or place as the Board may determine.

1. Adjournment of meetings
   1. The chairman of a general meeting may, with the consent of the Members at any general meeting at which a quorum is present (and shall if so directed), adjourn the meeting. Unless the meeting is adjourned to a specific date and time, fresh notice of the date, time and place for the resumption of the adjourned meeting shall be given to each Member in accordance with the provisions of these Bye-laws. In addition the chairman may adjourn the meeting to another time and place without such consent or direction if it appears to him that:
2. it is likely to be impracticable to hold or continue that meeting because of the number of Members wishing to attend who are not present; or
3. the unruly conduct of persons attending the meeting prevents, or is likely to prevent, the orderly continuation of the business of the meeting; or
4. an adjournment is otherwise necessary so that the business of the meeting may be properly conducted.

19

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* 1. Unless the meeting is adjourned to a specific date and time, fresh notice of the date, time and place for the resumption of the adjourned meeting shall be given to each Member in accordance with the provisions of these Bye-laws.

1. Attendance at meetings
   1. A meeting of the Members or any class thereof may be held by means of such telephone, electronic or other communication facilities as permit all persons participating in the meeting to communicate with each other simultaneously and instantaneously, and participation in such a meeting shall constitute presence in person at such meeting. In addition, the Board may resolve to enable persons entitled to attend a general meeting of the Company or of any class of Members to do so by simultaneous attendance and participation at a satellite meeting place anywhere in the world. The Members present at any such satellite meeting place in person or by proxy and entitled to vote shall be counted in the quorum for, and shall be entitled to vote at, the general meeting in question if the chairman of the general meeting is satisfied that adequate facilities are available throughout the general meeting to ensure that Members attending at all the meeting places are able to:
      1. communicate simultaneously and instantaneously with the persons present at the other meeting place or places, whether by the use of microphones, loud-speakers, audio-visual or other communications equipment or facilities; and
      2. have access to all documents which are required by the Act and these Bye-Laws to be made available at the meeting.

The chairman of the general meeting shall be present at, and the meeting shall be deemed to take place at, the principal meeting place.

If it appears to the chairman of the general meeting that the facilities at the principal meeting place or any satellite meeting place are or become inadequate for the purposes

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referred to above, then the chairman may, without the consent of the meeting, interrupt or adjourn the general meeting. All business conducted at that general meeting up to the time of such adjournment shall be valid.

* 1. The Board and the chairman of any general meeting may make any arrangement and impose any requirement or restriction it or he considers appropriate to ensure the security of a general meeting including, without limitation, requirements for evidence of identity to be produced by those attending the meeting, the searching of their personal property and the restriction of items that may be taken into the meeting place. The Board and the chairman of any general meeting shall be entitled to refuse entry to a person who refuses to comply with any such arrangements, requirements or restrictions.

1. Written resolutions
   1. Subject to subparagraph (6) of this Bye-Law, anything which may be done by resolution of the Company in general meeting or by resolution of a meeting of any class of the Members of the Company, may, without a meeting and without any previous notice being required, be done by resolution in writing signed by, or, in the case of a Member that is a corporation whether or not a company within the meaning of the Act, on behalf of, all the Members who at the date of the resolution would be entitled to attend the meeting and vote on the resolution.
   2. A resolution in writing may be signed by, or, in the case of a Member that is a corporation whether or not a company within the meaning of the Act, on behalf of, all the Members, or any class thereof, in as many counterparts as may be necessary.
   3. For the purposes of this Bye-law, the date of the resolution is the date when the resolution is signed by, or, in the case of a Member that is a corporation whether or not a company within the meaning of the Act, on behalf of, the last Member to sign and any reference in any Bye-law to the date of passing of a resolution is, in relation to a resolution made in accordance with this Bye-law, a reference to such date.

21

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* 1. A resolution in writing made in accordance with this Bye-law is as valid as if it had been passed by the Company in general meeting or by a meeting of the relevant class of Members, as the case may be, and any reference in any Bye-law to a meeting at which a resolution is passed or to Members voting in favor of a resolution shall be construed accordingly.
  2. A resolution in writing made in accordance with this Bye-law shall constitute minutes for the purposes of sections 81 and 82 of the Act.
  3. This Bye-law shall not apply to:
     1. a resolution passed pursuant to section 89(5) of the Act; or
     2. a resolution passed for the purpose of removing a Director before the expiration of his term of office under Bye-law 15.

1. Attendance of Directors

The Directors of the Company shall be entitled to receive notice of and to

attend and be heard at any general meeting.

1. Voting at meetings
   1. Subject to the provisions of the Act and these Bye-laws, any question proposed for the consideration of the Members at any general meeting shall be decided by the affirmative votes of a majority of the votes cast in accordance with the provisions of these Bye-laws and in the case of an equality of votes the resolution shall fail.
   2. No Member shall be entitled to vote at any general meeting unless such Member has paid all the calls on all shares held by such Member.

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1. Voting on show of hands

At any general meeting a resolution put to the vote of the meeting shall, in the first instance, be voted upon by a show of hands and, subject to any rights or restrictions for the time being lawfully attached to any class of shares and subject to the provisions of these Bye-laws, every Member present in person and every person holding a valid proxy at such meeting shall be entitled to one vote and shall cast such vote by raising his or her hand.

1. Decision of chairman
   1. At any general meeting if an amendment is proposed to any resolution under consideration and the chairman of the meeting rules on whether the proposed amendment is out of order, the proceedings on the substantive resolution shall not be invalidated by any error in such ruling.
   2. At any general meeting a declaration by the chairman of the meeting that a question proposed for consideration has, on a show of hands, been carried, or carried unanimously, or by a particular majority, or lost, and an entry to that effect in a book containing the minutes of the proceedings of the Company shall, subject to the provisions of these Bye-laws, be conclusive evidence of that fact.
2. Demand for a poll
   1. Notwithstanding the provisions of the immediately preceding two

Bye-laws, at any general meeting of the Company, in respect of any question proposed for the consideration of the Members (whether before or on the declaration of the result of a show of hands as provided for in these Bye-laws), a poll may be demanded by any of the following persons:

1. the chairman of such meeting; or
2. at least three Members present in person or represented by proxy; or

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* 1. any Member or Members present in person or represented by proxy and holding between them not less than one-tenth of the total voting rights of all the Members having the right to vote at such meeting; or
  2. any Member or Members present in person or represented by proxy holding shares in the Company conferring the right to vote at such meeting, being shares on which an aggregate sum has been paid up equal to not less than one-tenth of the total sum paid up on all such shares conferring such right.

1. Where, in accordance with the provisions of subparagraph (1) of this Bye-law, a poll is demanded, subject to any rights or restrictions for the time being lawfully attached to any class of shares, every person present at such meeting shall have one vote for each share of which such person is the holder or for which such person holds a proxy and such vote shall be counted in the manner set out in sub-paragraph (4) of this Bye-Law or in the case of a general meeting at which one or more Members are present by telephone in such manner as the chairman of the meeting may direct and the result of such poll shall be deemed to be the resolution of the meeting at which the poll was demanded and shall replace any previous resolution upon the same matter which has been the subject of a show of hands.
2. A poll demanded in accordance with the provisions of subparagraph (1) of this Bye-law, for the purpose of electing a chairman or on a question of adjournment, shall be taken forthwith and a poll demanded on any other question shall be taken in such manner and at such time and place as the chairman may direct and any business other than that upon which a poll has been demanded may be proceeded with pending the taking of the poll.
3. Where a vote is taken by poll, each person present and entitled to vote shall be furnished with a ballot paper on which such person shall record his or her vote in such manner as shall be determined at the meeting having regard to the nature of the

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question on which the vote is taken, and each ballot paper shall be signed or initialed or otherwise marked so as to identify the voter and the registered holder in the case of a proxy. At the conclusion of the poll, the ballot papers shall be examined and counted by a committee of not less than two Members or proxy holders appointed by the chairman for the purpose and the result of the poll shall be declared by the chairman.

1. Seniority of joint holders voting

In the case of joint holders the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint holders, and for this purpose seniority shall be determined by the order in which the names stand in the Register of Members.

1. Proxies and Corporate Representatives
   1. The instrument appointing a proxy shall be in writing under the hand of the appointer or the appointer's attorney authorized in writing or, if the appointer is a corporation, either under its seal or under the hand of an officer, attorney or other person authorized to sign the same.
   2. Any Member may appoint a standing proxy or (if a corporation) a standing corporate representative by delivery to the Registered Office (or such other place as the Board may from time to time specify for such purposes) of evidence of such appointment. The appointment of such a standing proxy or representative shall be valid for all general meetings and adjournments thereof or, resolutions in writing, as the case may be, until notice of revocation is received at the Registered Office. Where an appointment of a standing proxy or corporate representative has been made, its operation shall be deemed to have been suspended at any general meeting or adjournment thereof at which the Member is present or in respect of which the Member has specially appointed a proxy or corporate representative.

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The Board may from time to time require such evidence as it shall deem necessary as to the due execution and continuing validity of any such appointment of the standing proxy or corporate representative and the operation of any such appointment shall be deemed to be suspended until such time as the Board determines that it has received the requested evidence or other evidence satisfactory to it.

1. The instrument appointing a proxy or corporate representative, together with such other evidence as to its due execution as the Board may from time to time require, shall be delivered at the Registered Office (or at such place as may be specified in the notice convening the meeting or in any notice of any adjournment or, in either case or the case of a written Resolution, in any document sent therewith) prior to the holding of the relevant meeting or adjourned meeting at which the person named in the instrument proposes to vote or, in the case of a poll taken subsequently to the date of a meeting or adjourned meeting, before the time appointed for the taking of the poll, or, in the case of a written Resolution, prior to the effective date of the written Resolution, and in default the instrument of proxy shall not be treated as valid. Delivery of the proxy or instrument appointing a corporate representative may be effected by facsimile communication to any facsimile number specified in the notice convening the general meeting.
2. A proxy may be appointed by an instrument in any common form or in such other form as the Board may approve, and the Board may, if it thinks fit, send out with the notice of any meeting or any written Resolution forms of instruments of proxy for use at that meeting. The instrument of proxy shall be deemed to confer authority to demand or join in demanding a poll and to vote on any amendment of a written Resolution or amendment of a Resolution put to the meeting for which it is given as the proxy thinks fit. The

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instrument of proxy shall, unless the contrary is stated therein, be valid as well for any adjournment of the meeting as for the meeting to which it relates.

1. A vote given by proxy shall be valid notwithstanding the previous death or insanity of the principal, or revocation of the instrument of proxy or of the authority under which it was executed; provided, however, that no intimation in writing of such death, insanity or revocation shall have been received by the Company at the Registered Office (or such other place as may be specified for the delivery of instruments of proxy in the notice convening the meeting or other documents sent therewith) one hour at least before the commencement of the meeting or adjourned meeting, or the taking of the poll, or the day before the effective date of any written Resolution at which the instrument of proxy is used.
2. Subject to the Act, the Board may at its discretion waive any of the provisions of these Bye-Laws related to proxies or authorizations and, in particular, may accept such verbal or other assurances as it thinks fit as to the right of any person to attend and vote on behalf of any Member at general meetings or to sign written resolutions.

SHARE CAPITAL AND SHARES

1. Subject to any resolution of the Members to the contrary, the share capital of the Company is divided into two classes of shares to be designated respectively Common Stock (the "Common") and Preferred Stock (the "Preferred"). The Preferred may be issued from time to time in one or more series. The Board of Directors is authorized to fix the number of shares of any series of the Preferred and to determine or alter the rights, preferences, privileges, and restrictions granted to or imposed upon any wholly unissued series of the Preferred and, within the limits and restrictions stated in any resolution or resolutions of the Board of Directors originally fixing the number of shares constituting any

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series of the Preferred, to increase or decrease (but not below the number of shares of any such series then outstanding) the number of shares of any such series subsequent to the issue of shares of that series. The first series of the Preferred shall be designated Series A Preferred Stock ("Series A Preferred") and shall consist of up to 525,000 shares. The second series of the Preferred shall be designated Series B Preferred Stock ("Series B Preferred") and shall consist of up to 1,119,091 shares. The third series of the Preferred shall be designated Series C Preferred Stock (the "Series C Preferred") and shall consist of up to 2,184,280 shares. The fourth series of the Preferred shall be designated Series D Preferred Stock (the "Series D Preferred") and shall consist of up to 3,750,000 shares. The fifth series of the Preferred shall be designated Series E Preferred Stock (the "Series E Preferred") and shall consist of up to 421,629 shares.

1. The holders of the shares of Common Stock shall, subject to the provisions of these Bye-laws:
   1. be entitled to one vote per share;
   2. be entitled to such dividends as the Board may from time to time declare, but only if dividends at the annual rate set forth in (b) below shall have been paid or declared and set apart upon all shares of Preferred for such fiscal year, and no dividend shall be declared or paid with respect to the Common Stock unless at the same time an equivalent dividend (which shall be in addition to the dividend on the Preferred referred to immediately previously) is declared or paid with respect to the Preferred;
   3. in the event of a winding-up or dissolution of the Company, whether voluntary or involuntary or for the purpose of a reorganization or otherwise or upon any distribution of capital, be entitled to the surplus assets of the Company, subject to the rights of the Preferred shares; and

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* + 1. generally be entitled to enjoy all of the rights attaching to

shares.

1. The holders of shares of Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and Series E Preferred shall be subject to the provisions of the following Bye-laws so long as such shares are outstanding. The provisions of this Bye-Law 50(2) shall expire and be of no further force or effect upon the automatic conversion of Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and Series E Preferred Shares:
   * 1. Voting Rights; Directors.
        1. Except as otherwise required by law, the holder of each share of Preferred shall be entitled to the number of votes equal to the number of shares of Common Stock into which such share of Preferred could be converted at the record date for determination of the Members entitled to vote on such matters, or, if no such record date is established, at the date such vote is taken or any written consent of Members is solicited, such votes to be counted together with all other shares of stock of the Company having general voting power and not separately as a class. Fractional votes by the holders of Preferred shall not, however, be permitted and any fractional voting rights shall (after aggregating all shares into which shares of the Preferred held by each holder could be converted) be rounded to the nearest whole number. Holders of Common Stock and the Preferred shall be entitled to notice of any Members' meeting in accordance with the Bye-laws of the Company.
        2. The holders of a majority of the outstanding shares of Series B Preferred, voting as a class, shall be entitled to elect one
   1. member of the Board of Directors (the "Series B Director").

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* 1. The holders of a majority of the outstanding shares of Series C Preferred, voting as a class, shall be entitled to one (1) member of the Board of Directors (the "Series C Director").
  2. In the case of a vacancy in the office of the Series B Director, a majority of the holders of the Series B Preferred shall elect a successor to serve for the unexpired term of the Series B Director whose office is vacant.
  3. The Series B Director may only be removed by the vote or written consent of the majority of the holders of the Series B Preferred.
  4. In the case of a vacancy in the office of the Series C Director, a majority of the holders of the Series C Preferred shall elect a successor to serve for the unexpired term of the Series C Director whose office is vacant.
  5. The Series C Director may only be removed by the vote or written consent of the majority of the holders of the Series C Preferred.

1. Dividends. The holders of outstanding Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and Series E Preferred shall be entitled to receive in any fiscal year, when, if and as declared by the Board of Directors, out of any assets at the time legally available therefor, dividends in cash at an annual rate of $0.047, $0.077 per share, $0.245 per share, $0.303 per share and $0.70 per share (as appropriately adjusted for any combinations, consolidations, subdivisions, or stock dividends with respect to such shares of Preferred), respectively. Such dividends shall be payable, when, as and if declared by the Board of Directors. The right to such dividends shall not be cumulative, and no right shall accrue to holders of Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred or Series E Preferred by reason of the fact that dividends on such shares were not declared in any prior year, nor shall any

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undeclared or unpaid dividends bear or accrue interest. Any declared but unpaid dividends on Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred or Series E Preferred shall be paid upon the conversion of such shares into Common Stock either (at the option of the Company) by payment of cash or by the issuance of additional shares of Common Stock based upon the fair market value of the Common Stock at the time of conversion, as determined by the Board of Directors.

1. Liquidation Preference. In the event of any liquidation, dissolution, or winding up of the Company, either voluntary or involuntary, distributions to the Members of the Company shall be made in the following manner:
   1. The holders of the Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and Series E Preferred shall be entitled, on a pari passu basis, to receive, prior and in preference to any distribution of any of the assets or surplus funds of the Company to the holders of the Common Stock by reason of their ownership of such stock, the amount of $0.667, $1.10, $3.50, $4.33 and $10.00 per share, respectively, for each share of Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred or Series E Preferred then held by them, (as appropriately adjusted for any combinations, consolidations, subdivisions, or stock dividends with respect to such shares of Preferred) and, in addition, an amount equal to all declared but unpaid dividends on the Series A Preferred (the "Series A Preferred Per Share Liquidation Preference"), all declared but unpaid dividends on the Series B Preferred (the "Series B Preferred Per Share Liquidation Preference"), all declared but unpaid dividends on the Series C Preferred (the "Series C Preferred Per Share Liquidation Preference"), all declared but unpaid dividends on the Series D Preferred (the "Series D Preferred Per Share Liquidation Preference") and all declared but unpaid dividends on the Series E Preferred (the "Series E Preferred Per Share Liquidation Preference"). If the assets and funds thus distributed among the holders of Series A Preferred, Series B

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36

Preferred, Series C Preferred, Series D Preferred and Series E Preferred shall be insufficient to permit the payment to such holders of the full aforesaid respective preferential amounts for such series of Preferred, then the entire assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and Series E Preferred on a pari passu basis, in proportion to the full respective preferential amount each such holder is otherwise entitled to receive with respect to such series of Preferred.

1. If the assets and funds of the Company available for distribution to Members exceed the aggregate amount of the Series A Preferred Per Share Liquidation Preference, the Series B Preferred Per Share Liquidation Preference, the Series C Preferred Per Share Liquidation Preference, the Series D Preferred Per Share Liquidation Preference and the Series E Preferred Per Share Liquidation Preference payable with respect to all shares of Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and Series E Preferred, respectively, then, after payment required by paragraph (1) above shall have been made or irrevocably set aside, the remaining assets of the Company available for distribution to Members shall be distributed among the holders of Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred, Series E Preferred and Common Stock pro rata based on the number of shares of Common Stock then outstanding and the number of shares of Common Stock into which the outstanding shares of Preferred are then convertible; provided, however, that such pro rata participation by the Series A Preferred shall cease upon the receipt by the holders of the Series A Preferred (pursuant to this Section (c)(2)) of an amount equal to $1.667 per share of the Series A Preferred (as appropriately adjusted for any combinations, consolidations, subdivisions, or stock dividends with respect to such shares of Preferred), and further provided, that such pro rata participation by the Series B Preferred shall cease upon the receipt by the holders of the Series B Preferred (pursuant to this subsection (c)(2)) of an amount equal to $2.750 per

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37

share of the Series B Preferred (as appropriately adjusted for any

combinations, consolidations, subdivisions, or stock dividends with

respect to such shares of Preferred), and further provided, that such pro

rata participation by the Series C Preferred shall cease upon the receipt

by the holders of the Series C Preferred (pursuant to this subsection

(c)(2)) of an amount equal to $8.75 per share of the Series C Preferred

(as appropriately adjusted for any combinations, consolidations,

subdivisions, or stock dividends with respect to such shares of

Preferred), and further provided, that such pro rata participation by the

Series D Preferred shall cease upon receipt by the holders of the Series D

Preferred (pursuant to this subsection (c)(2)) of an amount equal to

$10.833 per share of the Series D Preferred (as appropriately adjusted for

any combinations, consolidations, subdivisions, or stock dividends with

respect to such shares of Preferred), and further provided, that such pro

rata participation by the Series E Preferred shall cease upon receipt by

the holders of the Series E Preferred (pursuant to this subsection (c)(2))

of an amount equal to $25.00 per share of the Series E Preferred (as

appropriately adjusted for any combinations, consolidations, subdivisions,

or stock dividends with respect to such shares of Preferred), and

thereafter the holders of Common Stock shall be entitled to receive all

remaining assets of the Company available for distribution to Members pro

rata based on the number of shares of Common Stock then outstanding.

1. For purposes of this Section (c), an amalgamation, merger or consolidation of the Company with or into any other company or companies, or the amalgamation, merger or consolidation of any other company or companies into the Company, which results in the Members of the Company prior to the transaction owing less than 50% of the voting power of the surviving entity or a sale of all or substantially all the assets of the Company unless the stockholders prior to the sale own at least 50% of the surviving entity receive distributions in cash or securities of another company or companies as a result of such amalgamation, consolidation or

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38

merger, or a sale of all or substantially all of the assets of the Company shall be treated as a liquidation, dissolution or winding up of the Company.

* 1. If any of the assets of the Company are to be distributed other than in cash under this Section (c) or for any purpose, then the Board of Directors of the Company shall in good faith determine the value of such assets to be distributed to the holders of Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred, Series E Preferred and Common Stock.

1. Conversion. Notwithstanding the terms of this Bye-law, no account shall be taken of any shares of Common Stock issued or issuable as a result of the issue of stock dividends in June 1998, which issue would otherwise lead to an adjustment to the Conversion Price calculated pursuant to this Bye-law 50(2)(d). The holders of the Preferred have conversion rights as follows (the "Conversion Rights"):
   1. Right to Convert. Each share of Series A Preferred shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share at the office of the Company or any transfer agent for the Series A Preferred, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Series A Conversion Value per share of the Series A Preferred by the Conversion Price for the Series A Preferred (determined as hereinafter provided) in effect at the time of the conversion. Each share of Series B Preferred shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share at the office of the Company or any transfer agent for the Series B Preferred, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Series B Conversion Value per share of the Series B Preferred by the Conversion Price for the Series B Preferred (determined as hereinafter provided) in effect at the time of the conversion. Each share of Series C Preferred shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share at the

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39

office of the Company or any transfer agent for the Series C Preferred,

into such number of fully paid and nonassessable shares of Common Stock as

is determined by dividing the Series C Conversion Value per share of the

Series C Preferred by the Conversion Price for the Series C Preferred

(determined as hereinafter provided) in effect at the time of the

conversion. Each share of Series D Preferred shall be convertible, at the

option of the holder thereof, at any time after the date of issuance of

such share at the office of the Company or any transfer agent for the

Series D Preferred, into such number of fully paid and nonassessable

shares of Common Stock as is determined by dividing the Series D

Conversion Value per share of the Series D Preferred by the Conversion

Price for the Series D Preferred (determined as hereinafter provided) in

effect at the time of the conversion. Each share of Series E Preferred

shall be convertible, at the option of the holder thereof, at any time

after the date of issuance of such share at the office of the Company or

any transfer agent for the Series E Preferred, into such number of fully

paid and nonassessable shares of Common Stock as is determined by dividing

the Series E Conversion Value per share of the Series E Preferred by the

Conversion Price for the Series E Preferred (determined as hereinafter

provided) in effect at the time of the conversion. The initial Conversion

Price per share of Series A Preferred shall be $0.667. The Series A

Conversion Value per share of Series A Preferred shall be $0.667. The

initial Conversion Price per share of Series B Preferred shall be $1.10.

The Series B Conversion Value per share of Series B Preferred shall be

$1.10. The initial Conversion Price per share of Series C Preferred shall

be $3.50. The Series C Conversion Value per share of Series C Preferred

shall be $3.50. The initial Conversion Price per share of Series D

Preferred shall be $4.333. The Series D Conversion Value per share of

Series D Preferred shall be $4.333. The Series E Conversion Value per

share of Series E Preferred shall be $10.00. The initial Conversion Price

per share of Series E Preferred shall be $10.00. The initial Conversion

Price of each of the Series A Preferred, Series B Preferred, Series C

Preferred, Series D Preferred and Series E Preferred shall be subject to

adjustment as hereinafter provided.

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1. Automatic Conversion. Each share of Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and Series E Preferred shall automatically be converted into shares of Common Stock at the then effective Conversion Price (i) upon the closing of a firm commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, covering the offer and sale of Common Stock for the account of the Company to the public at a price per share (prior to deduction of underwriter commissions and offering expenses) of not less than $13.00 per share (appropriately adjusted for any recapitalizations, combinations, stock dividends, subdivisions or split-ups) and an aggregate offering price to the public of not less than $10,000,000 (prior to deduction of underwriter commissions and offering expenses), (ii) in respect of the Series A Preferred, upon the Company's receipt of the written consent of the holders of greater than one-half (1/2) of the then outstanding shares of Series A Preferred to the conversion of all then outstanding Series A Preferred under this Section (d), (iii) in respect of the Series B Preferred, upon the Company's receipt of the written consent of the holders of greater than one-half (1/2) of the then outstanding shares of Series B Preferred to the conversion of all then outstanding Series B Preferred under this Section (d), (iv) in respect of the Series C Preferred, upon the Company's receipt of the written consent of the holders of greater than one-half (1/2) of the then outstanding shares of Series C Preferred to the conversion of all then outstanding Series C Preferred under this Section (d), (v) in respect of the Series D Preferred, upon the Company's receipt of the written consent of the holders of greater than one-half (1/2) of the then outstanding shares of Series D Preferred to the conversion of all then outstanding Series D Preferred under this Section (d) or (vi) in respect of the Series E Preferred, upon the Company's receipt of the written consent of the holders of greater than one-half (1/2) of the then outstanding shares of Series E Preferred to the conversion of all then outstanding Series E Preferred under this Section (d). In the event of the automatic conversion of the Preferred upon a public offering as aforesaid, the

36

41

person(s) entitled to receive the Common Stock issuable upon such conversion of the Preferred shall not be deemed to have converted such shares of Preferred until immediately prior to the closing of such sale of securities.

1. Mechanics of Conversion. No fractional shares of Common Stock shall be issued upon conversion of shares of Preferred. In lieu of any fractional shares to which the holder would otherwise be entitled, the Company shall pay cash equal to such fraction multiplied by the then effective Conversion Price for such series of Preferred. Before any holder of Preferred shall be entitled to convert the same into full shares of Common Stock and to receive certificates therefor, such holder shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Company or of any transfer agent for the Preferred, and shall give written notice to the Company at such office that such holder elects to convert the same; provided, however, that in the event of an automatic conversion pursuant to subsection (d)(2), the outstanding shares of Preferred that is the subject of such automatic conversion shall be converted automatically without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Company or its transfer agent, and provided further that the Company shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such automatic conversion unless the certificates evidencing such shares of Preferred are either delivered to the Company or its transfer agent as provided above, or the holder notifies the Company or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Company to indemnify the Company from any loss incurred by it in connection with such certificates. The Company shall, as soon as practicable after delivery of such certificate, or such agreement and indemnification in the case of a lost certificate, issue and deliver at such office to such holder of Preferred, a certificate or certificates for the number of shares of Common Stock to which such holder shall be entitled as aforesaid and a cheque payable to the holder in the amount of any cash amounts payable as the result of a conversion into

37

42

fractional shares of Common Stock. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of Preferred to be converted, or in the case of automatic conversion on the date of closing of the offering or the effective date of such written consent, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock on such date.

1. Adjustments to Conversion Price.
   1. Adjustments for Stock Dividends, Subdivisions, Combinations or Consolidation of Common Stock. In the event the outstanding shares of Common Stock shall be subdivided (by stock split, or otherwise), into a greater number of shares of Common Stock, or the Company shall declare or pay any dividend on the Common Stock payable in Common Stock, and the proportionate sub-division (by stock split or otherwise) or dividend is not made to the holders of the Preferred, then in each such event provision shall be made so that the holders of the Preferred shall receive upon conversion thereof, in addition to the number of shares of Common Stock receivable thereupon, the amount of securities of the Company which they would have received had their shares of Preferred been converted into Common Stock on the date of such event and had they thereafter during the period from the date of such event to and including the date of conversion, retained such securities receivable by them as aforesaid during such period. In the event the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, the applicable Conversion Price for the Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and Series E Preferred then in effect shall, concurrently with the effectiveness of such combination or consolidation, be proportionately increased on the same basis as set forth above.

38

43

1. Adjustments for Other Distributions. In the event the Company at any time or from time to time makes, or fixes a record date for the determination of holders of Common Stock entitled to receive any distribution payable in securities of the Company other than shares of Common Stock, and other than as otherwise adjusted for in this subsection (d)(4), then and in each such event provision shall be made so that the holders of Preferred shall receive upon conversion thereof, in addition to the number of shares of Common Stock receivable thereupon, the amount of securities of the Company which they would have received had their shares of Preferred been converted into Common Stock on the date of such event and had they thereafter, during the period from the date of such event to and including the date of conversion, retained such securities receivable by them as aforesaid during such period, subject to all other adjustments called for during such period under this subsection (d)(4) with respect to the rights of the holders of such series of Preferred.
2. Adjustments for Reclassification, Exchange and Substitution. If the Common Stock issuable upon conversion of shares of Preferred shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for above), the applicable Conversion Price of the Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and Series E Preferred then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted such that the shares of Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and Series E Preferred shall be convertible into, in lieu of the number of shares of Common Stock which the holders would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would be subject to receipt by the holders upon conversion of the Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and Series

39

44

E Preferred, respectively, immediately prior to such reclassification or capital reorganization.

1. Preferred Conversion Price Adjustments. The Conversion Price for the Series A Preferred, Conversion Price for the Series B Preferred, the Conversion Price for the Series C Preferred, the Conversion Price for the Series D Preferred and the Conversion Price for the Series E Preferred shall be subject to adjustment from time to time as follows:
   1. Special Definitions. For purposes of this

subsection 4(d), the following definitions shall apply:

* + 1. "Options" shall mean rights, options or

warrants to subscribe for, purchase or otherwise acquire either Common or Convertible Securities.

* + 1. "Series A Original Issue Date" shall mean

the date on which the first share of Series A Preferred was first issued.

* + 1. "Series B Original Issue Date" shall mean

the date on which the first share of Series B Preferred was first issued.

* + 1. "Series C Original Issue Date" shall mean

the date on which the first share of Series C Preferred was first issued.

* + 1. "Series D Original Issue Date" shall mean

the date on which the first share of Series D Preferred was first issued.

* + 1. "Series E Original Issue Date" shall mean

the date on which the first share of Series E Preferred was first issued.

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1. "Convertible Securities" shall mean any

evidences of indebtedness, shares or other securities convertible into or exchangeable for Common.

1. "Additional Shares of Common" shall mean all

shares of Common issued (or, pursuant to subsection 4(d)(iii) below, deemed to be issued) by the Company after the Series E Original Issue Date, other than shares of Common issued or issuable:

* 1. upon conversion of shares of the

Preferred.

* 1. up to 32,400,000 shares issued or

issuable to officers, directors, employees and consultants of the Company pursuant to incentive plans or arrangements, including the Company's 1995 Stock Option Plan and 1997 Director's Stock Option Plan (as amended from time to time), or other stock arrangements which have been approved by the Board;

* 1. up to 150,000 shares issued or

issuable to commercial banking or equipment leases financing entities in connection with such commercial transactions as the Board shall approve, or issued or issuable to corporations or other entities in connection with such strategic or commercial transactions as the Board shall approve, provided that the Board shall also approve the grant of shares or other securities exercisable for such shares in connection therewith;

* 1. pursuant to any event for which

adjustment has already been made pursuant to this subsection (d)(4); or

* 1. as a dividend or distribution on the

41

46

Preferred.

1. No Adjustment of Conversion Price. No

adjustment in the Series A Conversion Price, Series B Conversion Price , Series C Conversion Price, Series D Conversion Price or Series E Conversion Price shall be made in respect of the issuance of Additional Shares of Common unless the consideration per share for an Additional Share of Common issued or deemed to be issued by the Company is less than the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series E Conversion Price, as applicable, in effect on the date of and immediately prior to such issue.

1. Deemed Issue of Additional Shares of

Common. Except as provided in Section 4(b) above, in the event the Company at any time or from time to time after the Series A Original Issue Date with respect to the Series A Preferred, after the Series B Original Issue Date with respect to the Series B Preferred, after the Series C Original Issue Date with respect to the Series C Preferred, after the Series D Original Issue Date with respect to the Series D Preferred and after the Series E Original Issue Date with respect to the Series E Preferred, shall issue any Options or Convertible Securities or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares (as set forth in the instrument relating thereto without regard to any provisions contained therein for a subsequent adjustment of such number) of Common issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date, provided that in any such case in which Additional Shares of Common are deemed to be issued:

42

47

1. no further adjustment in the Series A Conversion Price, or Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series E Conversion Price, as applicable, shall be made upon the subsequent issue of Convertible Securities or shares of Common upon the exercise of such Options or conversion or exchange of such Convertible Securities;
2. if such Options or Convertible

Securities by their terms provide, with the passage of time or otherwise, for any increase or decrease in the consideration payable to the Company, or increase or decrease in the number of shares of Common issuable upon the exercise, conversion or exchange thereof, the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series E Conversion Price, as applicable, computed upon the initial conversion prices thereof set forth in subsection (d)(1) above (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such increase or decrease becoming effective, be recomputed to reflect such increase or decrease insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities; and

1. upon the expiration of any such

Options or any rights of conversion or exchange under such Convertible Securities which shall not have been exercised, the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price or Series E Conversion Price, as applicable, computed upon the initial conversion prices set forth in subsection (d)(1) above, and any subsequent adjustments based thereon, shall, upon such expiration, be recomputed as if:

* 1. in the case of Convertible

Securities

43

48

or Options for Common, the only Additional Shares of Common issued were shares of Common, if any, actually issued upon the exercise of such Options or the conversion or exchange of such Convertible Securities, and the consideration received therefor was the consideration actually received by the Company for the issue of all such Options, whether or not exercised, plus the consideration actually received by the Company upon such exercise, or for the issue of all such Convertible Securities which were actually converted or exchanged plus the consideration actually received by the Company upon such conversion or exchange, if any, and

(b) in the case of Options for

Convertible Securities, only the Convertible Securities, if any, actually issued upon the exercise thereof were issued at the time of issue of such Options and the consideration received by the Company for the Additional Shares of Common deemed to have been then issued was the consideration actually received by the Company for the issue of all such Options, whether or not exercised, plus the consideration deemed to have been received by the Company upon the issue of the Convertible Securities with respect to which such Options were actually exercised; and

(4) no readjustment pursuant to clause

1. or (3) above shall have the effect of: (v) increasing the Series A Conversion Price to an amount which exceeds the initial Series A Conversion Price set forth in subsection (d)(1) above, (w) increasing the Series B Conversion Price to an amount which exceeds the initial Series B Conversion Price set forth in subsection (d)(1) above, (x) increasing the Series C Conversion Price to an amount which exceeds the initial Series C Conversion Price set forth in subsection (d)(1) above, (y) increasing the Series D Conversion Price to an amount which exceeds the initial Series D Conversion Price set forth in subsection (d)(1) above or (z) increasing the Series E Conversion Price to an amount which exceeds the initial

44

49

Series E Conversion Price set forth in subsection (d)(1) above.

1. Adjustment of Conversion Price Upon

Issuance of Additional Shares of Common. In the event this Company shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to subsection 4(d)(iii) but excluding stock dividends, subdivisions or split-ups that are the subject of adjustment pursuant to Section 4(a)) without consideration or for a consideration per share less than the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price and/or Series E Conversion Price applicable on and immediately prior to such issue, then and in such event, the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price and/or Series E Conversion Price as applicable, shall be reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price and/or Series E Conversion Price, as applicable, in effect on the date of and immediately prior to such issue by a fraction, the numerator of which shall be the number of shares of Common Stock issuable upon conversion of any class or series of Preferred Stock (or shares issued upon conversion thereof) outstanding immediately prior to such issue, plus 10,600,000 shares (as appropriately adjusted for any combinations, consolidations, subdivisions, or stock dividends with respect to such shares of Common) of Common, plus the number of shares of Common which the aggregate consideration received by the Company for the total number of Additional Shares of Common so issued would purchase at the Series A Conversion Price, Series B Conversion Price, Series C Conversion Price, Series D Conversion Price, and/or Series E Conversion Price, as applicable, in effect on the date of and immediately prior to such issue; and the denominator of which shall be the number of shares of Common Stock issuable upon conversion of any class or series of Preferred Stock (or shares issued upon conversion thereof) outstanding immediately prior to such issue, plus 10,600,000 shares (as

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appropriately adjusted for any combinations, consolidations, subdivisions, or stock dividends with respect to such shares of Common) of Common, plus the number of such Additional Shares of Common so issued.

* 1. Determination of Consideration. For purposes

of this Section 4(d), the consideration received by the Company for the issue of any Additional Shares of Common shall be computed as follows:

* + 1. Cash and Property. Such consideration

shall:

* + - 1. insofar as it consists of cash, be

computed at the aggregate amount of cash received by the Company;

* + - 1. insofar as it consists of property other than cash, be computed at the fair value thereof at the time of such issue, as determined in good faith by the Board; and
      2. in the event Additional Shares of Common are issued together with other shares or securities or other assets of the Company for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (A) and

1. above, as determined in good faith by the Board.
   * 1. Options and Convertible Securities.

The consideration per share received by the Company for Additional Shares of Common deemed to have been issued pursuant to subsection 4(d)(iii), relating to Options and Convertible Securities, shall be determined by dividing:

* + - 1. the total amount, if any, received

or

46

51

receivable by the Company as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Company upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such options for Convertible Securities and the conversion or exchange of such Convertible Securities by:

(b) the maximum number of shares of

Common (as set forth in the instruments relating thereto, without regard

to any provision contained therein for a subsequent adjustment of such

number) issuable upon the exercise of such Options or the conversion or

exchange of such Convertible Securities.

1. Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the then applicable Conversion Price for the Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and/or Series E Preferred pursuant to subsection (d)(4), the Company at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of such series of Preferred a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall, upon the written request at any time of any holder of Preferred, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the applicable Conversion Price in effect at the time for such series, and (iii) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of such shares of Preferred.

47

52

1. Notices of Record Date. In the event that the Company shall propose at any time:
   1. to declare any dividend or distribution upon its

Common Stock, whether in cash, property, stock or other securities, whether or not a regular cash dividend and whether or not out of earnings or earned surplus;

* 1. to offer for subscription pro rata to the

holders of any class or series of its stock any additional shares of stock of any class or series or any other similar rights;

* 1. to effect any reclassification or

recapitalization of its Common Stock outstanding which results in a change in the Common Stock; or

* 1. to merge or consolidate with or into any other

corporation, or sell, lease or convey all or substantially all its property or business, or to liquidate, dissolve or wind up;

then, in connection with each such event, the Company shall send to the holders of the Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and Series E Preferred:

* 1. at least 20 days' prior written notice of

the date on which a record shall be taken for such dividend, distribution or subscription offer (and specifying the date on which the holders of Common Stock shall be entitled thereto) or for determining rights to vote on the matters referred to in (c) and (d) above; and

* 1. in the case of the matters referred to in

1. and (d) above, at least 20 days' prior written notice of the date when the same shall

48

53

take place and specifying the date on which the holders of Common Stock shall be entitled to exchange their Common Stock for securities or other property deliverable upon the occurrence of such event or the record date for the determination of such holders if such record date is earlier.

Each such written notice shall be delivered personally or given by first class mail, postage prepaid, addressed to the holders of the Series A Preferred, the Series B Preferred, the Series C Preferred, the Series D Preferred and the Series E Preferred at the address for each such holder as shown on the books of the Company.

1. Certain Covenants.
   1. In addition to any other rights provided by law, so long as any shares of Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and Series E Preferred shall be outstanding, the Company shall not, without first obtaining the affirmative vote or written consent of the holders of not less than a majority of the outstanding shares of the Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and Series E Preferred (voting together as a single class):
2. authorize or issue (a) any additional shares of

Series A Preferred, (b) any additional shares of Series B Preferred, (c) any additional shares of Series C Preferred, (d) any additional shares of Series D Preferred or (e) any additional shares of Series E Preferred;

1. declare or pay any dividend on shares of Common Stock, other than such dividends as are payable solely in shares of Common Stock, or repurchase or redeem any shares of Common Stock or Preferred other than such repurchases or redemptions of shares made from employees, officers, directors or consultants upon their termination at their original issue price;

49

54

1. authorize or issue any series or class of

shares having rights or preferences superior to the Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred or Series E Preferred as to dividend rights or liquidation preferences, or having redemption rights, ratchet or narrower-based weighted average anti-dilution protection than that afforded the Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred or Series E Preferred or a liquidation preference per share that exceeds two times the aggregate amount invested per share with respect to such series or class of shares, or that is afforded separate voting rights with respect to subject matters in addition to those set forth in this subsection 8 (or afforded by operation of law) for which Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred or Series E Preferred has such voting rights or other extraordinary voting rights not afforded the Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred or Series E Preferred herein or by operation of law;

1. merge or consolidate with or into, or permit

subsidiary to merge with into, any other corporation, corporations or other entity or entities unless Members of the Company immediately prior to such merger or consolidation continue to hold not less than fifty percent of the outstanding voting power of the surviving corporation or entity, or sell or otherwise dispose of all or substantially all of its assets; or

1. adversely alter or change any of the powers, preferences, privileges or rights of the Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred or Series E Preferred.

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1. Power to issue shares
   1. Subject to these Bye-laws and to any resolution of the Members to the contrary and without prejudice to any special rights previously conferred on the holders of any existing shares or class of shares, the Board shall have power to issue any unissued shares of the Company on such terms and conditions as it may determine and any shares or class of shares may be issued with such preferred, deferred or other special rights or such restrictions, whether in regard to dividend, voting, return of capital or otherwise as the Company may from time to time by resolution of the Members prescribe.
   2. The Board shall, in connection with the issue of any share, have the power to pay such commission and brokerage as may be permitted by law.
   3. The Company shall not give, whether directly or indirectly, whether by means of loan, guarantee, provision of security or otherwise, any financial assistance for the purpose of a purchase or subscription made or to be made by any person of or for any shares in the Company, but nothing in this Bye-Law shall prohibit transactions mentioned in Sections 39A, 39B and 39C of the Act.
   4. The Company may from time to time do any one or more of the following

things:

* + 1. make arrangements on the issue of shares for a difference between the Members in the amounts and times of payments of calls on their shares;
    2. accept from any Member the whole or a part of the amount remaining unpaid on any shares held by him, although no part of that amount has been called up;
    3. pay dividends in proportion to the amount paid up on each share where a larger amount is paid up on some shares than on others; and
    4. issue its shares in fractional denominations and deal with such fractions to the same extent as its whole shares and shares in

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fractional denominations shall have in proportion to the respective fractions represented thereby all of the rights of whole shares including (but without limiting the generality of the foregoing) the right to vote, to receive dividends and distributions and to participate in a winding up.

1. Variation of rights, alteration of share capital and purchase of shares of the Company
   1. Subject to the provisions of Sections 42 and 43 of the Act any preference shares may be issued or converted into shares that, at a determinable date or at the option of the Company, are liable to be redeemed on such terms and in such manner as the Company before the issue or conversion may by resolution of the Members determine.
   2. If at any time the share capital is divided into different classes of shares, the rights attached to any class (unless otherwise provided by the terms of issue of the shares of that class) may, whether or not the Company is being wound-up, be varied with the consent in writing of the holders of three-fourths of the issued shares of that class or with the sanction of a resolution passed by a majority of the votes cast at a separate general meeting of the holders of the shares of the class in accordance with Section 47 (7) of the Act. The rights conferred upon the holders of the shares of any class issued with preferred or other rights shall not, unless otherwise expressly provided by the terms of issue of the shares of that class, be deemed to be varied by the creation or issue of further shares ranking pari passu therewith.
   3. The Company may from time to time by resolution of the Members change the currency denomination of, increase, alter or reduce its share capital in accordance with the provisions of Sections 45 and 46 of the Act. Where, on any alteration of share capital, fractions of shares or some other difficulty would arise, the Board may deal with or resolve the same in such manner as it thinks fit including, without limiting the generality of the foregoing, the issue to Members, as appropriate, of fractions of shares and/or arranging for the sale or transfer of the fractions of shares of Members.

52

57

* 1. The Company may from time to time purchase its own shares in accordance with the provisions of Section 42A of the Act.

1. Registered holder of shares
   1. The Company shall be entitled to treat the registered holder of any share as the absolute owner thereof and accordingly shall not be bound to recognize any equitable or other claim to, or interest in, such share on the part of any other person.
   2. Any dividend, interest or other moneys payable in cash in respect of shares may be paid by cheque or draft sent through the post directed to the Member at such Member's address in the Register of Members or, in the case of joint holders, to such address of the holder first named in the Register of Members, or to such person and to such address as the holder or joint holders may in writing direct. If two or more persons are registered as joint holders of any shares any one can give an effectual receipt for any dividend paid in respect of such shares.
2. Death of a joint holder

Where two or more persons are registered as joint holders of a share or

shares then in the event of the death of any joint holder or holders the remaining joint holder or holders shall be absolutely entitled to the said share or shares and the Company shall recognize no claim in respect of the estate of any joint holder except in the case of the last survivor of such joint holders.

1. Share certificates
   1. Shares shall be issued in registered form. Unless otherwise provided by the rights attaching to or by the terms of issue of any particular Shares, each Member shall, upon becoming the holder of any Share, be entitled to a Share certificate for all the Shares of each class held by such Member (and, on transferring a part of such Member's holding, to a certificate for the balance), but the Board may decide not to issue certificates for any

53

58

Shares held by, or by the nominee of, any securities exchange or depository or any operator of any clearance or settlement system except at the request of any such person. In the case of a Share held jointly by several persons, delivery of a certificate in their joint names to one of several joint holders shall be sufficient delivery to all.

* + 1. If a Share certificate is defaced, lost or destroyed, it may be replaced without fee but on such terms (if any) as to evidence and indemnity and to payment of the costs and out-of-pocket expenses of the Company in investigating such evidence and preparing such indemnity as the Board may think fit and, in case of defacement, on delivery of the old certificate to the Company.
  1. The Board may by resolution determine, either generally or in any particular case, that any signatures on any such certificates need not be autographic but may be affixed to such certificates by some mechanical means or may be printed thereon or that such certificates need not be signed by any persons.
  2. Nothing in these Bye-Laws shall preclude title to a Share being evidenced or transferred otherwise than in writing to the extent permitted by the Act and as may be determined by the Board from time to time.

1. Calls on shares
   1. The Board may from time to time make such calls as it thinks fit upon the Members in respect of any monies unpaid on the shares allotted to or held by such Members and, if a call is not paid on or before the day appointed for payment thereof, the Member may at the discretion of the Board be liable to pay the Company interest on the amount of such call at such rate as the Board may determine, from the date when such call was payable up to the actual date of payment. The joint holders of a share shall be jointly and severally liable to pay all calls in respect thereof.
   2. The Board may, on the issue of shares, differentiate between the

holders

54

59

as to the amount of calls to be paid and the times of payment of such calls.

1. Forfeiture of shares
   1. If any Member fails to pay, on the day appointed for payment thereof, any call in respect of any share allotted to or held by such Member, the Board may, at any time thereafter during such time as the call remains unpaid, direct the Secretary to forward to such Member a notice in the form, or as near thereto as circumstances admit, of Form "A" in the Schedule hereto.
   2. If the requirements of such notice are not complied with, any such share may at any time thereafter before the payment of such call and the interest due in respect thereof be forfeited by a resolution of the Board to that effect, and such share shall thereupon become the property of the Company and may be disposed of as the Board shall determine.
   3. A Member whose share or shares have been forfeited as aforesaid shall, notwithstanding such forfeiture, be liable to pay to the Company all calls owing on such share or shares at the time of the forfeiture and all interest due thereon.
   4. The Board may accept the surrender of any share which it is in a position to forfeit on such terms and conditions as may be agreed. Subject to those terms and conditions, a surrendered share shall be treated as if it had been forfeited.

REGISTER OF MEMBERS

1. Contents of Register of Members

The Board shall cause to be kept in one or more books a Register of Members and shall enter therein required by the Act.

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60

1. Inspection of Register of Members

The Register of Members shall be open to inspection at the registered office of the Company on every business day, subject to such reasonable restrictions as the Board may impose, so that not less than two hours in each business day be allowed for inspection. The Register of Members may, after notice has been given by advertisement in an appointed newspaper to that effect, be closed for any time or times not exceeding in the whole thirty days in each year.

1. Determination of record dates

Notwithstanding any other provision of these Bye-laws, the Board may fix any date as the record date for:

1. determining the Members entitled to receive any dividend; and
2. determining the Members entitled to receive notice of and to vote at any general meeting of the Company.

TRANSFER OF SHARES

1. Instrument of Transfer
   1. An instrument of transfer shall be in such common form as the Board may accept. Such instrument of transfer shall be signed by or on behalf of the transferor and transferee provided that, in the case of a fully paid share, the Board may accept the instrument signed by or on behalf of the transferor alone. The transferor shall be deemed to remain the holder of such share until the same has been transferred to the transferee in the Register of Members.
   2. The Board may refuse to recognize any instrument of transfer unless it is accompanied by the certificate in respect of the shares to which it relates and by such other evidence as the Board may reasonably require to show the right of the transferor to

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61

make the transfer.

1. Restriction on Transfer
   1. Subject to the Act and to such of the restrictions contained in these Bye-Laws as may be applicable and to any agreement relating to the transfer of Shares to which any Member is a party or by which any Member may be bound, any Member may transfer all or any of such Member's Shares by an instrument of transfer in the usual common form or in any other form that the Board may approve.
   2. The instrument of transfer of a Share shall be signed by or on behalf of the transferor, and where any Share is not fully paid the transferee, and the transferor shall be deemed to remain the holder of the Share until the name of the transferee is entered in the Register in respect thereof. All instruments of transfer when registered may be retained by the Company. The Board may, in its absolute discretion and without assigning any reason therefor, decline to register any transfer of any Share that is not a fully paid Share or that is in violation of these Bye-Laws or of any agreement of which the Company has notice. The Board may also decline to register any transfer unless:
      1. the instrument of transfer is duly stamped, if required, and lodged with the Company at the registered office or any other place as the Board may from time to time specify, accompanied by the certificate (if any) for the Shares to which it relates, and such other evidence as the Board may reasonably require to show the right of the transferor to make the transfer;
      2. the instrument of transfer is in respect of only one class of Share;
      3. where applicable, the permission of the Bermuda Monetary Authority with respect thereto has been obtained; and

57

62

* + 1. where applicable, the Board is satisfied that the transfer complies with the Securities Laws.
  1. If the Board declines to register a transfer it shall, within three months after the date on which the instrument of transfer was lodged, send to the transferee notice of such refusal.
  2. No fee shall be charged by the Company for registering any transfer, or otherwise making an entry in the Register concerning any other document relating to or affecting the title to any Share.
  3. Subject to any directions of the Board from time to time in force, the Secretary may exercise the powers and discretions of the Board under Bye-Laws 62(1), 62(2) and 62(3).

1. Transfers by joint holders

The joint holders of any share or shares may transfer such share or shares

to one or more of such joint holders, and the surviving holder or holders of any share or shares previously held by them jointly with a deceased Member may transfer any such share to the executors or administrators of such deceased Member.

TRANSMISSION OF SHARES

1. Representative of deceased Member

In the case of the death of a Member, the survivor or survivors where the deceased Member was a joint holder, and the legal personal representatives of the deceased Member where the deceased Member was a sole holder, shall be the only persons recognized by the Company as having any title to the deceased Member's interest in the shares. Nothing herein contained shall release the estate of a deceased joint holder from

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any liability in respect of any share which had been jointly held by such deceased Member with other persons. Subject to the provisions of Section 52 of the Act, for the purpose of this Bye-law, legal personal representative means the executor or administrator of a deceased Member or such other person as the Board may in its absolute discretion decide as being properly authorized to deal with the shares of a deceased Member.

1. Registration on death or bankruptcy

Any person becoming entitled to a share in consequence of the death or bankruptcy of any Member may be registered as a Member upon such evidence as the Board may deem sufficient or may elect to nominate some person to be registered as a transferee of such share, and in such case the person becoming entitled shall execute in favor of such nominee an instrument of transfer in the form, or as near thereto as circumstances admit, of Form "B" in the Schedule hereto. On the presentation thereof to the Board, accompanied by such evidence as the Board may require to prove the title of the transferor, the transferee shall be registered as a Member but the Board shall, in either case, have the same right to decline or suspend registration as it would have had in the case of a transfer of the share by that Member before such Member's death or bankruptcy, as the case may be.

DIVIDENDS AND OTHER DISTRIBUTIONS

1. Declaration of dividends by the Board

The Board may, subject to these Bye-laws and in accordance with Section 54 of the Act, declare a dividend to be paid to the Members, in proportion to the number of shares held by them, and such dividend may be paid in cash or wholly or partly in specie in which case the Board may fix the value for distribution in specie of any assets. No unpaid dividend shall bear interest as against the Company.

1. Other distributions

The Board may declare and make such other distributions (in cash or in specie) to

59

64

the Members as may be lawfully made out of the assets of the Company. No unpaid dividend shall bear interest as against the Company.

1. Reserve fund

The Board may from time to time before declaring a dividend set aside, out of the surplus or profits of the Company, such sum as it thinks proper as a reserve fund to be used to meet contingencies or for equalizing dividends or for any other special purpose.

1. Payment of Dividends and deduction of Amounts due to the Company
   1. Any dividend or other monies payable in respect of a share may be paid by cheque or warrant sent through the post to the registered address of the Members (in the case of joint Members, the senior joint holder, seniority being determined by the order in which the names stand in the Register of Members) or person entitled thereto, or by direct bank transfer to such bank account as such Member or person entitled thereto may direct. Every such cheque shall be made payable to the order of the person to whom it is sent or to such persons as the Member may direct, and payment of the cheque or warrant shall be a good discharge to the Company. Every such cheque or warrant shall be sent at the risk of the person entitled to the money represented thereby.
      1. Any dividend or other monies payable in respect of a share which has remained unclaimed for 12 years from the date when it became due for payment shall, if the Board so resolves, be forfeited and cease to remain owing by the Company. The payment of any unclaimed dividend or other moneys payable in respect of a share may (but need not) be paid by the Company into an account separate from the Company's own account. Such payment shall not constitute the Company a trustee in respect thereof.
2. The Company shall be entitled to cease sending dividend warrants and cheques by post or otherwise to a Member if those instruments have been returned undelivered to, or left uncashed by, that Member on at least two consecutive occasions,

60

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or, following one such occasion, reasonable enquiries have failed to establish the Member's new address. The entitlement conferred on the Company by this Bye-law 69(3) in respect of any Member shall cease if the Member claims a dividend or cashes a dividend warrant or cheque.

1. The Board may deduct from the dividends or distributions payable to any Member all monies due from such Member to the Company on account of calls or otherwise.

CAPITALIZATION

1. Issue of bonus shares
   1. The Board may resolve to capitalize any part of the amount for the time being standing to the credit of any of the Company's share premium or other reserve accounts or to the credit of the profit and loss account or otherwise available for distribution by applying such sum in paying up unissued shares to be allotted as fully paid bonus shares pro rata to the Members.
   2. The Company may capitalize any sum standing to the credit of a reserve account or sums otherwise available for dividend or distribution by applying such amounts in paying up in full partly paid shares of those Members who would have been entitled to such sums if they were distributed by way of dividend or distribution.

ACCOUNTS AND FINANCIAL STATEMENTS

1. Records of account

The Board shall cause to be kept proper records of account with respect to all transactions of the Company and in particular with respect to:

1. all sums of money received and expended by the Company and the 61

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matters in respect of which the receipt and expenditure relates;

1. all sales and purchases of goods by the Company; and
2. the assets and liabilities of the Company.

Such records of account shall be kept at the registered office of the Company or, subject to Section 83 (2) of the Act, at such other place as the Board thinks fit and shall be available for inspection by the Directors during normal business hours.

1. Financial year end

The financial year end of the Company may be determined by resolution of the Board and failing such resolution shall be 31st December in each year.

1. Financial statements

Subject to any rights to waive laying of accounts pursuant to Section 88 of the Act, financial statements as required by the Act shall be laid before the Members in general meeting.

AUDIT

1. Appointment of Auditor

Subject to Section 88 of the Act, at the annual general meeting or at a subsequent special general meeting in each year, an independent representative of the Members shall be appointed by them as Auditor of the accounts of the Company. Such Auditor may be a Member but no Director, Officer or employee of the Company shall, during his or her continuance in office, be eligible to act as an Auditor of the Company.

1. Remuneration of Auditor

The remuneration of the Auditor shall be fixed by the Company in general meeting or in such manner as the Members may determine.

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1. Vacation of office of Auditor

If the office of Auditor becomes vacant by the resignation or death of the Auditor, or by the Auditor becoming incapable of acting by reason of illness or other disability at a time when the Auditor's services are required, the Board shall, as soon as practicable, convene a special general meeting to fill the vacancy thereby created.

1. Access to books of the Company

The Auditor shall at all reasonable times have access to all books kept by the Company and to all accounts and vouchers relating thereto, and the Auditor may call on the Directors or Officers of the Company for any information in their possession relating to the books or affairs of the Company.

1. Report of the Auditor
   1. Subject to any rights to waive laying of accounts or appointment of an Auditor pursuant to Section 88 of the Act, the accounts of the Company shall be audited at least once in every year.
   2. The financial statements provided for by these Bye-laws shall be audited by the Auditor in accordance with generally accepted auditing standards. The Auditor shall make a written report thereon in accordance with generally accepted auditing standards and the report of the Auditor shall be submitted to the Members in general meeting.
   3. The generally accepted auditing standards referred to in subparagraph

(2) of this Bye-law may be those of a country or jurisdiction other than Bermuda. If so, the financial statements and the report of the Auditor must disclose this fact and name such country or jurisdiction.

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1. Business Combinations

Any Business Combination shall require the approval of the Board and a Special Resolution of the Members.

NOTICES

1. Service of Notices and Other Documents
   1. Any notice or other document (including a Share certificate) may be served on or delivered to any Member by the Company either personally or by sending it through the post in a prepaid letter addressed to such Member at the address appearing in the Register or by delivering it to or leaving it at such registered address. In the case of joint holders of a Share, service or delivery of any notice or other document on or to one of the joint holders shall for all purposes be deemed as sufficient service on or delivery to all the joint holders. Any notice or other document if sent by post shall be deemed to have been served or delivered five Clear Days after it was put in the post, and, in proving such service or delivery, it shall be sufficient to prove that the notice or document was properly addressed, stamped and put in the post.
   2. Any notice of a general meeting of the Company shall be deemed to be duly given to a Member, or other person entitled to it, if it is sent by air courier, facsimile, telex, telecopier, electronic mail or other mode of representing or reproducing words in a legible and non-transitory form to the address as it appears in the Register or any other address given to the Company for this purpose. Any such notice shall be deemed to have been served 24 hours after its dispatch except in the case of air courier in which case such notice shall be deemed to have been served 48 hours after its dispatch.
   3. Any notice or other document delivered, sent or given to a Member in any manner permitted by these Bye-Laws shall, notwithstanding that such Member is then dead or bankrupt or that any other event has occurred, and whether or not the Company has notice of the death or bankruptcy or other event, be deemed to have been duly served

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or delivered in respect of any Share registered in the name of such Member as sole or joint holder unless such Member's name shall, at the time of the service or delivery of the notice or document, have been removed from the Register as the holder of the Share, and such service or delivery shall for all purposes be deemed as sufficient service or delivery of such notice or document on all persons interested (whether jointly with or as claiming through or under such Member) in the Share.

Any notice or other document (including without limitation a proxy, appointment of corporate representative or nomination form for a director) may be delivered by any Member to the Company either personally, by air courier or by sending it through the post in a pre-paid letter addressed to the Company and the registered office of the Company. Where a notice convening a general meeting indicates that any document which is to be delivered by a Member to the Company in connection with such general meeting may be delivered by facsimile and indicates a facsimile number for delivery, then any Member may deliver such document or documents by facsimile transmission to the number identified in the notice of general meeting.

1. Service and delivery of notice

Any notice shall be deemed to have been served at the time when the same would be delivered in the ordinary course of transmission save for notices sent by post which shall be deemed to have been served five (5) days after posting and, in proving such service, it shall be sufficient to prove that the notice was properly addressed and prepaid, if posted, and the time when it was posted, delivered to the courier or to the cable company or transmitted by telex, facsimile or other method as the case may be.

SEAL OF THE COMPANY

1. The seal
   1. The Board shall provide for the safe custody of the Seal. The Seal shall only be used by the authority of the Board or of a committee authorized by the Board in that

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behalf. The Board may determine who (if anyone) shall sign any instrument to which the Seal is affixed and shall unless otherwise determined by resolution of the Board be signed by one Director.

* 1. The Board may by resolution determine either generally or in any particular case that any certificates or warrants for Shares or debentures or representing any other form of security to which the Seal is to be affixed may have signatures affixed to them by some mechanical means, or printed thereon or that such certificates need not bear any signature.
  2. Where the Company engages in business outside Bermuda the Company may, if the Board so determines, have for use in any country, territory or place outside Bermuda a seal which shall be a duplicate of the Seal and which shall be affixed in the same manner as the Seal.
  3. The Company may, if the Board so determines, have for use for sealing securities issued by the Company and for sealing documents creating or evidencing securities so issued an official seal which shall be a facsimile of the Seal with the addition on its face of the word "Securities".

1. Manner in which seal is to be affixed

The seal of the Company shall not be affixed to any instrument except

attested by the signature of a Director and the Secretary or any two Directors, or some other person appointed by the Board for the purpose, provided that any Director, or Officer, may affix the seal of the Company attested by such Director or Officer's signature only to any authenticated copies of these Bye-laws, the incorporating documents of the Company, the minutes of any meetings or any other documents required to be authenticated by such Director or Officer.

WINDING-UP

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71

1. Winding-up/distribution by liquidator

If the Company shall be wound up the liquidator may, with the sanction of a resolution of the Members, divide amongst the Members in specie or in kind the whole or any part of the assets of the Company (whether they shall consist of property of the same kind or not) and may, for such purpose, set such value as he or she deems fair upon any property to be divided as aforesaid and may determine how such division shall be carried out as between the Members or different classes of Members. The liquidator may, with the like sanction, vest the whole or any part of such assets in trustees upon such trusts for the benefit of the Members as the liquidator shall think fit, but so that no Member shall be compelled to accept any shares or other securities or assets whereon there is any liability.

ALTERATION OF BYE-LAWS

1. Alteration of Bye-laws

No Bye-law shall be rescinded, altered or amended and no new Bye-law shall be made until the same has been approved by a resolution of the Board and by a Special Resolution of the Members.

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SCHEDULE - FORM A (Bye-law 58)

NOTICE OF LIABILITY TO FORFEITURE FOR NON PAYMENT OF CALL

You have failed to pay the call of [amount of call] made on the ...... day of ........, 20.. last, in respect of the [number] share(s) [numbers in figures] standing in your name in the Register of Members of the Company, on the ...... day of ........., 20.. last, the day appointed for payment of such call. You are

hereby notified that unless you pay such call together with interest thereon at

the rate of .......... per annum computed from the said ....... day of

........., 20... last, on or before the ....... day of ........., 20... next at

the place of business of the said Company the share(s) will be liable to be

forfeited.

Dated this ....... day of .............., 20...

[Signature of Secretary]

By order of the Board

68

73

SCHEDULE - FORM B (Bye-law 65)

TRANSFER BY A PERSON BECOMING ENTITLED ON DEATH/BANKRUPTCY

OF A MEMBER

I/We having become entitled in consequence of the [death/bankruptcy] of [name of the deceased Member] to [number] share(s) numbered [number in figures] standing in the register of members of [Company] in the name of the said [name of deceased Member] instead of being registered myself/ourselves elect to have [name of transferee] (the "Transferee") registered as a transferee of such share(s) and I/we do hereby accordingly transfer the said share(s) to the Transferee to hold the same unto the Transferee his or her executors administrators and assigns subject to the conditions on which the same were held at the time of the execution thereof; and the Transferee does hereby agree to take the said share(s) subject to the same conditions.

WITNESS our hands this ........ day of ..........., 20...

Signed by the above-named [person or persons entitled] in the presence of:

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Signed by the above-named

[transferee]

in the presence of:

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EXHIBIT 10.1

MARVELL TECHNOLOGY GROUP LTD.

AMENDED AND RESTATED

1995 STOCK OPTION PLAN

1. Purpose. This Plan is intended to attract and retain the best available individuals as Employees and Consultants of the Company and its Subsidiaries, to provide additional incentives to those Employees and Consultants, and to promote the success of the Company's business.
2. Defined Terms. The meanings of defined terms (generally, capitalized terms) in this Plan are provided in Section 22 ("Glossary").
3. Shares Reserved. Subject to Section 14, a maximum aggregate of

29,500,000 Shares may be issued under this Plan; provided however, that beginning the first business day of each fiscal year starting January 30, 2000 or after, there shall be added to this Plan the lesser of an additional (i) 5,000,000 shares of Common Stock, (ii) 5.0% of the outstanding shares of capital stock on such date, or (iii) an amount determined by the Board. The Shares may be authorized, but unissued, or reacquired Common Stock. If an Option expires or becomes unexercisable for any reason, any unpurchased Optioned Stock shall be available for future issuance under this Plan. Shares retained to satisfy tax withholding obligations do not reduce the number authorized for issuance.

1. Administration.
2. In General. This Plan shall be administered by the Board or a Committee appointed by the Board. Once appointed, a Committee shall serve until otherwise directed by the Board. From time to time, the Board may increase the size of the Committee and appoint additional members, remove members (with or without cause) and appoint new members in their stead, fill vacancies however caused, and terminate the Committee and thereafter directly administer this Plan.
3. After Exchange Act Applies. After the Company becomes subject to the Exchange Act, the Board may provide for administration of this Plan with respect to Employees who are also officers or directors of the Company by a Committee constituted so as to permit this Plan to comply as a discretionary plan with Rule 16b-3 promulgated under the Exchange Act or any successor thereto. A Committee appointed under this Section 4(b) may be separate from any Committee appointed to administer this Plan with respect to Employees who are neither officers nor directors.

2

1. Powers of the Administrator. Subject to the provisions of this Plan and in the case of a Committee, the specific duties delegated by the Board, the Administrator shall have the authority, in its discretion:
   * 1. to determine the Fair Market Value of the Common Stock;
     2. to grant Options to such Consultants and Employees as it

selects;

* + 1. to determine the terms and conditions of each Option granted, including without limitation the number of Shares of Optioned Stock, the exercise price per share, and whether an Option is to be granted as an ISO or a NSO;
    2. to approve forms of agreement for use under this Plan;
    3. to determine whether and under what circumstances to offer to buy out an Option for cash or Shares under Section 13;
    4. to modify grants of Options to participants who are foreign nationals or employed outside of the United States in order to recognize differences in local law, tax policies, or customs; and
    5. to construe and interpret the terms of this Plan and Options granted pursuant to this Plan.
  1. Administrator's Decisions Binding. All decisions, determinations, and interpretations of the Administrator shall be final and binding on all Optionees and any other holders of any Options, and no member of the Administrator shall be liable for any such determination, decision, or interpretation made in good faith.

1. Eligibility.
2. NSOs/ISOs. Nonstatutory Stock Options may be granted to Employees and Consultants. Incentive Stock Options may be granted only to Employees. An Employee or Consultant who has been granted an Option may, if otherwise eligible, be granted additional Options.
3. Limitations.
   1. If the Company or a successor issues any class of equity securities required to be registered under Section 12 of the Exchange Act or if this Plan is assumed by a corporation that has a class of such securities, the following limitations shall apply to grants of Options to Employees:

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* 1. No Employee shall be granted, in any fiscal year of the Company, Options to purchase more than 1,000,000 Shares, adjusted proportionately in connection with any change in the Company's capitalization as described in Section 14. If an Option is granted but canceled in the same fiscal year, it shall nonetheless count against the foregoing limit. Reduction of an Option's exercise price is treated as a cancellation of the Option and the grant of a new Option.

1. Term of Options. The term of each Option shall be determined by the Administrator at the time of grant but shall not exceed ten years. In the case of an ISO granted to an Optionee who, at the time of grant, owns stock representing more than ten percent of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the Option term shall not exceed five years.
2. Date of Grant. Unless otherwise determined by the Administrator, the date of grant of an Option shall be the date on which the Administrator completes the actions necessary to grant the Option. Notice of the grant shall be given to the Optionee within a reasonable time after the date of the grant.
3. Exercise Price and Form of Consideration.
4. Price. The per-Share exercise price of an Option shall be determined by the Administrator at the time of grant, but:
5. In the case of an ISO:
   1. granted to an Employee who, at the time of grant, owns stock representing more than ten percent of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per-Share exercise price shall be at least 110% of the Fair Market Value on the date of grant; or
   2. granted to any other Employee, the per-Share exercise price shall be at least the Fair Market Value on the date of grant.
6. In the case of a NSO:
   1. granted to an Employee who, at the time of grant, owns stock representing more than ten percent of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per-Share exercise price shall be at least the Fair Market Value on the date of grant; or

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* 1. granted to any other Employee, the per-Share exercise price shall be at least 85% of the Fair Market Value on the date of grant.

1. Form of Payment. Payment for Shares upon exercise of an Option shall be made in any lawful consideration approved by the Administrator and may, without limitation, consist of (1) cash, (2) check, (3) other Shares that have a Fair Market Value on the date of payment equal to the aggregate exercise price of the Shares as to which Option is exercised, (4) delivery by a broker or brokerage firm approved by the Administrator of a properly executed exercise notice together with payment of the exercise price and such other documentation as the Administrator shall require, or (5) any combination of the foregoing.
2. Exercise.
3. Exercisability. Each Option shall be exercisable at such times and under such conditions as determined by the Administrator at the time of grant.
4. Vesting. Each Option and the corresponding Optioned Stock shall vest at such times and under such conditions as determined by the Administrator at the time of grant, and as are otherwise permissible under the terms of this Plan, including without limitation, performance criteria with respect to the Company and/or the Optionee.
5. Fractional Shares. An Option may not be exercised for a fraction of

a Share.

1. Manner of Exercise; Rights as a Shareholder. Unless otherwise allowed by the Administrator, an Option shall be exercised by delivery to the Company of all of the following: (i) written notice of exercise by the Optionee, in a form approved by the Administrator and in accordance with the terms of the Option, (ii) full payment for the Shares with respect to which the Option is exercised, and (iii) payment (or provision for payment) of withholding taxes pursuant to Subsection (g), below. Delivery of any of the foregoing may be by electronic means approved by the Administrator. The Optionee shall be treated as a shareholder of the Company with respect to the purchased Shares upon completion of exercise of the Option.
2. Optionee Representations. If Shares purchasable pursuant to the exercise of an Option have not been registered under the Securities Act of 1933, as amended, at the time the Option is exercised, the Optionee shall, if required by the Administrator, as a condition to exercise of all or any portion of the Option, deliver to the Company an investment representation statement in a form approved by the Administrator.
3. Termination of Employment or Consulting Relationship. If an Optionee's Continuous Service terminates, the Optionee (or the Optionee's estate or heirs, if termination is due to death or the Optionee dies during the post-termination exercise

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period of the Option) may exercise the Option, (i) only within such period of time as is determined by the Administrator (but no later than the expiration date for the Option determined by the Administrator at the time of grant) and the Option shall terminate at the end of that period, and (ii) unless otherwise determined by the Administrator, only to the extent that the Optionee was entitled to exercise it at the date of termination.

1. Tax Withholding. The Company's obligation to deliver Shares upon exercise of an Option is subject to payment (or provision for payment satisfactory to the Administrator) by the Optionee of all federal, state, and local income and employment taxes that the Administrator determines in its discretion to be due as a result of the exercise of the Option or sale of the Shares.
2. Rule 16b-3. Except to the extent determined by the Administrator, Options granted to persons subject to Section 16(b) of the Exchange Act shall comply with Rule 16b-3 and shall contain such terms as may be required or desirable to qualify Plan transactions for the maximum exemption from Section 16 of the Exchange Act.
3. Non-Transferability of Options. Options may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Optionee, only by the Optionee.
4. Lockup Agreement. Grant and exercise of each Option are subject to the Optionee's agreement, upon the request of (and in form and substance satisfactory to) the Company or the underwriters managing an initial firmly underwritten public offering of the Company's securities, not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any Shares or any derivative security (unless included in the registration of Shares offered) without the prior written consent of the Company or such underwriters, as the case may be, for such period of time (not to exceed 180 days) from the effective date of the registration as the Company or underwriters may specify.
5. Buyout of Options. The Administrator may at any time offer to buy out an Option for a payment in cash or Shares, based on such terms and conditions as the Administrator shall establish and communicate to the Optionee at the time of the offer.
6. Changes in Capitalization or Control.
7. Changes in Capitalization. Subject to any required action by the shareholders of the Company, the number of shares of Optioned Stock and the number of Shares that have been authorized for issuance under this Plan but as to which no Options have then been granted or that have been returned to this Plan upon cancellation or expiration of an Option, as well as the price per share of Optioned Stock, shall be proportionately adjusted

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for any change in the number of issued Shares resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the Common Stock, or any other change in the number of issued Shares effected without receipt of consideration by the Company (not counting Shares issued upon conversion of convertible securities of the Company as "effected without receipt of consideration"). Such adjustment shall be made by the Board and shall be final, binding, and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no consequent adjustment shall be made with respect to, the number or price of Shares subject to this Plan.

1. Change in Control. The Administrator may, in its discretion, determine at any time from and after the grant of an Option the effect that a Change in Control shall have upon the Option; provided however, that a Change in Control shall not have the effect of impairing the rights of any Optionee under any then-outstanding Option without his or her prior written consent. Without limiting the foregoing sentence, the Administrator may determine that upon a Change in Control, an Option:
   1. shall become fully vested and exercisable either for a limited period following the Change in Control or for the remainder of the Option's term;
   2. shall terminate upon or after a specified period following the Change in Control;
   3. shall be cancelled in exchange for cash in the amount of the excess of the fair market value of the Optioned Shares over the exercise price upon termination; or
   4. shall be treated as provided under a combination of clauses
2. through (iii), or shall be so treated only if not adequately assumed (or substituted for) by a surviving or successor person or entity in the transactions or events that give rise to the Change in Control.

For purposes of this Section 14(b), (x) the occurrence of any of the foregoing clauses (i), (ii), (iii) or (iv) shall not constitute an impairment of the rights of any Optionee and (y) the "Administrator" shall be the Administrator as constituted before the Change in Control occurs.

1. Amendments. The Board may at any time amend, alter, suspend, or discontinue this Plan, but no such action shall impair the rights of any Optionee under any then-outstanding Option without his or her prior written consent.

6

7

1. Securities Regulation Requirements.
2. Compliance with Rule; Buy-out Offer. In general, Shares shall not be issued pursuant to the exercise of an Option unless the exercise of the Option and issuance of the Shares comply with all relevant provisions of law, including, without limitation, any applicable state securities laws, the Securities Act of 1933, as amended, the Exchange Act, the rules and regulations promulgated thereunder, the requirements of any stock exchange upon which the Shares may then be listed, and the requirements of any regulatory body having jurisdiction. When the Company receives notice of exercise of an Option, if the Administrator believes in its discretion that the period before Shares may be issued will exceed 21 days, the Administrator shall (unless it determines that such an offer is itself prevented by the rules described in the preceding sentence) make an offer pursuant to Section 13 to buy out the portion of the Option corresponding to the number of Shares whose issuance is thus prevented. The buy-out offer shall be valid for at least 21 days.
3. Optionee Investment Representation. As a condition to the exercise of an Option, the Company may require the person exercising the Option to represent and warrant that the Shares are being purchased only for investment and without any present intention to sell or distribute the Shares if, in the opinion of counsel for the Company, such a representation is required by law.
4. Written Option Agreements. Options shall be evidenced by written agreements in a form the Administrator approves from time to time. The written agreement shall designate the Option as either an Incentive Stock Option or a Nonstatutory Stock Option. Delay in executing a written agreement shall not affect the date of grant of an Option; however, an Option may not be exercised until a written agreement has been executed by the Company and the Optionee.
5. Shareholder Approval. This Plan is subject to approval by the shareholders of the Company within 12 months after the Board adopts this Plan. Shareholder approval shall be obtained in the degree and manner required under applicable state and federal law and the rules of any stock exchange upon which the Common Stock is listed.
6. Information to Optionees. The Company shall provide to each Optionee copies of financial statements at least annually, at the same time and in the same form as it furnishes such information to its shareholders. The Company shall not be required to provide such statements to key employees whose duties assure their access to equivalent information.
7. No Employment Rights. This Plan does not confer upon any Optionee any right with respect to continuation of employment or consulting relationship with the

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Company, nor shall it interfere in any way with the Company's right to terminate his or her employment or consulting relationship at any time, with or without cause.

1. Term of Plan. This Plan shall become effective upon the earlier to occur of adoption by the Board or approval by the shareholders of the Company, as described in Section 18. It shall continue in effect for a term of ten years unless sooner terminated under Section 15.
2. Glossary. The following definitions apply for purposes of this Plan:
3. "Administrator" means the Board or a committee appointed by the Board under Section 4.
4. "Board" means the Board of Directors of the Company.
5. "Change in Control" means a change in ownership or control of the Company by any of:
   1. a merger or consolidation in which the holders of stock possessing a majority of the voting power in the surviving entity (or a parent of the surviving entity) did not own a majority of the Common Stock immediately before the transaction;
   2. the sale of all or substantially all of the Company's assets to any other person or entity (other than a Subsidiary);
   3. the liquidation or dissolution of the Company;
   4. the direct or indirect acquisition by any person or related group of persons of beneficial ownership (within the meaning of Rule

13d-3 of the Exchange Act) of securities possessing more than 50% of the total combined voting power of the Company's outstanding securities pursuant to a tender or exchange offer made directly to the Company's shareholders that the Board does not recommend that the shareholders accept, or

* 1. a change in composition of the Board over a period of 36 consecutive months such that a majority of the Board ceases, by reason of one or more contested elections for Board membership, to be composed of individuals who either (A) have been Board members continuously since the beginning of that period or (B) have been elected or nominated for election as Board members during that period by at least a majority of the Board members described in clause (A) who were in office when the Board approved the election or nomination.

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* 1. "Code" means the Internal Revenue Code of 1986, as amended.
  2. "Common Stock" means the Common Stock of the Company.
  3. "Company" means Marvell Technology Group Ltd., a Bermuda

corporation.

* 1. "Consultant" means any person, other than an Employee, who is engaged by the Company or any Parent or Subsidiary to perform consulting or advisory services.
     1. "Continuous Service" means that an Optionee's employment and/or consulting relationship with the Company or a Parent or Subsidiary is not interrupted or terminated. Continuous Service is not interrupted by (i) any leave of absence approved by the Company, (ii) transfers between locations of the Company or between the Company, a Parent, a Subsidiary, or any successor, or

1. changes in status from Employee to Consultant or Consultant to Employee.
   1. "Employee" means any person employed by the Company or any Parent or Subsidiary of the Company.
   2. "Exchange Act" means the Securities Exchange Act of 1934, as

amended.

* 1. "Fair Market Value" means, as of any date, the value of common Stock determined as follows:
     + 1. If the Common Stock is quoted on an established stock exchange or national market system, including without limitation the National Association of Securities Dealers, Inc. Automated Quotation ("NASDAQ") National Market System, Fair Market Value shall be the closing sales price (or the closing bid, if no sales are reported) as quoted on that exchange or system for the day of the determination, as reported in The Wall Street Journal or an equivalent source, or if the determination date is not a trading day, then on the most recent preceding trading day;
       2. If the Common Stock is quoted on NASDAQ (but not on the National Market System) or regularly quoted by a recognized securities dealer but selling prices are not reported, Fair Market Value shall be the mean between the high bid and low asked prices for the Common Stock on the day of the determination, or on the most recent preceding trading day if the determination date is not a trading day; or
       3. In the absence of an established market for the Common Stock, Fair Market Value shall be determined by the Administrator.

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1. "Incentive Stock Option" or "ISO" means an Option intended to qualify as an "incentive stock option" within the meaning of, and to the extent otherwise permitted by, Section 422 of the Code.
2. "Nonstatutory Stock Option" or "NSO" means an Option not intended to qualify as an ISO.
3. "Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.
4. "Option" means a stock option granted pursuant to this Plan.
5. "Optioned Stock" means the Common Stock subject to an Option.
6. "Optionee" means the Employee or Consultant who receives an Option and includes any person who owns all or any part of an Option, or who is entitled to exercise an Option, after the death or disability of an Optionee.
7. "Parent" means a "parent corporation," present or future, as defined in Section 424(e) of the Code.
8. "Plan" means this Amended and Restated 1995 Marvell Technology Group Ltd. Stock Option Plan.
9. "Share" means a share of the Common Stock, as adjusted in accordance with Section 14(a).
10. "Subsidiary" means a "subsidiary corporation," present or future, as defined in Section 424(f) of the Code.

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EXHIBIT 10.3

MARVELL TECHNOLOGY GROUP LTD.

2000 EMPLOYEE STOCK PURCHASE PLAN

1. Purpose.

This Plan is intended to allow Employees of the Company and its Designated Subsidiaries to purchase Common Stock through accumulated Payroll deductions.

1. Defined Terms.

The meanings of defined terms (generally, capitalized terms) in this Plan are provided in Section 23 ("Glossary").

1. Eligibility.
2. Participation. Any person who is an Employee on an Offering Date shall be eligible to participate in this Plan during the corresponding Offering Period.
3. No Participation by Five-Percent Stockholders. Notwithstanding Section 3(a), an Employee shall not participate in this Plan during an Offering Period if immediately after the grant of a Purchase Right on the Offering Date, the Employee (or any other person whose stock would be attributed to the Employee under Section 424(d) of the Code) would own stock possessing five percent or more of the total combined voting power or value of all classes of stock of the Company or of any Subsidiary. For this purpose, an Employee is treated as owning stock that he or she could purchase by exercise of Purchase Rights or other options.
4. Offering Periods.

Except as otherwise determined by the Administrator:

1. the first Offering Period under this Plan shall begin on the first business day before the effective date of a firmly underwritten initial public offering of Common Stock and shall end on the last trading day of May of the second succeeding calendar year;
2. a new Offering Period shall begin on the first business day of each June and December while this Plan is in effect;
3. the duration of each Offering Period (other than the first Offering Period) shall be 24 months (measured from the first business day of the first month to the last business day of the 24th month); and
4. an Offering Period shall terminate on the first date that no Participant is enrolled in it.

2

1. Participation.
2. An Employee may become a Participant in this Plan by completing a subscription agreement, in such form as the Administrator may approve from time to time, and delivering it to the Administrator by 1 p.m. Pacific time on the applicable Offering Date, unless another time for filing the subscription agreement is set by the Administrator for all Employees with respect to a given Offering Period. The subscription agreement shall authorize Payroll deductions pursuant to this Plan and shall have such other terms as the Administrator may specify from time to time.
3. At the end of an Offering Period, each Participant in the Offering Period who remains an Employee shall be automatically enrolled in the next succeeding Offering Period (a "Re-enrollment") unless, in a manner and at a time specified by the Administrator, but in no event later than 1 p.m. Pacific time on the Offering Date of such succeeding Offering Period, the Participant notifies the Administrator in writing that the Participant does not wish to be re-enrolled. Re-enrollment shall be at the withholding percentage specified in the Participant's most recent subscription agreement. No Participant shall be automatically re-enrolled whose participation has terminated by operation of Section 10.
4. If the fair market value of the Common Stock on any Offering Date is less it was on the first day of a then-concurrent Offering Period, each Participant in the concurrent Offering Period shall automatically be withdrawn from such concurrent Offering Period and shall become a Participant in the commencing Offering Period. Participation shall be at the withholding percentage specified in the Participant's most recent (as of 1 p.m. Pacific time on the relevant Offering Date) subscription agreement. No Participant shall be automatically re-enrolled whose participation in this Plan has terminated by operation of Section 10.
5. Payroll Deductions.
6. Payroll deductions under this Plan shall be in whole percentages, from a minimum of 1% up to a maximum (not to exceed 20%) established by the Administrator from time to time, as specified by the Participant in his or her subscription agreement in effect on the first day of an Offering Period. Payroll deductions for a Participant shall begin with the first payroll payment date of the Offering Period and shall end with the last payroll payment date of the Offering Period, unless sooner terminated by the Participant as provided in Section 10.
7. A Participant's Payroll deductions shall be credited to his or her account under this Plan. A Participant may not make any additional payments into his or her account.
8. A Participant may reduce his or her Payroll deductions by any whole percentage (but not below 1%) at any time during an Offering Period, effective 15 days after the Participant files with the Administrator a new subscription agreement authorizing the change. A Participant may change his or her Payroll deductions during an Offering Period, effective the first business day after a Purchase Date, by delivering a new subscription agreement authorizing the change to the Administrator by 1 p.m. Pacific time on the effective date of the increase.

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1. Purchase Rights.
2. Grant of Purchase Rights. On the Offering Date of each Offering Period, the Participant shall be granted a Purchase Right to purchase during the Offering Period the number of shares of Common Stock determined by dividing (i) $25,000 multiplied by the number of (whole or part) calendar years in the Offering Period by (ii) the fair market value of a share of Common Stock on the Offering Date.
3. Terms of Purchase Rights. Except as otherwise determined by the Administrator, each Purchase Right shall have the following terms:
   1. The per-share price of the shares subject to a Purchase Right shall be 85% of the lower of the fair market values of a share of Common Stock on (a) the Offering Date on which the Purchase Right was granted and (b) the Purchase Date. The fair market value of the Common Stock on a given date shall be the closing price as reported in the Wall Street Journal; provided, however, that if there is no public trading of the Common Stock on that date, then fair market value shall be determined by the Administrator in its discretion.
   2. Payment for shares purchased by exercise of Purchase Rights shall be made only through Payroll deductions under Section 6.
   3. Upon purchase or disposition of shares acquired by exercise of a Purchase Right, the Participant shall pay, or make provision satisfactory to the Administrator for payment of, all tax (and similar) withholdings that the Administrator determines, in its discretion, are required due to the acquisition or disposition, including without limitation any such withholding that the Administrator determines in its discretion is necessary to allow the Company and its Subsidiaries to claim tax deductions or other benefits in connection with the acquisition or disposition.
   4. During his or her lifetime, a Participant's Purchase Right is exercisable only by the Participant.
   5. Purchase Rights will in all respects be subject to the terms and conditions of this Plan, as interpreted by the Administrator from time to time.
4. Purchase Dates; Purchase of Shares; Refund of Excess Cash.
5. The Administrator shall establish one or more Purchase Dates for each Offering Period. Unless otherwise determined by the Administrator, the last trading day of each May and November in an Offering Period shall be a Purchase Date.

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1. Except as otherwise determined by the Administrator, and subject to subsection (c), below, each then-outstanding Purchase Right shall be exercised automatically on each Purchase Date, following addition to the Participant's account of that day's Payroll deductions, to purchase the maximum number of full shares of Common Stock at the applicable price using the Participant's accumulated Payroll deductions.
2. If on a Purchase Date the fair market value of the Common Stock is less than 75% of the fair market value of the Common Stock on the immediately preceding Purchase Date (whether or not such preceding Purchase Date is in the same Offering Period) (the "Benchmark Date"), then (except as otherwise determined by the Administrator):
3. the maximum number of shares that a Participant may purchase on the Purchase Date shall be determined by multiplying the fair market value of the Common Stock on the Benchmark Date by 0.6375 and then dividing the Participant's accumulated Payroll deductions by the result;
4. a maximum number of shares established pursuant to the clause (i) shall remain the maximum number of shares purchasable by a Participant on any subsequent Purchase Date until the Purchase Date on which the fair market value of the Common Stock is at least 75% of the fair market value of the Common Stock on the Benchmark Date; and
5. notwithstanding the foregoing, during the initial Offering Period under this Plan, the Benchmark Date shall be date of the beginning such Offering Period.
6. The shares purchased upon exercise of a Purchase Right shall be deemed to be transferred to the Participant on the Purchase Date.
7. Registration and Delivery of Share Certificates.
8. Shares purchased by a Participant under this Plan will be registered in the name of the Participant, or in the name of the Participant and his or her spouse, or in the name of the Participant and joint tenant(s) (with right of survivorship), as designated by the Participant.
9. As soon as administratively feasible after each Purchase Date, the Company shall deliver to the Participant a certificate representing the shares purchased upon exercise of a Purchase Right. If approved by the Administrator in its discretion, the Company may instead (i) deliver a certificate (or equivalent) to a broker for crediting to the Participant's account or (ii) make a notation in the Participant's favor of non-certificated shares on the Company's stock records.

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1. Withdrawal; Termination of Employment.
2. A Participant may withdraw all, but not less than all, the Payroll deductions credited to his account under this Plan before a Purchase Date by giving written notice to the Administrator, in a form the Administrator prescribes from time to time, at least 15 days before the Purchase Date. Payroll deductions will then cease as to the Participant, no purchase of shares will be made for the Participant on the Purchase Date, and all Payroll deductions then credited to the Participant's account will be refunded promptly.
3. Upon termination of a Participant's Continuous Employment for any reason, including retirement or death, all Payroll deductions credited to the Participant's account will be promptly refunded to the Participant or, in the case of death, to the person or persons entitled thereto under Section 14, and the Participant's Purchase Right will automatically terminate.
4. A Participant's withdrawal from an offering will not affect the Participant's eligibility to participate in a succeeding offering or in any similar plan that may be adopted by the Company.
5. Use of Funds; No Interest.

Amounts withheld from Participants under this Plan shall constitute general funds of the Company, may be used for any corporate purpose, and need not be segregated from other funds. No interest shall accrue on a Participant's Payroll deductions.

1. Number of Shares Reserved.
2. The following numbers of shares of Common Stock are reserved for issuance under this Plan, and such number may be issued at any time before termination of this Plan:
   1. Beginning the date of approval of this Plan by the stockholders of the Company, 1,000,000 shares of Common Stock; and
   2. Beginning the first business day of each calendar year starting January 1, 2001 or after, the lesser of an additional (A) 500,000 shares of Common Stock, (B) 0.75% of the outstanding shares of capital stock on such date, or (C) an amount determined by the Board.
3. If the total number of shares that would otherwise be subject to Purchase Rights granted on an Offering Date exceeds the number of shares then available under this Plan (after deduction of all shares for which Purchase Rights have been exercised or are then exercisable), the Administrator shall make a pro-rata allocation of the available shares in a manner that it determines to be as uniform and equitable as practicable. In such event, the Administrator shall give written notice of the reduction and allocation to each Participant.

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1. The Administrator may, in its discretion, transfer shares reserved for issuance under this Plan into a plan or plans of similar terms, as approved by the Board, providing for the purchase of shares of Common Stock to employees of Subsidiaries designated by the Board that do not (or do not thereafter) participate in this Plan. Such additional plans may, without limitation, provide for variances from the terms of this Plan to take into account special circumstances (such as foreign legal restrictions) affecting the employees of the designated Subsidiaries.
2. Administration.

This Plan shall be administered by the Board or by such directors, officers, and employees of the Company as the Board may select from time to time (the "Administrator"). All costs and expenses incurred in administering this Plan shall be paid by the Company, provided that any taxes applicable to an Employee's participation in this Plan may be charged to the Employee by the Company. The Administrator may make such rules and regulations as it deems necessary to administer this Plan and to interpret any provision of this Plan. Any determination, decision, or action of the Administrator in connection with the construction, interpretation, administration, or application of this Plan or any right granted under this Plan shall be final, conclusive, and binding upon all persons, and no member of the Administrator shall be liable for any such determination, decision, or action made in good faith.

1. Designation of Beneficiary.
2. A Participant may file a written designation of a beneficiary who is to receive any shares and cash, if any, from the Participant's account under this Plan in the event of the Participant's death.
3. A designation of beneficiary may be changed by the Participant at any time by written notice. In the event of the death of a Participant, and in the absence of a beneficiary validly designated under this Plan who is living at the time of the Participant's death, the Administrator shall deliver such shares and/or cash to the executor or administrator of the Participant's estate, or if no such executor or administrator has been appointed (to the Administrator's knowledge), the Administrator, in its discretion, may deliver such shares and/or cash to the spouse or to any one or more dependents or relatives of the Participant or, if no spouse, dependent, or relative is known to the Administrator, then to such other person as the Administrator may designate.

15. Transferability.

Neither Payroll deductions credited to a Participant's account nor any rights with regard to the exercise of a Purchase Right or to receive shares under this Plan may be assigned, transferred, pledged, or otherwise disposed of in any way (other than by will, the laws of descent and distribution, or as provided in Section 14) by the Participant. Any such attempt at assignment, transfer, pledge, or other disposition shall be without effect, except that the Administrator may treat such act as an election to withdraw funds in accordance with Section 10.

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1. Reports.

Individual accounts will be maintained for each Participant in this Plan. Statements of account will be given to participating Employees promptly following each Purchase Date, setting forth the amounts of Payroll deductions, per-share purchase price, number of shares purchased, and remaining cash balance, if any.

1. Adjustments upon Changes in Capitalization.
2. Subject to any required action by the stockholders of the Company, the number of shares of Common Stock covered by each unexercised Purchase Right and the number of shares of Common Stock authorized for issuance under this Plan but not yet been placed under a Purchase Right (collectively, the "Reserves"), as well as the price per share of Common Stock covered by each unexercised Purchase Right, shall be proportionately adjusted for any change in the number of issued shares of Common Stock resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the Common Stock, or any change in the number of shares of Common Stock effected without receipt of consideration by the Company (not counting shares issued upon conversion of convertible securities of the Company as "effected without receipt of consideration"). Such adjustment shall made by the Board and shall be final, binding, and conclusive. Except as expressly provided herein, no issue by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no consequent adjustment shall be made with respect to, the number or price of shares of Common Stock subject to a Purchase Right.
3. In the event of the proposed dissolution or liquidation of the Company, the then-current Offering Period will terminate immediately before the consummation of the proposed action, unless otherwise provided by the Board. In the event of a proposed sale of all or substantially all of the Company's assets, or the merger of the Company with or into another corporation (if the Company's stockholders own less than 50% of the total outstanding voting power in the surviving entity or a parent of the surviving entity after the merger), each Purchase Right under this Plan shall be assumed or an equivalent purchase right shall be substituted by the successor corporation or a parent or subsidiary of the successor corporation, unless the successor corporation does not agree to assume the Purchase Rights or to substitute equivalent purchase rights, in which case the Board may, in lieu of such assumption or substitution, accelerate the exercisability of Purchase Rights and allow Purchase Rights to be exercisable as to shares as to which they would not otherwise be exercisable, on terms and for a period that the Board determines in its discretion. To the extent that the Board accelerates exercisability of Purchase Rights as described above, it shall promptly so notify all Participants in writing.
4. The Board may, in its discretion, also make provision for adjusting the Reserves, as well as the price per share of Common Stock covered by each outstanding Purchase Right, if the Company effects one or more reorganizations, recapitalizations, rights offerings, or other increases or reductions of shares of its outstanding Common Stock, or if the Company

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consolidates with or merges into any other corporation, in a transaction not otherwise covered by this Section 17.

1. Amendment or Termination.
2. The Board may at any time terminate or amend this Plan. No amendment may be made without prior approval of the stockholders of the Company (obtained in the manner described in Section 20) if it would increase the number of shares that may be issued under this Plan.
3. The Board may elect to terminate any or all outstanding Purchase Rights at any time, except to the extent that exercisability of such Purchase Rights has been accelerated pursuant to Section 17(b). If this Plan is terminated, the Board may also elect to terminate Purchase Rights upon completion of the purchase of shares on the next Purchase Date or to permit Purchase Rights to expire in accordance with their terms (with participation to continue through such expiration dates). If Purchase Rights are terminated before expiration, any funds contributed to this Plan that have not been used to purchase shares shall be refunded to Participants as soon as administratively feasible.
4. Notices.

All notices or other communications by a Participant to the Company or the Administrator under or in connection with this Plan shall be deemed to have been duly given when received in the form specified by the Administrator at the location, or by the person, designated by the Administrator for that purpose.

1. Stockholder Approval.

This Plan shall be submitted to the stockholders of the Company for their approval within 12 months after the date this Plan is adopted by the Board.

1. Conditions upon Issuance of Shares.
2. Shares shall not be issued with respect to a Purchase Right unless the exercise of such Purchase Right and the issuance and delivery of such shares pursuant thereto complies with all applicable provisions of law, domestic or foreign, including, without limitation, the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, the rules and regulations promulgated thereunder, and the requirements of any stock exchange upon which the shares may then be listed, and shall be further subject to the approval of counsel for the Company with respect to such compliance.
3. As a condition to the exercise of a Purchase Right, the Company may require the person exercising such Purchase Right to represent and warrant at the time of any such exercise that the shares are being purchased only for investment and without any present intention to sell

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or distribute such shares if, in the opinion of counsel for the Company, such a representation is required by any of the aforementioned applicable provisions of law.

22. Term of Plan.

This Plan shall become effective upon the earlier of its adoption by the Board or its approval by the stockholders of the Company as described in Section

1. It shall continue in effect for a term of 20 years unless sooner terminated under Section 18.
   1. Glossary. The following definitions apply for purposes of this Plan:
2. "Administrator" means the Board or the persons appointed by the Board to administer this Plan pursuant to Section 13.
3. "Board" means the Board of Directors of the Company.
4. "Code" means the Internal Revenue Code of 1986, as amended.
5. "Common Stock" means the Common Stock of the Company.
6. "Company" means Marvell Technology Group Ltd., a Bermuda

corporation.

1. "Continuous Employment" means the absence of any interruption or termination of service as an Employee. Continuous Employment shall not be considered interrupted in the case of a leave of absence agreed to in writing by the Company, provided that either (i) the leave does not exceed 90 days or (ii) re-employment upon expiration of the leave is guaranteed by contract or statute.
2. "Designated Subsidiaries" means the Subsidiaries that have been designated by the Board from time to time in its sole discretion to participate in this Plan.
3. "Employee" means any person, including an officer, who is customarily employed for at least 20 hours per week and five months per year by the Company or one of its Designated Subsidiaries. Whether an individual qualifies as an Employee shall be determined by the Administrator, in its sole discretion, by reference to Section 3401(c) of the Code and the regulations promulgated thereunder; unless the Administrator makes a contrary determination, the Employees of the Company shall, for all purposes of this Plan, be those individuals who satisfy the customary employment criteria set forth above and are carried as employees by the Company or a Designated Subsidiary for regular payroll purposes.
4. "Offering Date" means the first business day of an Offering Period.
5. "Offering Period" means a period established by the Administrator pursuant to Section 4 during which Payroll deductions are accumulated from Participants and applied to the purchase of Common Stock.

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1. "Participant" means an Employee who has elected to participate in this Plan pursuant to Section 5.
2. "Payroll" means all regular, straight-time gross earnings, exclusive of payments for overtime, shift premium, incentive compensation or payments, bonuses, and commissions.
3. "Plan" means this Marvell Technology Group Ltd. 2000 Employee Stock Purchase Plan.
4. "Purchase Date" means such business days during each Offering Period as may be established by the Administrator for the purchase of Common Stock pursuant to Section 8.
5. "Purchase Right" means a right to purchase Common Stock granted pursuant to Section 7.
6. "Subsidiary" means, from time to time, any corporation, domestic or foreign, of which not less than 50% of the voting shares are held by the Company or another Subsidiary of the Company.

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EXHIBIT 10.6

MARVELL TECHNOLOGY GROUP LTD.

INVESTOR RIGHTS AGREEMENT

SEPTEMBER 10, 1999

2

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| --- | --- | --- |
|  | TABLE OF CONTENTS |  |
|  |  | Page |
|  |  | ---- |
| Section 1. | Certain Definitions.............................................. | 3 |
| Section 2. | Restrictions on Transferability.................................. | 5 |
| Section 3. | Restrictive Legend............................................... | 5 |
| Section 4. | Notice of Proposed Transfers..................................... | 5 |
| Section 5. | Registration..................................................... | 6 |
| 5.1 | Requested Registration........................................... | 6 |
| 5.2 | Company Registration............................................. | 8 |
| 5.3 | Registration on Form S-3......................................... | 9 |
| 5.4. | Expenses of Registration......................................... | 10 |
| 5.5. | Registration Procedures.......................................... | 10 |
| 5.6 | Indemnification.................................................. | 11 |
| 5.7 | Information by Holders........................................... | 12 |
| 5.8 | Rule 144 Reporting............................................... | 13 |
| 5.9 | Transfer of Registration Rights.................................. | 13 |
| 5.10 | Termination of Registration Rights............................... | 13 |
| Section 6. | Financial Information and Inspection Rights...................... | 14 |
| Section 7. | Standoff Agreement............................................... | 15 |
| Section 8. | Additional Parties............................................... | 15 |
| Section 9. | Amendment........................................................ | 15 |
| Section 10. Governing Law................................................... | | 16 |
| Section 11. Entire Agreement................................................ | | 16 |
| Section 12. Notices, Etc.................................................... | | 16 |
| Section 13. Counterparts.................................................... | | 16 |

3

MARVELL TECHNOLOGY GROUP LTD.

INVESTORS RIGHTS AGREEMENT

This Investors Rights Agreement (this "Agreement") is made as of September 10, 1999 by and among Marvell Technology Group Ltd., a Bermuda corporation (the "Company"), the undersigned purchasers of Series A Preferred Stock of the Company (the "Series A Purchasers"), the undersigned purchasers of Series B Preferred Stock of the Company (the "Series B Purchasers"), the undersigned purchasers of Series C Preferred Stock of the Company (the "Series C Purchasers"), the undersigned Purchasers of this Series D Preferred Stock of the Company (the "Series D Purchasers") and the undersigned Purchasers of this Series E Preferred Stock of the Company (the "Series E Purchasers") (the Series A Purchasers, the Series B Purchasers, the Series C Purchasers, the Series D Purchasers, the Series E Purchasers and GBC Venture Capital, Inc. ("GBC"), being hereinafter referred to individually as a "Purchaser" and together, along with such additional parties as are hereafter deemed Purchasers pursuant to Section 8 hereof, as the "Purchasers"), and Weili Dai, Pantas Sutardja and Sehat Sutardja (individually, a "Founder" and collectively, the "Founders").

RECITALS

1. The Company and the Series A Purchasers, the Series B Purchasers, the Series C Purchasers and the Series D Purchasers are parties to that certain Registration and Information Rights Agreement, dated as of December 10, 1997 (the "Prior Agreement") pursuant to which the Company granted certain registration and other rights to the Series A Purchasers, the Series B Purchasers, the Series C Purchasers and the Series D Purchasers;
2. The Series E Purchasers and the Company have entered into or concurrently herewith are entering into a Series E Preferred Stock Purchase Agreement (the "Series E Purchase Agreement"), pursuant to which such Series E Purchasers are purchasing from the Company shares of its Series E Preferred Stock;
3. The obligations of the Company and such Series E Purchasers under the Series E Purchase Agreement are conditioned, among other things, upon the execution and delivery of this Agreement by the Company, the Founders, the Series A Purchasers, the Series B Purchasers, the Series C Purchasers, the Series D Purchasers and the Series E Purchasers; and
4. The Company and GBC entered in to that certain Loan and Security Agreement, dated May 21, 1998, as amended by the First Amendment to Loan and Security Agreement, dated July 16, 1999 (the "General Bank Agreement"), pursuant to which the Company issued to GBC a warrant to purchase up to 45,000 shares of Series D Preferred Stock (the "General Bank Series D Warrant") and a warrant to purchase up to 15,000 shares of Common Stock (the "General Bank Common Warrant");
5. The Series E Purchasers and GBC desire to be granted the rights set forth herein relating to registration rights and the Company, the Founders, the Series A Purchasers, the Series B Purchasers, the Series C Purchasers, and the Series D Purchasers desire that this Agreement supersede and cancel the Prior Agreement relating to registration and information rights;

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NOW, THEREFORE, in consideration of the mutual promises and covenants hereinafter set forth, the Company, the Founders, the Series A Purchasers, the Series B Purchasers, the Series C Purchasers, the Series D Purchasers, the Series E Purchasers and GBC agree as follows:

SECTION 1. CERTAIN DEFINITIONS.

As used in this Agreement, the following terms shall have the following respective meanings:

"Commission" shall mean the Securities and Exchange Commission or any other federal agency at the time administering the Securities Act.

"Common Stock" shall mean the common stock of the Company, $0.002 par value per share.

"Conversion Stock" shall mean the Series A Preferred, the Series B Preferred, the Series C Preferred, the Series D Preferred (including the Series C Preferred and Series D Preferred issuable upon exercise of outstanding warrants to purchase Series C Preferred and Series D Preferred), the Series E Preferred, and the Common Stock issued or issuable pursuant to the conversion of the Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred, Series E Preferred and the General Bank Common Warrant.

"Exchange Act" shall mean the Securities Exchange Act of 1934, as amended.

"General Meeting" shall mean any general meeting of the shareholders of the Company.

"Holders" shall mean (i) the Purchasers for so long as the Purchasers hold Conversion Stock or Registrable Securities, (ii) the Founders for so long as the Founders hold Registrable Securities, (iii) GBC for so long as GBC holds Conversion Stock or Registrable Securities, and (iv) any person holding Registrable Securities to whom the rights under this Agreement have been transferred in accordance with Section 5.9 hereof.

"Initiating Holders" shall mean any Holder or Holders of more than 25% of the Series A Preferred, the Series B Preferred, the Series C Preferred, the Series D Preferred, the Series E Preferred and the General Bank Common Warrant (and Registrable Securities issued upon conversion thereof) voting as a single class, with each share of Preferred Stock entitled to the number of votes equal to the number of shares of Common Stock into which such share would be converted on the date of the vote.

"Preferred Stock" shall mean collectively the Series A Preferred, the Series B Preferred, the Series C Preferred, the Series D Preferred and the Series E Preferred.

"Series A Preferred" shall mean the Series A Preferred Stock of the Company issued pursuant to the Series A Preferred Stock Purchase Agreement, dated April 26, 1995.

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"Series B Preferred" shall mean the Series B Preferred Stock of the Company issued pursuant to the Series B Preferred Stock Purchase Agreement, dated October 19, 1995.

"Series C Preferred" shall mean the Series C Preferred Stock of the Company issued pursuant to the Series C Preferred Stock Purchase Agreement, dated September 12, 1996 and the Series C Preferred Stock Purchase Agreement, dated November 4, 1996.

"Series D Preferred" shall mean the Series D Preferred Stock of the Company issued pursuant to the Series D Preferred Stock Purchase Agreement, dated December 10, 1997, and the General Bank Series D Warrant.

"Series E Preferred" shall mean the Series E Preferred Stock of the Company issued pursuant to the Series E Purchase Agreement.

"Registrable Securities" shall mean (i) shares of Common Stock of the Company issued or issuable in respect of the Conversion Stock upon any stock split, stock dividend, recapitalization, or similar event, or any Common Stock otherwise issuable with respect to the Conversion Stock, (ii) shares of Common Stock which are Conversion Stock, (iii) shares of Common Stock which are held by the Founders; provided, however, that shares of Conversion Stock or other securities shall only be treated as Registrable Securities if and so long as they have not been sold to or through a broker or dealer or underwriter in a public distribution or a public securities transaction.

The terms "register," "registered" and "registration" refer to a registration effected by preparing and filing a registration statement in compliance with the Securities Act, and the declaration or ordering of the effectiveness of such registration statement.

"Registration Expenses" shall mean all expenses, except as otherwise stated below under "Selling Expenses", incurred by the Company in complying with Sections 5.1, 5.2 and 5.3 hereof, including, without limitation, all registration, qualification and filing fees, printing expenses, escrow fees, fees and disbursements of counsel for the Company, blue sky fees and expenses, the expense of any special audits incident to or required by any such registration (but excluding the compensation of regular employees of the Company which shall be paid in any event by the Company) and the reasonable fees and disbursements of one counsel for all Holders as appointed by the Holders (other than the Founders).

"Restricted Securities" shall mean the securities of the Company required to bear the legend set forth in Section 3 hereof.

"Securities Act" shall mean the Securities Act of 1933, as amended, or any similar federal statute and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

"Selling Expenses" shall mean all underwriting discounts, selling commissions and stock transfer taxes applicable to the securities registered by the Holders and, except as set forth under "Registration Expenses," all reasonable fees and disbursements of counsel for any Holder.

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SECTION 2. RESTRICTIONS ON TRANSFERABILITY. The Registrable Securities and any other securities issued in respect of the Registrable Securities upon any stock split, stock dividend, recapitalization, merger, consolidation or similar event, shall not be sold, assigned, transferred or pledged except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. Each Purchaser will cause any proposed purchaser, assignee, transferee, or pledgee of any such shares held by such Purchaser to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement.

SECTION 3. RESTRICTIVE LEGEND. Each certificate representing (i) the Registrable Securities and (ii) any other securities issued in respect of the Registrable Securities upon any stock split, stock dividend, recapitalization, merger, consolidation or similar event, shall (unless otherwise permitted by the provisions of Section 4 below) be stamped or otherwise imprinted with a legend in substantially the following form (in addition to any legend required under applicable state securities laws):

THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY STATE SECURITIES LAWS AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. SUCH SHARES MAY NOT BE SOLD OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION UNLESS THE COMPANY RECEIVES AN OPINION OF COUNSEL REASONABLY ACCEPTABLE TO IT STATING THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT AND STATE SECURITIES LAWS. COPIES OF THE AGREEMENTS COVERING THE PURCHASE OF THESE SHARES AND RESTRICTING THEIR TRANSFER MAY BE OBTAINED AT NO COST BY WRITTEN REQUEST MADE BY THE HOLDER OF RECORD OF THIS CERTIFICATE TO THE SECRETARY OF THE CORPORATION AT THE PRINCIPAL EXECUTIVE OFFICES OF THE CORPORATION.

Each Purchaser and each Holder consents to the Company making a notation on its records and giving instructions to any transfer agent of the Preferred Stock or the Common Stock in order to implement the restrictions on transfer established in this Agreement.

SECTION 4. NOTICE OF PROPOSED TRANSFERS. The holder of each certificate representing Restricted Securities by acceptance thereof agrees to comply in all respects with the provisions of this Section 4. Prior to any proposed sale, assignment, transfer or pledge of any Restricted Securities (other than (i) a transfer not involving a change in beneficial ownership, (ii) in transactions involving the distribution without consideration of Restricted Securities

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by any Purchaser to any of its partners, or retired partners, or to the estate of any of its partners or retired partners, (iii) in transactions involving the transfer without consideration of Restricted Securities by a Purchaser during his or her lifetime by way of gift or on death by will or intestacy, or (iv) in transactions in compliance with Rule 144), unless there is in effect a registration statement under the Securities Act covering the proposed transfer, the holder thereof shall give written notice to the Company of such holder's intention to effect such transfer, sale, assignment or pledge. Each such notice shall describe the manner and circumstances of the proposed transfer, sale, assignment or pledge in sufficient detail, and shall be accompanied, at such holder's expense, by either (A) an unqualified written opinion of legal counsel who shall be, and whose legal opinion shall be, reasonably satisfactory to the Company addressed to the Company, to the effect that the proposed transfer of the Restricted Securities may be effected without registration under the Securities Act and applicable state securities laws, or (B) a "no action" letter from the Commission to the effect that the transfer of such securities without registration will not result in a recommendation by the staff of the Commission that action be taken with respect thereto, whereupon the holder of such Restricted Securities shall be entitled to transfer such Restricted Securities in accordance with the terms of the notice delivered by the holder to the Company. Each certificate evidencing the Restricted Securities transferred as above provided shall bear, except if such transfer is made pursuant to Rule 144, the appropriate restrictive legend set forth in Section 3 above, except that such certificate shall not bear such restrictive legend if, in the opinion of counsel for such holder and the Company, such legend is not required in order to establish compliance with any provision of the Securities Act.

SECTION 5. REGISTRATION.

5.1 REQUESTED REGISTRATION.

1. In case the Company shall receive from Initiating Holders a written request that the Company effect any registration, qualification or compliance with respect to shares of Registrable Securities with an anticipated aggregate offering price, net of underwriting discounts and commissions, of ten million dollars ($10,000,000), the Company will:
   1. promptly give written notice of the proposed registration, qualification or compliance to all other Holders, except for the Founders, who shall not be entitled to registration under this Section 5.1; and
   2. as soon as practicable, use its best efforts to effect such registration, qualification or compliance (including, without limitation, appropriate qualification under applicable blue sky or other state securities laws and appropriate compliance with applicable regulations issued under the Securities Act and any other governmental requirements or regulations) as may be so requested and as would permit or facilitate the sale and distribution of all or such portion of such Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any Holder or Holders joining in such request as are specified in a written request received by the Company within 20 days after receipt of such written notice from the Company.
2. Notwithstanding the foregoing, the Company shall not be obligated to take any action pursuant to this Section 5.1:

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1. In any particular jurisdiction in which the Company

would be required to execute a general consent to service of process in effecting such registration, qualification or compliance, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

1. Prior to the earlier to occur of: (x) December 31,

2001 and (y) six months after the effective date of the Company's first registered public offering of shares of its Common Stock;

1. During the period starting with the date sixty (60) days prior to the Company's estimated date of filing of, and ending on the date six (6) months immediately following the effective date of, any registration statement pertaining to securities of the Company (other than a registration of securities in a Rule 145 transaction or with respect to an employee benefit plan, or any other registration which is not appropriate for the registration of Registrable Securities), provided that the Company is actively employing in good faith all reasonable efforts to cause such registration statement to become effective;
2. After the Company has effected two such registrations pursuant to this subparagraph 5.1(a), and such registrations have been declared or ordered effective and remain effective until the earlier to occur of (x) 90 days or (y) the sale of all the securities offered pursuant to each such registration;
3. If the Company shall furnish to such Initiating Holders a certificate signed by the President of the Company stating that in the good faith judgment of the Board of Directors it would be seriously detrimental to the Company or its shareholders for a registration statement to be filed in the near future, then the Company's obligation to use its best efforts to register, qualify or comply under this Section 5.1 shall be deferred for a period not to exceed 90 days from the date of receipt of written request from the Initiating Holders, provided that the Company may not exercise this deferral right for more than 150 days in any one year period; or
4. If such registration, qualification or compliance is

proposed to be part of a firm commitment underwritten public offering with underwriters not reasonably acceptable to the Company.

Subject to the foregoing clauses (i) through (vi), the Company shall file a registration statement covering the Registrable Securities so requested to be registered as soon as practicable after receipt of the request or requests of the Initiating Holders.

1. Underwriting. If the Initiating Holders intend to distribute the Registrable Securities covered by their request in an underwritten offering, they shall so advise the Company as a part of their request made pursuant to this Section 5.1, and the Company shall advise the Holders as part of the notice given pursuant to Section 5.l(a)(i) that the right of any Holder to registration pursuant to Section 5.1 shall be conditioned upon such Holder's participation in the underwriting arrangements required by this Section 5.1, and the inclusion of such Holder's Registrable Securities in the underwriting to the extent requested shall be limited to the extent provided herein.

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The Company shall (together with all Holders proposing to distribute their securities through such underwriting) enter into an underwriting agreement in customary form with the managing underwriter selected for such underwriting by a majority in interest of the Initiating Holders, but subject to the Company's reasonable approval. Notwithstanding any other provision of this Section 5.1, if the managing underwriter advises the Initiating Holders in writing that marketing factors require a limitation of the number of shares to be underwritten, then the Company shall so advise all holders of Registrable Securities and the number of shares of Registrable Securities that may be included in the registration and underwriting shall be allocated among all Holders desiring to register Registrable Securities in the underwriting in proportion, as nearly as practicable, to the respective amounts of Registrable Securities held by such Holders at the time of filing the registration statement. No Registrable Securities excluded from the underwriting by reason of the underwriter's marketing limitation shall be included in such registration. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares.

If any Holder of Registrable Securities disapproves of the terms of the underwriting, such person may elect to withdraw therefrom by written notice to the Company, the managing underwriter and the Initiating Holders. The Registrable Securities so withdrawn shall also be withdrawn from registration, and such Registrable Securities shall not be transferred in a public distribution prior to 180 days after the effective date of such registration, or such other shorter period of time as the underwriters may require.

5.2 COMPANY REGISTRATION.

1. Notice of Registration. If at any time or from time to time the Company shall determine to register any of its equity securities, either for its own account or the account of a security holder or holders, other than (i) a registration relating solely to employee benefit plans, (ii) a registration relating solely to a Rule 145 transaction, or (iii) a registration in which the only equity security being registered is capital stock issuable upon conversion of convertible (or exchange of exchangeable) debt securities which are also being registered, the Company will:
   1. promptly give to each Holder written notice thereof;

and

* 1. include in such registration (and any related qualification under blue sky laws or other compliance), and in any underwriting involved therein, all the Registrable Securities specified in a written request or requests, made within twenty (20) days after receipt of such written notice from the Company, by any Holder.

1. Underwriting. If the registration of which the Company gives notice is for a registered public offering involving an underwriting, the Company shall so advise the Holders as a part of the written notice given pursuant to Section 5.2(a)(i). In such event, the right of any Holder to registration pursuant to Section 5.2 shall be conditioned upon such Holder's participation in such underwriting and the inclusion of Registrable Securities in the underwriting shall be limited to the extent provided herein.

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All Holders proposing to distribute their securities through such underwriting shall (together with the Company and the other holders distributing their securities through such underwriting) enter into an underwriting agreement in customary form with the managing underwriter selected for such underwriting by the Company. Notwithstanding any other provision of this Section 5.2, if the managing underwriter determines that marketing factors require a limitation of the number of shares to be underwritten, the managing underwriter may limit the Registrable Securities to be included in such registration (i) in the case of the Company's initial public offering, to zero, and (ii) in the case of any other offering, to an amount no less than 25% of the total number of shares to be sold in the offering, provided that in each such case no shares held by any Holder other than the Founders shall be so excluded from such registration until all shares held by the Founders are excluded from such registration. The number of shares of Registrable Securities that may be included in the registration and underwriting shall be allocated among all the Holders desiring to register Registrable Securities in the underwriting in proportion, as nearly as practicable, to the respective amounts of Registrable Securities held by such Holders at the time of filing the Registration Statement. To facilitate the allocation of shares in accordance with the above provisions, the Company may round the number of shares allocated to any Holder or holder to the nearest 100 shares.

If any of the Holders disapproves of the terms of any such underwriting, such Holder may elect to withdraw therefrom by written notice to the Company and the managing underwriter. Any securities excluded or withdrawn from such underwriting shall be withdrawn from such registration.

1. Right to Terminate Registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 5.2 prior to the effectiveness of such registration whether or not any Holder has elected to include securities in such registration.

5.3 REGISTRATION ON FORM S-3.

1. If any of the Holders (excluding the Founders) request that the Company file a registration statement on Form S-3 (or any successor form to Form S-3) for a public offering of shares of the Registrable Securities the reasonably anticipated aggregate price to the public of which, net of underwriting discounts and commissions, would exceed $1,000,000, and the Company is a registrant entitled to use Form S-3 to register the Registrable Securities for such an offering, the Company shall use its best efforts to cause such Registrable Securities to be registered for the offering on such form and to cause such Registrable Securities to be qualified in such jurisdictions as such Holder or Holders may reasonably request; provided, however, that the Company shall not be required to effect more than one registration pursuant to this Section 5.3 in any six (6) month period. The Company shall inform other Holders (excluding the Founders) of the proposed registration and offer them the opportunity to participate. In the event the registration is proposed to be part of a firm commitment underwritten public offering, the substantive provisions of Section 5.1(c) shall be applicable to each such registration initiated under this Section 5.3.
2. Notwithstanding the foregoing, the Company shall not be obligated to take any action pursuant to this Section 5.3:

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1. in any particular jurisdiction in which the Company

would be required to execute a general consent to service of process in effecting such registration, qualification or compliance, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

1. if the Company, within ten (10) days of the receipt of the request of the Holders, gives notice of its bona fide intention to effect the filing of a registration statement with the Commission within ninety (90) days of receipt of such request (other than with respect to a registration statement relating to a Rule 145 transaction, an offering solely to employees, or any other registration which is not appropriate for the registration of Registrable Securities);
2. during the period starting with the date sixty (60) days prior to the Company's estimated date of filing of, and ending on the date six (6) months immediately following, the effective date of any registration statement pertaining to securities of the Company (other than a registration of securities in a Rule 145 transaction or with respect to an employee benefit plan, or any other registration which is not appropriate for the registration of Registrable Securities), provided that the Company is actively employing in good faith all reasonable efforts to cause such registration statement to become effective; or
3. if the Company shall furnish to such Holder or Holders a certificate signed by the President of the Company stating that in the good faith judgment of the Board of Directors it would be seriously detrimental to the Company or its shareholders for registration statements to be filed in the near future, then the Company's obligation to use its best efforts to file a registration statement shall be deferred for a period not to exceed 90 days from the receipt of the request to file such registration by such Holder or Holders, provided that the Company may not exercise this deferral right for more than 150 days in any one year period.

5.4. EXPENSES OF REGISTRATION. All Registration Expenses incurred in connection with (i) the two registrations pursuant to Section 5.1, (ii) all registrations pursuant to Section 5.2, and (iii) three registrations pursuant to Section 5.3 shall be borne by the Company. Unless otherwise stated, all Selling Expenses relating to securities registered on behalf of the Holders and all other registration expenses shall be borne by the Holders of such securities pro rata on the basis of the number of shares so registered.

5.5. REGISTRATION PROCEDURES. In the case of each registration, qualification or compliance effected by the Company pursuant to this Agreement, the Company will keep each of the Holders advised in writing as to the initiation of each registration, qualification and compliance and as to the completion thereof. At its expense the Company will:

1. prepare and file with the Commission a registration statement with respect to such securities and use its reasonable best efforts to cause such registration statement to become and remain effective for at least ninety (90) days or until the distribution described in the registration statement has been completed, whichever first occurs; and
2. furnish to the Holders participating in such registration and to the underwriters of the securities being registered such reasonable number of copies of the

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12

registration statement, preliminary prospectus, final

prospectus and such other documents as such underwriters may reasonably request in order to facilitate the public offering of such securities.

5.6 INDEMNIFICATION.

1. The Company will indemnify each Holder of securities, each of its officers, directors and partners, and each person controlling such Holder within the meaning of Section 15 of the Securities Act, with respect to which registration, qualification or compliance has been effected pursuant to this Agreement, and each underwriter, if any, and each person who controls any underwriter within the meaning of Section 15 of the Securities Act, against all expenses, claims, losses, damages and liabilities (or actions in respect thereof), including any of the foregoing incurred in settlement of any litigation (commenced or threatened), arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any registration statement, prospectus, offering circular or other document, or any amendment or supplement thereto, incident to any such registration, qualification or compliance, or based on any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, and will reimburse each such Holder, each of its officers, directors, general partners and each person controlling such Holder, each such underwriter and each person who controls any such underwriter, for any legal and any other expenses reasonably incurred, as such expenses are incurred, in connection with investigating, preparing or defending any such claim, loss, damage, liability or action; provided that the Company will not be liable in any such case to the extent that any such claim, loss, damage, liability or expense arises out of or is based on any untrue statement or omission or alleged untrue statement or omission, made in reliance upon and in conformity with written information furnished to the Company by such Holder, controlling person or underwriter specifically for use therein; provided, however, that the foregoing indemnity agreement is subject to the condition that, insofar as it relates to any such untrue statement, alleged untrue statement, omission or alleged omission made in a preliminary prospectus on file with the Commission at the time the registration statement becomes effective or the amended prospectus filed with the Commission pursuant to Rule 424(b) (the "Final Prospectus"), such indemnity agreement shall not inure to the benefit of: (1) any Holder, (i) if there is no underwriter, and a copy of the Final Prospectus was not furnished to the person asserting the loss, liability, claim or damage at or prior to the time such action is required by the Securities Act and the Final Prospectus would have cured the defect giving rise to the loss, liability, claim or damage (to the extent that such Holder was obligated by law to provide a copy of the Final Prospectus to such person), or (ii) to the extent that such untrue statement, alleged untrue statement, omission or alleged omission is made in reliance upon and in conformity with written information furnished to the Company by an instrument duly executed by such Holder and stated to be specifically for use therein; or (2) any underwriter, (i) if a copy of the Final Prospectus was not furnished to the person asserting the loss, liability, claim or damage at or prior to the time such action is required by the Securities Act and the Final Prospectus would have cured the defect giving rise to the loss, liability, claim or damage, or (ii) to the extent that such untrue statement, alleged untrue statement, omission or alleged omission is made in reliance on and in conformity with written information furnished to the Company by an instrument duly executed by such underwriter and stated to be specifically for use therein.

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13

1. Each Holder will, if Registrable Securities held by such Holder are included in the securities as to which such registration, qualification or compliance is being effected, indemnify the Company, each of its directors and officers, each underwriter, if any, of the Company's securities covered by such a registration statement, each person who controls the Company or such underwriter within the meaning of Section 15 of the Securities Act, and each other such Holder, each of its officers and directors and each person controlling such Holder within the meaning of Section 15 of the Securities Act, against all expenses, claims, losses, damages and liabilities (or actions in respect thereof), including any of the foregoing incurred in settlement of any litigation (commenced or threatened), arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any such registration statement, prospectus, offering circular or other document, or any amendment or supplement thereto, incident to such registration, qualification or compliance, or any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, and will reimburse the Company, such Holders, such directors, officers, persons, underwriters or control persons for any legal and any other expenses reasonably incurred, as such expenses are incurred, in connection with investigating or defending any such claim, loss, damage, liability or action, in each case to the extent, but only to the extent, that such untrue statement (or alleged untrue statement) or omission (or alleged omission) is made in such registration statement, prospectus, offering circular or other document in reliance upon and in conformity with written information furnished to the Company by such Holder specifically for use therein. Notwithstanding the foregoing, the liability of each Holder under this subsection 5.6(b) shall be limited in an amount equal to the net proceeds received by such Holder from the sale of shares in such registration, unless such liability arises out of or is based on willful misconduct by such Holder.
2. Each party entitled to indemnification under this Section

5.6 (the "Indemnified Party") shall give notice to the party required to provide indemnification (the "Indemnifying Party") promptly after such Indemnified Party has actual knowledge of any claim as to which indemnity may be sought, and shall permit the Indemnifying Party to assume the defense of any such claim or any litigation resulting therefrom, provided that counsel for the Indemnifying Party, who shall conduct the defense of such claim or litigation, shall be approved by the Indemnified Party (whose approval shall not unreasonably be withheld) and the Indemnified Party may participate in such defense at such party's expense, and provided further that the failure of any Indemnified Party to give notice as provided herein shall not relieve the Indemnifying Party of its obligations under this Agreement, unless the failure to give such notice is materially prejudicial to an Indemnifying Party's ability to defend such action, and provided further that the Indemnifying Party shall not assume the defense for matters as to which there is a conflict of interest or separate and different defenses. No Indemnifying Party, in the defense of any such claim or litigation, shall, except with the consent of each Indemnified Party, consent to entry of any judgment or enter into any settlement which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party of a release from all liability in respect of such claim or litigation.

5.7 INFORMATION BY HOLDERS. The Holder or Holders of Registrable Securities included in any registration shall furnish to the Company such information regarding such Holder or Holders, the Registrable Securities held by them and the distribution proposed by such

12

14

Holder or Holders as the Company may request in writing and as shall be required in connection with any registration, qualification or compliance referred to in this Agreement.

5.8 RULE 144 REPORTING. With a view to making available the benefits of certain rules and regulations of the Commission which may at any time permit the sale of the Restricted Securities to the public without registration, after such time as a public market exists for the Common Stock, the Company agrees to use all reasonable efforts to:

1. Make and keep public information available, as those terms are understood and defined in Rule 144 under the Securities Act, at all times after the effective date that the Company becomes subject to the reporting requirements of the Securities Act or the Exchange Act;
2. File with the Commission in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements); and
3. So long as any of the Holders owns any Restricted Securities, to furnish to such Holders forthwith upon request a written statement by the Company as to its compliance with the reporting requirements of said Rule 144 (at any time after 90 days after the effective date of the first registration statement filed by the Company for an offering of its securities to the general public), and of the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements), a copy of the most recent annual or quarterly report of the Company, and such other reports and documents of the Company and other information in the possession of or reasonably obtainable by the Company as such Holders may reasonably request in availing itself of any rule or regulation of the Commission allowing the Holders to sell any such securities without registration.

5.9 TRANSFER OF REGISTRATION RIGHTS. Any rights to cause the Company to register securities granted to the Holders under Sections 5.1, 5.2 and 5.3 may be assigned to a transferee or assignee in connection with any transfer or assignment of Registrable Securities by a Purchaser or Founder, to the extent of the rights of such transferor, only if such transferee or assignee, as appropriate, acquires at least 50,000 shares (as adjusted for stock splits, stock dividends, recapitalizations and the like) of Common Stock or Conversion Stock, provided written notice thereof is promptly given to the Company and the transferee agrees to be bound by the provisions of this Agreement. Notwithstanding the foregoing, the rights to cause the Company to register securities may be assigned to any constituent partner or retired partner of a Holder which is a partnership, or an affiliate of a Holder which is a corporation, or a family member or trust for the benefit of a Holder who is an individual, provided written notice thereof is promptly given to the Company and the transferee agrees to be bound by the provisions of this Agreement.

5.10 TERMINATION OF REGISTRATION RIGHTS. The rights granted pursuant to Sections 5.1, 5.2 and 5.3 of this Agreement shall terminate on the five year anniversary of the Company's initial public offering pursuant to an effective registration statement under the Securities Act, or as to any Holder at such time as such Holder is able to sell all such Registrable

13

15

Securities as are held by such Holder under Rule 144 promulgated under the Securities Act within a 90-day period.

SECTION 6. FINANCIAL INFORMATION AND INSPECTION RIGHTS.

* 1. The Company will provide the following reports and rights to each Purchaser for so long as such Purchaser continues to hold at least 75,000 shares of Conversion Stock (as adjusted for stock splits, stock dividends, recapitalizations and the like):
     1. As soon as practicable after the end of each fiscal year, and in any event within 120 days thereafter and at least seven days prior to any General Meeting at which the Financial Information (as defined below) is to be considered, consolidated balance sheets of the Company and its subsidiaries, if any, as of the end of such fiscal year, and consolidated statements of operations and consolidated statements of cash flows and shareholders' equity of the Company and its subsidiaries, if any, for such year, prepared in accordance with generally accepted accounting principles and setting forth in each case in comparative form the figures for the previous fiscal year, all in reasonable detail and audited by independent public accountants of national standing selected by the Company (the "Financial Information"), and a capitalization table in reasonable detail for such fiscal year;
     2. As soon as practicable after the end of the first,

second, and third quarterly accounting periods in each fiscal year of the Company and in any event within 60 days thereafter, a consolidated balance sheet of the Company and its subsidiaries, if any, as of the end of each such quarterly period, and consolidated statements of operations and, to the extent prepared for the Board of Directors of the Company, consolidated statements of cash flows of the Company and its subsidiaries for such period and for the current fiscal year to date, prepared in accordance with generally accepted accounting principles (other than for accompanying notes), subject to changes resulting from year-end audit adjustments, in reasonable detail and signed by the principal financial or accounting officer of the Company; and

* + 1. The Company shall permit each such Purchaser, at such Purchaser's expense, to visit and inspect the Company's properties, to examine its books of account and records, and to discuss the Company's affairs, finances and accounts with its officers, all at such reasonable times as may be requested by such Purchaser; provided, however, that the Company shall not be obligated pursuant to this clause (iii) to provide access to any information that it reasonably considers to be a trade secret or similar confidential information.

1. The rights granted pursuant to this Section 6 may be assigned to a transferee or assignee in connection with any transfer or assignment of Conversion Stock by any such Purchaser only if such transferee or assignee, as appropriate, acquires at least 75,000 shares (as adjusted for stock splits, stock dividends, recapitalizations and the like) of the Conversion Stock, provided written notice thereof is promptly given to the Company.
2. Each of the Purchasers acknowledge and agree that any information obtained pursuant to this Section 6 which may be considered "inside" non-public information will not be utilized by any Purchaser in connection with purchases or sales of the Company's securities except in compliance with applicable state and federal securities laws.

14

16

1. The covenants set forth in this Section 6 shall terminate and be of no further force or effect upon the consummation of a firm commitment underwritten public offering or at such time as the Company is required to file reports pursuant to Section 13 or 15(d) of the Exchange Act, whichever shall occur first.

SECTION 7. STANDOFF AGREEMENT. In connection with any public offering of the Company's securities in connection with an effective registration statement under the Securities Act, each Holder agrees, upon the request of the Company or the underwriters managing any underwritten offering of the Company's securities, not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any securities of the Company (other than those included in the registration) without the prior written consent of the Company or such underwriters, as the case may be, for such period of time, not to exceed one hundred eighty (180) days for the Company's initial public offering registration and not to exceed ninety (90) days in the case of any subsequent registration (or such lesser period as officers, directors or 1% shareholders of the voting power of the Company are so restricted with respect to the transfer of shares of capital stock of the Company held by them) after the effective date of the registration statement relating thereto provided that, should the underwriters release from such transfer restricted shares held by any officer, director or 1% shareholder, then such Holder shall similarly be released from such restriction. Each of the Purchasers and each Holder agrees that the Company may instruct its transfer agent to place stop-transfer notations in its records to enforce the provisions of this Section 7.

SECTION 8. ADDITIONAL PARTIES. The parties hereto agree that additional holders of Preferred Stock may, with the consent only of the Company, be added as parties to this Agreement with respect to any or all securities of the Company held by them, and shall thereupon be deemed for all purposes "Purchasers" hereunder; provided, however, that from and after the date of this Agreement, the Company shall not without the prior written consent of each Purchaser, enter into any agreement with any holder or prospective holder of any securities of the Company providing for the grant to such holder of rights superior to those granted herein. Any additional party added pursuant to this Section 8 shall execute a counter-part of this Agreement, and upon execution by such additional party and by the Company, shall be considered a Purchaser for purposes of this Agreement.

SECTION 9. AMENDMENT. Any provision of this Agreement may be amended or the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and the Holders of a majority of each of: (i) the Founders and (ii) the Holders of Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred, Series E Preferred and the General Bank Warrant, voting together as a single class, with each share of Preferred Stock entitled to the number of votes equal to the number of shares of Common Stock into which such share would be converted on the date of the vote; provided that, no such amendment shall impose or increase any liability or obligation or impair any right of a Holder without the consent of such Holder. Any amendment or waiver effected in accordance with this Section 9 shall be binding upon each Holder of Registrable Securities at the time outstanding (including securities into which such securities are convertible), each future Holder of all such securities, and the Company.

15

17

SECTION 10. GOVERNING LAW. This Agreement and the legal relations between the parties arising hereunder shall be governed by and interpreted in accordance with the internal laws of Bermuda.

SECTION 11. ENTIRE AGREEMENT. This Agreement constitutes the full and entire understanding and agreement between the parties hereto regarding the matters set forth herein, and supersedes in their entirety all prior agreements and understandings among the parties relative to the subject matter hereof. Upon execution of this Agreement by the parties required to amend the Prior Agreement, the Prior Agreement shall be rendered null and void and be of no further force or effect. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon the successors, assigns, heirs, executors and administrators of the parties hereto.

SECTION 12. NOTICES, ETC. All notices and other communications required or permitted hereunder shall be in writing and shall be deemed effectively given upon personal delivery to the party to be notified or three (3) days after deposit with the United States mail, by registered or certified mail, postage prepaid, addressed (a) if to a Purchaser, at the address of such Purchaser on the records of the Company, or at such other address as the Purchaser shall have furnished to the Company in writing in accordance with this Section 12, (b) if to GBC, at the address set forth on the General Bank Agreement, (c) if to a Founder, at the address of such Founder on the records of the Company, or at such other address as the Founder shall have furnished to the Company in writing in accordance with this Section 12, (d) if to any other holder of Conversion Stock, at such address as such holder shall have furnished the Company in writing in accordance with this Section 12, or, until any such holder so furnishes an address to the Company, then to and at the address of the last holder thereof who has so furnished an address to the Company, or (e) if to the Company, at its principal office, or that of Marvell Semiconductor, Inc., its subsidiary.

SECTION 13. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument.

[Signature pages follow]

16

18

The foregoing agreement is hereby executed as of the date first above written.

"COMPANY"

MARVELL TECHNOLOGY GROUP LTD.

a Bermuda corporation

By: /s/ SEHAT SUTARDJA

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Sehat Sutardja, President

and Chief Executive Officer

[Signature page to Investor Rights Agreement dated September 10, 1999]

[Shareholder signature pages intentionally omitted]

1

EXHIBIT 23.3

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the use in this Registration Statement on Form S-1 of our report dated March 3, 2000 except for Note 11, which is as of March 21, 2000, relating to the financial statements of Marvell Technology Group Ltd., which appears in such Registration Statement. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

San Jose, California

June 7, 2000