

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)

(X) QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended SEPTEMBER 30, 1998.

OR

() TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____.

Commission File Number: 0-21184

MICROCHIP TECHNOLOGY INCORPORATED
(Exact Name of Registrant as Specified in Its Charter)

DELAWARE
(State or Other Jurisdiction of
Incorporation or Organization)

86-0629024
(I.R.S. Employer
Identification No.)

2355 W. CHANDLER BLVD., CHANDLER, AZ 85224-6199
(602) 786-7200
(Address, Including Zip Code, and Telephone Number,
Including Area Code, of Registrant's
Principal Executive Offices)

The registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to the filing requirements for the past 90 days.

Yes X No

The number of shares outstanding of the issuer's common stock, as of October 30, 1998:

COMMON STOCK, \$.001 PAR VALUE: 51,352,935 SHARES

MICROCHIP TECHNOLOGY INCORPORATED AND SUBSIDIARIES

INDEX

PART I. FINANCIAL INFORMATION. PAGE
Item 1. Financial Statements
Condensed Consolidated Balance Sheets - September 30, 1998 and March 31, 1998.....3
Condensed Consolidated Statements of Income - Three and Six Months Ended September 30, 1998 and September 30, 1997.....4
Condensed Consolidated Statements of Cash Flows - Six Months Ended September 30, 1998 and September 30, 1997.....5
Notes to Condensed Consolidated Financial Statements.....6
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.....10
PART II. OTHER INFORMATION.
Item 4. Submission of Matters to a Vote of Security Holders.....18
Item 6. Exhibits and Reports on Form 8-K.....18

EXHIBITS

- 3.1 By-Laws of Registrant as Amended through August 10, 1998
- 3.2 Modification Agreement dated as of November 4, 1998 to the Credit Agreement dated as of October 28, 1997 among Registrant, the Banks named therein, Bank One, Arizona, N.A., as Administrative Agent and The First National Bank of Chicago, as Documentation Agent

2

MICROCHIP TECHNOLOGY INCORPORATED AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS

(in thousands except share amounts)

<TABLE>
<CAPTION>

ASSETS

	September 30, 1998	March 31, 1998
	(Unaudited)	
	<C>	<C>
Cash and cash equivalents	\$ 27,795	\$ 32,188
Accounts receivable, net	63,925	56,320
Inventories	71,340	66,293
Prepaid expenses	2,948	2,208
Deferred tax asset	39,960	35,778
Other current assets	2,088	1,802
	-----	-----
Total current assets	208,056	194,589
Property, plant and equipment, net	317,712	325,892
Other assets	4,133	4,262
	-----	-----
Total assets	\$ 529,901	\$ 524,743
	=====	=====

LIABILITIES AND STOCKHOLDERS' EQUITY

Short-term lines of credit	\$ 1,800	\$ 16,000
Accounts payable	36,977	36,049
Current maturities of long-term debt	1,661	2,196
Current maturities of capital lease obligations	1,156	2,206
Accrued liabilities	53,628	53,452
Deferred income on shipments to distributors	31,916	29,515
	-----	-----
Total current liabilities	127,138	139,418
Long-term lines of credit	45,000	7,000
Long-term debt, less current maturities	764	1,420
Capital lease obligations, less current maturities	92	348
Long-term pension accrual	922	976
Deferred tax liability	9,192	8,273
Stockholders' equity:		
Preferred stock, \$.001 par value; authorized 5,000,000 shares; no shares issued or outstanding	--	--
Common stock, \$.001 par value; authorized 100,000,000 shares; issued 53,881,342 and outstanding 51,177,618 shares at September 30, 1998;	54	54
issued 53,881,342 and outstanding 52,870,389 shares at March 31, 1998		
Additional paid-in capital	171,402	176,865
Retained earnings	244,530	214,193
Less shares of common stock held in treasury at cost; 2,703,724 shares at September 30, 1998 and 1,010,953 at March 31, 1998	(69,193)	(23,804)
	-----	-----
Net stockholders' equity	346,793	367,308
Total liabilities and stockholders' equity	\$ 529,901	\$ 524,743
	=====	=====

</TABLE>

See accompanying notes to condensed consolidated financial statements

3

CONDENSED CONSOLIDATED STATEMENTS OF INCOME

(in thousands except per share amounts)

	Three Months Ended September 30,		Six Months Ended September 30,	
	1998	1997	1998	1997
	(Unaudited)		(Unaudited)	
<S>	<C>	<C>	<C>	<C>
Net sales	\$ 103,780	\$ 103,036	\$ 203,269	\$ 200,264
Cost of sales	52,307	50,895	102,538	98,730
Gross profit	51,473	52,141	100,731	101,534
Operating expenses:				
Research and development	10,572	9,380	20,788	18,590
Selling, general and administrative	16,237	17,198	32,291	33,426
Special charge	--	--	5,500	--
	26,809	26,578	58,579	52,016
Operating income	24,664	25,563	42,152	49,518
Other income (expense):				
Interest income	215	845	420	1,585
Interest expense	(1,049)	(287)	(1,562)	(568)
Other, net	229	156	548	169
Income before income taxes	24,059	26,277	41,558	50,704
Income taxes	6,496	7,095	11,221	13,690
Net income	\$ 17,563	\$ 19,182	\$ 30,337	\$ 37,014
Basic net income per share	\$ 0.34	\$ 0.36	\$ 0.59	\$ 0.69
Diluted net income per share	\$ 0.33	\$ 0.34	\$ 0.56	\$ 0.65
Weighted average common shares outstanding	50,963	53,535	51,546	53,334
Weighted average common and common equivalent shares outstanding	53,358	56,935	53,940	56,616

</TABLE>

See accompanying notes to condensed consolidated financial statements

4

MICROCHIP TECHNOLOGY INCORPORATED AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

	Six Months Ended September 30,	
	1998	1997
	(Unaudited)	
<S>	<C>	<C>
Cash flows from operating activities:		
Net income	\$ 30,337	\$ 37,014
Adjustments to reconcile net income to net cash provided by operating activities:		
Provision for doubtful accounts	201	250
Provision for inventory valuation	1,316	(400)
Provision for pension accrual	476	697
Depreciation and amortization	32,336	25,143
Amortization of purchased technology	150	150
Deferred income taxes	(3,263)	(3,005)
Increase in accounts receivable	(7,806)	(4,856)
Increase in inventories	(6,363)	(1,577)
Increase in accounts payable and accrued liabilities	1,104	28,376
Change in other assets and liabilities	825	9,631

Net cash provided by operating activities	49,313	91,423
Cash flows from investing activities:		
Capital expenditures	(24,157)	(78,616)
Net cash used in investing activities	(24,157)	(78,616)
Cash flows from financing activities:		
Net proceeds from lines of credit	23,800	--
Payments on long-term debt	(1,191)	(1,245)
Payments on capital lease obligations	(1,306)	(1,497)
Repurchase of common stock	(57,890)	--
Proceeds from sale of stock and put options	7,038	7,179
Net cash (used) provided by financing activities	(29,549)	4,437
Net increase (decrease) in cash and cash equivalents	(4,393)	17,244
Cash and cash equivalents at beginning of period	32,188	42,999
Cash and cash equivalents at end of period	\$ 27,795	\$ 60,243

</TABLE>

See accompanying notes to condensed consolidated financial statements

5

MICROCHIP TECHNOLOGY INCORPORATED AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(1) BASIS OF PRESENTATION

The accompanying condensed consolidated financial statements include the accounts of Microchip Technology Incorporated and its wholly owned subsidiaries (the "Company"). All intercompany balances and transactions have been eliminated in consolidation.

The accompanying financial statements have been prepared in accordance with generally accepted accounting principles, pursuant to the rules and regulations of the Securities and Exchange Commission. In the opinion of the Company, the accompanying financial statements include all adjustments of a normal recurring nature which are necessary for a fair presentation of the results for the interim periods presented. Certain information and footnote disclosures normally included in financial statements have been condensed or omitted pursuant to such rules and regulations. It is suggested that these financial statements be read in conjunction with the consolidated financial statements and the notes thereto included in the Company's Annual Report on Form 10-K for the year ended March 31, 1998. The results of operations for the six months ended September 30, 1998 are not necessarily indicative of the results to be expected for the full fiscal year.

(2) SPECIAL CHARGE

During the quarter ended June 30, 1998, the Company recognized a special charge of \$5,500,000 which was comprised of three elements: a \$3,300,000 legal settlement with another company involving an intellectual property dispute; a \$1,700,000 write-off of products obsoleted by the introduction of newer products; and a \$500,000 charge associated with the restructuring of a portion of the Company's sales organization.

(3) ACQUISITIONS

KEELOQ(R) HOPPING CODE

On November 17, 1995, the Company acquired the Keeloq(R) hopping code technology and patents developed by Nanotek Ltd. of the Republic of South Africa, and the marketing rights related thereto (the "Keeloq Acquisition"). The Keeloq Acquisition was treated as an asset purchase for accounting purposes. The amount paid for the Keeloq Acquisition, including all related costs, was \$12,948,000. The Company has written off a substantial portion of the purchase price that relates to in-process research and development costs, which is consistent with the Company's ongoing treatment of research and development costs, as well as all Keeloq Acquisition-related costs. The special charge associated with the Keeloq Acquisition was \$11,448,000, with the balance treated

as purchased technology and amortized on a straight line basis over five years. Under the terms of the Keeloq Acquisition, the Company agreed to make a secondary payment, the amount of which will be determined by a formula based on the net sales and gross margin results of the Company's Keeloq product division for a six month measurement period. Any such secondary payment is based on future performance and is currently not determinable. The measurement period will be either the six month period ending December 31, 1998 or the six month period ending March 31, 1999, depending upon an election which can be made either by the Company or the seller. As of the date hereof, neither the Company nor the seller has made the election, and the measurement period has not yet therefore been determined. It is currently anticipated that any such payment would be expensed in the quarter the amount is determined. The impact of the Keeloq Acquisition to the Company's reported financial position and results of

6

operations is immaterial, therefore, pro-forma information illustrating the combined results after the Keeloq Acquisition has not been provided.

(4) ACCOUNTS RECEIVABLE

Accounts receivable consists of the following (amounts in thousands):

	September 30, 1998	March 31, 1998

	(unaudited)	
Trade accounts receivable	\$ 65,974	\$ 57,922
Other	445	790

	66,419	58,712
Less allowance for doubtful accounts	2,494	2,392

	\$ 63,925	\$ 56,320
	=====	

(5) INVENTORIES

The components of inventories are as follows (amounts in thousands):

	September 30, 1998	March 31, 1998

	(unaudited)	
Raw materials	\$ 5,722	\$ 5,795
Work in process	45,880	40,000
Finished goods	30,255	30,021

	81,857	75,816
Less allowance for inventory valuation	10,517	9,523

	\$ 71,340	\$ 66,293
	=====	

(6) PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consists of the following (amounts in thousands):

	September 30, 1998	March 31, 1998

	(unaudited)	
Land	\$ 11,749	\$ 11,749
Building and building improvements	77,659	59,725
Machinery and equipment	355,404	322,624
Projects in process	53,356	82,528

	498,168	476,626
Less accumulated depreciation and amortization	180,456	150,734

	\$ 317,712	\$ 325,892
	=====	

7

(7) LINES OF CREDIT

The Company has an unsecured line of credit with a syndicate of U.S. banks for up to \$90,000,000, bearing interest at LIBOR (5.52% at September 30, 1998) plus .325%, expiring in October 2000. At September 30, 1998, the Company had utilized \$45,000,000 of this line of credit. At March 31, 1998, the Company had utilized \$7,000,000 of the line of credit. The agreement between the Company and the syndicate of banks requires the Company to achieve certain financial ratios and operating results. The Company was in compliance with these covenants

as of September 30, 1998.

The Company has an additional unsecured line of credit with various Taiwan financial institutions for up to \$29,800,000 (U.S. Dollar equivalent). These borrowings are predominantly denominated in New Taiwan Dollars, bearing interest at SIBOR (5.43% at September 30, 1998) plus 0.75%, and expiring on various dates through November 1999. At September 30, 1998, the Company had utilized \$1,800,000 of this line of credit. At March 31, 1998, the Company had utilized \$16,000,000 of this line of credit.

(8) STOCKHOLDERS' EQUITY

STOCK REPURCHASE AND OPTION ACTIVITY. During the six months ended September 31, 1998, the Company's Board of Director's authorized the repurchase of up to 4,000,000 shares of Common Stock and the sale of put options for an additional 500,000 shares of Common Stock. In connection with the stock repurchase program, during the six months ended September 30, 1998, the Company purchased a total of 2,222,500 shares of the Company's Common Stock in open market activities at a total cost of \$57,890,000. As of September 30, 1998, the Company had reissued 796,276 of these shares through stock option exercises, the Company's employee stock purchase plan and settlements related to the Company's net share settled forward contract. Subsequent to September 30, 1998, the Company purchased 625,000 shares of the Company's Common Stock in open market activities at a total cost of \$12,430,000.

Also in connection with the stock repurchase program, during the six months ended September 30, 1998, the Company sold put options covering 500,000 shares of Common Stock at prices ranging from \$22.30 to \$23.75 per share. During the six months ended September 30, 1998, the Company repurchased put options for 50,000 shares. The net proceeds from the sale and repurchase of such put options, in the amount of \$1,650,000 for the six months ended September 30, 1998, has been credited to additional paid-in capital. As of September 30, 1998, the Company had outstanding put options covering 950,000 shares of Common Stock which have expiration dates ranging from October 23, 1998 to September 13, 1999 at prices ranging from \$22.30 to \$38.81 per share. Subsequent to September 30, 1998, the Company repurchased put options for 100,000 shares. The cost of this transaction, \$3,881,000, was charged to additional paid-in capital.

Also in connection with the stock repurchase program, during the six months ended September 30, 1998, the Company completed a costless collar transaction involving the purchase of call options for 500,000 shares of Common Stock priced at \$25.95 and the sale of put options for 665,000 shares of Common Stock priced at \$25.19. The expiration date of the transaction is April 1999. Also in connection with the stock repurchase program, during the six months ended September 30, 1998, the Company completed a net share settled forward contract for 2,000,000 shares of Common Stock at an average price of \$29.24. The expiration date of this transaction is May 2000, with quarterly interim settlement dates.

The Company expects from time to time to purchase shares of Common Stock in connection with its authorized Common Stock repurchase plan.

8

(9) NET INCOME PER SHARE

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

<TABLE>
<CAPTION>

	Three Months Ended September 30, (Unaudited) 1998		Six Months Ended September 30, (Unaudited) 1998	
	1997	1998	1997	1998
<S>	<C>	<C>	<C>	<C>
Net income	\$17,563	\$19,182	\$30,337	\$37,014
Weighted average common shares outstanding	50,963	53,535	51,546	53,334
Dilutive effect of stock options	2,395	3,400	2,394	3,282
Weighted average common and common equivalent shares outstanding	53,358	56,935	53,940	56,616
Basic net income per share	\$ 0.34	\$ 0.36	\$ 0.59	\$ 0.69
Diluted net income per share	\$ 0.33	\$ 0.34	\$ 0.56	\$ 0.65

</TABLE>

(10) COMPREHENSIVE INCOME

In June 1997, the Financial Accounting Standards Board (FASB) issued Statement of Financial Standards (SFAS) No. 130, "Reporting Comprehensive Income." SFAS No. 130 establishes requirements for disclosure of comprehensive income and is effective for both interim and annual periods beginning after December 15, 1997. Comprehensive income is defined as the change in equity from transactions involving non-owner sources. The Company has no transactions involving non-owner sources.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

RESULTS OF OPERATIONS

The following table sets forth certain operational data as a percentage of net sales for the periods indicated:

<TABLE>
<CAPTION>

	Three Months Ended		Six Months Ended	
	September 30,		September 30,	
	1998	1997	1998	1997
<S>	<C>	<C>	<C>	<C>
Net sales	100.0%	100.0%	100.0%	100.0%
Cost of sales	50.4%	49.4%	50.4%	49.3%
Gross profit	49.6%	50.6%	49.6%	50.7%
Research and development	10.2%	9.1%	10.2%	9.3%
Selling, general and administrative	15.6%	16.7%	15.9%	16.7%
Special charge	--	--	2.7%	--
Operating income	23.8%	24.8%	20.8%	24.7%

</TABLE>

For the quarter ended June 30, 1998, the Company recognized a special charge of \$5,500,000 which was comprised of three elements: a \$3,300,000 legal settlement with another company involving an intellectual property dispute; a \$1,700,000 write-off of products obsoleted by the introduction of newer products; and a \$500,000 charge associated with the restructuring of a portion of the Company's sales organization.

NET SALES

Microchip's net sales for the quarter ended September 30, 1998 were \$103.8 million, an increase of 0.7% over sales of \$103.0 million for the corresponding quarter of the previous fiscal year, and an increase of 4.3% from the previous quarter's sales of \$99.5 million. Net sales for the six months ended September 30, 1998 were \$203.3 million, an increase of 1.5% from sales of \$200.3 million in the corresponding period of the previous fiscal year.

The Company's family of 8-bit microcontrollers represents the largest component of Microchip's total net sales. Microcontrollers and associated application development systems accounted for 75% and 69% of net sales in the three months ended September 30, 1998 and 1997, respectively. A related component of the Company's product sales consists primarily of Serial EEPROM memories which accounted for 25% and 31% of net sales in the three months ended September 30, 1998 and 1997, respectively. Microcontroller and associated application development systems accounted for 75% and 69% of net sales in the six months ended September 30, 1998 and 1997, respectively, while the related component consisting of primarily Serial EEPROM memories accounted for 25% and 31%, respectively, for the same periods.

The Company's net sales in any given quarter are dependent upon a combination of orders received in that quarter for shipment in that quarter ("turns orders") and shipments from backlog. As part of its competitive strategy, the Company has emphasized its ability to respond quickly to such turns orders. This strategy, combined with current industry conditions, results in customers placing orders with short delivery schedules. The Company has been experiencing increasing turns orders as a portion of its business over the last several years and is highly dependent on turns orders. Because turns orders are

difficult to predict, there can be no assurance that the combination of turns orders and shipments from backlog in any quarter will be sufficient to achieve growth in net sales. If the Company does not achieve a sufficient level of turns orders in a particular quarter, the Company's revenues and operating results would be adversely affected.

The Company's overall average selling prices for its microcontroller products have remained relatively constant, while average selling prices of its

memory products have declined over time. During fiscal 1998 and the first six months of fiscal 1999, the Company continued to experience increased pricing pressure on its memory products, primarily due to the less proprietary nature of these products and increased competition, and the Company expects this to continue in the future. While average selling prices for microcontrollers have remained relatively constant, the Company has experienced, and expects to continue to experience, increasing pricing pressure in certain microcontroller product lines, due primarily to competitive conditions. The Company has been able to maintain average selling prices by continuing to introduce new products with more features and higher prices, thereby offsetting price declines in older products. There can be no assurance that average selling prices for the Company's microcontroller or other products can be maintained due to increased pricing pressure in the future. An increase in pricing pressure could adversely affect the Company's operating results.

THE FOREGOING STATEMENTS REGARDING TURNS ORDERS, AVERAGE SELLING PRICES AND PRICING PRESSURES ARE FORWARD LOOKING STATEMENTS. ACTUAL RESULTS COULD DIFFER MATERIALLY BECAUSE OF THE FOLLOWING FACTORS, AMONG OTHERS: THE LEVEL OF ORDERS THAT ARE RECEIVED AND CAN BE SHIPPED IN A QUARTER; INVENTORY MIX AND TIMING OF CUSTOMER ORDERS; COMPETITION AND COMPETITIVE PRESSURES ON PRICING AND PRODUCT AVAILABILITY; CUSTOMERS' INVENTORY LEVELS, ORDER PATTERNS AND SEASONALITY; THE CYCLICAL NATURE OF BOTH THE SEMICONDUCTOR INDUSTRY AND THE MARKETS ADDRESSED BY THE COMPANY'S PRODUCTS; MARKET ACCEPTANCE OF THE PRODUCTS OF BOTH THE COMPANY AND ITS CUSTOMERS; DEMAND FOR THE COMPANY'S PRODUCTS; FLUCTUATIONS IN PRODUCTION YIELDS, PRODUCTION EFFICIENCIES AND OVERALL CAPACITY UTILIZATION; CHANGES IN PRODUCT MIX; AND ABSORPTION OF FIXED COSTS, LABOR AND OTHER FIXED MANUFACTURING COSTS.

Foreign sales represented 66% and 68% of net sales in the three months ended September 30, 1998 and 1997, respectively, and 67% and 69% for the six months ended September 30, 1998 and 1997, respectively. The Company's foreign sales have been predominantly in Asia and Europe which the Company attributes to the manufacturing strength in those areas for consumer, automotive, office automation, communications and industrial products. The majority of foreign sales are U.S. Dollar denominated. The Company has entered into, and from time to time will enter into, hedging transactions in order to minimize exposure to currency rate fluctuations. Although none of the countries in which the Company conducts significant foreign operations have had a highly inflationary economy in the last five years, there is no assurance that inflation rates or fluctuations in foreign currency rates in countries where the Company conducts operations will not adversely affect the Company's operating results in the future.

ADDITIONAL FACTORS AFFECTING OPERATING RESULTS

The Company believes that future growth in net sales of its 8-bit microcontrollers and other related products will depend largely upon the Company's success in having its current and new products designed into high-volume customer applications. Design wins typically precede the Company's volume shipment of products for such applications by 15 months or more. The Company also believes that shipment levels of its proprietary application development systems are an indicator of potential future design wins and microcontroller sales. The Company continued to achieve a high volume of design wins and shipped substantial numbers of application development systems. There can be no assurance that any particular development system shipment will result in a product design win or that any particular design win will result in future product sales.

11

The Company's operating results are affected by a wide variety of other factors that could adversely impact its net sales and profitability, many of which are beyond the Company's control. These factors include the Company's ability to design and introduce new products on a timely basis, market acceptance of products of both the Company and its customers, customer order patterns and seasonality, changes in product mix, whether the Company's customers buy from a distributor or directly from the Company, product performance and reliability, product obsolescence, the amount of any product returns, availability and utilization of manufacturing capacity, fluctuations in manufacturing yield, the availability and cost of raw materials, equipment and other supplies, the cyclical nature of both the semiconductor industry and the markets addressed by the Company's products, technological changes, competition and competitive pressures on prices, and economic, political or other conditions in the United States and other worldwide markets served by the Company. The semiconductor industry is a capital intensive business and the Company's operating results may be adversely affected if net sales are not sufficient to offset the high fixed manufacturing costs and operating expenses. The Company's products are incorporated into a wide variety of consumer, automotive, office automation, communications and industrial products. A slowdown in demand for products which utilize the Company's products as a result of economic or other conditions in the worldwide markets served by the Company could adversely affect the Company's operating results.

GROSS PROFIT

The Company's gross profit was \$51.5 million and \$52.1 million in the three

months ended September 30, 1998 and 1997, respectively, and \$100.7 million and \$101.5 million in the six months ended September 30, 1998 and 1997, respectively. Gross profit as a percent of sales was 49.6% and 50.6% in the three months ended September 30, 1998 and 1997, respectively, and 49.6% and 50.7% in the six months ended September 30, 1998 and 1997, respectively. Gross margins remained relatively constant during the quarter ended September 30, 1998, with product mix remaining relatively constant and average selling price reductions, primarily in Serial EEPROMs, being offset by the Company's ongoing cost reduction programs. The Company is continuing the process of transitioning products to smaller geometries and to larger wafer sizes to reduce future manufacturing costs. The Company anticipates that its cost of sales and gross product margins will fluctuate over time, driven primarily by the product mix of 8-bit microcontroller products and related memory products, manufacturing yields, wafer fab loading levels and competitive and economic conditions.

As a result of reduced shipments of Serial EEPROMs produced in the Company's 5-inch manufacturing facility, the Company has reduced the manufacturing levels of this wafer fab by approximately 25%. The Company is also planning a longer than normal shutdown of its wafer fabrication facilities at the end of December 1998. In order to offset the adverse cost absorption effects related to the reduced 5-inch loading and the extended shutdown, the Company has instituted a series of cost reductions in all aspects of its business. Management believes that there will be no material financial impact from the reduced 5-inch loading and extended shutdown; however, there can be no assurance that further reductions in loading related primarily to customer demand will not result in unabsorbed fixed costs, having an unfavorable impact on operating results and net income reported by the Company.

THE FOREGOING STATEMENTS RELATING TO ANTICIPATED GROSS MARGINS, COST OF SALES, THE TRANSITION TO HIGHER YIELDING MANUFACTURING PROCESSES, 5-INCH WAFER PRODUCTION, AND THE EXTENT AND IMPACT OF OPERATING EXPENSE REDUCTIONS ARE FORWARD-LOOKING STATEMENTS. ACTUAL RESULTS COULD DIFFER MATERIALLY BECAUSE OF THE FOLLOWING FACTORS, AMONG OTHERS: FLUCTUATIONS IN PRODUCTION YIELDS, PRODUCTION EFFICIENCIES AND OVERALL CAPACITY UTILIZATION; COST AND AVAILABILITY OF RAW MATERIALS; ABSORPTION OF FIXED COSTS, LABOR AND OTHER DIRECT MANUFACTURING COSTS; THE TIMING AND SUCCESS OF MANUFACTURING PROCESS TRANSITION;

12

DEMAND FOR THE COMPANY'S PRODUCTS; COMPETITION AND COMPETITIVE PRESSURE ON PRICING OF SERIAL EEPROMS; THE IMPACT OF COST REDUCTIONS AND THE POSSIBLE NEED FOR FURTHER COST REDUCTIONS; CHANGES IN PRODUCT MIX; COMPETITIVE PRESSURES ON PRICES; AND OTHER ECONOMIC CONDITIONS.

All of Microchip's assembly operations are currently performed by third-party contractors in order to meet product shipment requirements. Reliance on third parties involves some reduction in the Company's level of control over these portions of its business. While the Company reviews the quality, delivery and cost performance of these third-party contractors, there can be no assurance that reliance on third-party contractors will not adversely impact results in future reporting periods if any third-party contractor is unable to maintain assembly yields and costs at their current levels. Microchip intends to develop its own in-house assembly operations over the next twelve months, and will transition a portion of its assembly requirements from third-party contractors to fill this capacity. The Company performs test operations at Company facilities in Taiwan and Thailand.

The Company's reliance on third-party and Company facilities in Taiwan, Thailand, the Philippines and other foreign countries, and maintenance of substantially all of its finished goods inventory overseas, entails certain political and economic risks, including political instability and expropriation, supply disruption, currency controls and exchange fluctuations, as well as changes in tax laws, tariff and freight rates. The Company has not experienced any significant interruptions in its foreign business operations to date. Nonetheless, the Company's business and operating results could be adversely affected if foreign operations or international air transportation were disrupted.

RESEARCH AND DEVELOPMENT

The Company is committed to continued investment in new and enhanced products, including its development systems software, and in its design and manufacturing process technology, which are significant factors in maintaining the Company's competitive position. The dollar investment in research and development increased by 12.7% in the current quarter as compared to the corresponding quarter of the previous fiscal year, and by 3.5% from the previous quarter. The Company will continue to invest in research and development in the future, including an investment in process and product development associated with capacity expansion of the Company's fabrication facilities.

The Company's future operating results will depend to a significant extent on its ability to continue to develop and introduce new products on a timely basis which can compete effectively on the basis of price and performance and which address customer requirements. The success of new product introductions depends on various factors, including proper new product selection, timely completion and introduction of new product designs,

development of support tools and collateral literature that make complex new products easy for engineers to understand and use and market acceptance of customers' end products. Because of the complexity of its products, the Company has experienced delays from time to time in completing development of new products. In addition, there can be no assurance that any new products will receive or maintain substantial market acceptance. If the Company were unable to design, develop and introduce competitive products on a timely basis, its future operating results would be adversely affected.

The Company's future success will also depend upon its ability to develop and implement new design and process technologies. Semiconductor design and process technologies are subject to rapid technological change, requiring large expenditures for research and development. Other companies in the industry have experienced difficulty in effecting transitions to smaller geometry processes and to larger wafers and, consequently, have suffered reduced manufacturing yields or delays in product deliveries. The Company believes that its transition to smaller geometries and to larger wafers will be important for

13

the Company to remain competitive, and operating results could be adversely affected if the transition is substantially delayed or inefficiently implemented.

SELLING, GENERAL AND ADMINISTRATIVE

The Company maintained its level of investment in selling, general and administrative costs at \$16.2 million in the current quarter, as compared to \$16.1 million in the immediately preceding quarter. On similar net sales, selling, general and administrative costs were lower in the current quarter by \$1.0 million as compared to the corresponding quarter of the previous fiscal year. As the Company continues to invest in incremental worldwide sales and technical support resources to promote the Company's embedded control products, selling, general and administrative costs are expected to increase over time, in relation to sales.

OTHER INCOME (EXPENSE)

Interest income was maintained at the same level for the three months ended September 30, 1998 as compared to the prior fiscal quarter and decreased from the prior fiscal quarter as a result of reduced invested cash balances. Interest expense in the three months ended September 30, 1998 increased over the three months ended September 30, 1997 and the prior fiscal quarter, respectively, due to incremental borrowing levels associated with a stock repurchase program. Other income represents numerous immaterial non-operating items. The Company's interest expense could increase in the balance of fiscal 1999 if the Company increases its borrowings, and interest expense could be adversely impacted by increased interest rates.

PROVISION FOR INCOME TAXES

Provisions for income taxes reflect tax on foreign earnings and federal and state tax on U.S. earnings. The Company had an effective tax rate of 27% in each of the six months ended September 30, 1998 and 1997, due to the combination of U.S. statutory taxes and lower tax rates at its foreign locations. The Company believes that its tax rate for the foreseeable future will be approximately 27%.

THE FOREGOING STATEMENT REGARDING THE COMPANY'S ANTICIPATED FUTURE TAX RATE IS A FORWARD-LOOKING STATEMENT. ACTUAL RESULTS COULD DIFFER MATERIALLY BECAUSE OF THE FOLLOWING FACTORS, AMONG OTHERS: CURRENT TAX LAWS AND REGULATIONS; TAXATION RATES IN GEOGRAPHIC REGIONS WHERE THE COMPANY HAS SIGNIFICANT OPERATIONS; AND CURRENT TAX HOLIDAYS AVAILABLE IN FOREIGN LOCATIONS.

YEAR 2000 ISSUE

The Year 2000 ("Y2K") issue is the result of various computer programs being written using two digits rather than four to define the year, thus potentially rendering them incapable of properly managing and manipulating data that includes 21st century dates. The potential for Y2K issues which could reasonably affect the Company could arise from any combination of: a) the Company's own internal information processing and embedded systems, b) external systems used by providers of critical goods or services to the Company, and c) Y2K issues arising within the products manufactured by the Company.

THE COMPANY'S CURRENT STATE OF YEAR 2000 READINESS

The Company has implemented a Y2K readiness program and has, as of September 30, 1998, taken substantial efforts to reasonably ensure that its operations are not subject to substantial adverse Y2K-related impact. This program began with a survey of potential sources of Y2K exposure which could

14

reasonably impact the Company's business. As of September 30, 1998, this initial source identification phase has been completed.

The subsequent step in the program has been to systematically analyze each identified potential source of Y2K exposure as to its likelihood of material effect on the Company's operations and the range of available remediation actions. In the case of identified systems INTERNAL to the Company, analysis generally involved performing physical tests which simulated performance of the systems with post-year 2000 dates. For potential sources of Y2K risk which are EXTERNAL to the Company, such as with the Company's external vendors and suppliers, the Company has typically relied upon written assurances of Y2K compliance from those various parties in lieu of physical testing by the Company's employees. To date, the Company has not identified any Y2K issues inherent in the products manufactured by the Company. The Company's products, for the most part, involve hardware integrated circuits which, at the time of sale to customers, have no inherent date sensitive features. As of September 30, 1998, the analysis phase of the Y2K readiness program has been substantially completed.

The final phase of the Y2K readiness program involves the modification, replacement or elimination of systems identified in the prior analysis phase as being in need of remediation. To date, the Company has completed the remediation process for the majority of its identified INTERNAL systems, with the primary effort centered around the total replacement of information systems related to the Company's sales order process, planning, physical distribution and finance functions. The majority of this task was completed during the quarter ended September 30, 1998. As of September 30, 1998, the Company had surveyed and begun to receive letters of Y2K compliance from approximately 80% of its key EXTERNAL vendors and suppliers and expects to secure documentation of compliance from these business partners by September 30, 1999.

COSTS TO ADDRESS THE YEAR 2000 ISSUE

The total cost associated with required modifications to become Y2K compliant is not expected to be material to the Company's financial position. The amount expended through September 30, 1998 was approximately \$13,000,000, primarily associated with the total replacement of the information systems related to the Company's sales order process, planning, physical distribution and finance functions which was completed during the quarter ended September 30, 1998. The Company had intended to replace such systems in the ordinary course of its business and the implementation was not substantially accelerated due to Y2K. The Company believes that the cost of its Y2K readiness program, as well as currently anticipated costs to be incurred with respect to Y2K issues of third-parties, will not exceed \$18,000,000, inclusive of the costs described above. It is anticipated that all such expenditures will be funded from operating cash flows and absorbed as part of the Company's ongoing operations.

THE FOREGOING STATEMENTS RELATED TO MATERIALITY OF Y2K COSTS, THE COSTS TO ADDRESS Y2K ISSUES AND THE FUNDING AND ABSORPTION OF SUCH COSTS ARE FORWARD LOOKING STATEMENTS. ACTUAL RESULTS COULD DIFFER MATERIALLY BECAUSE OF THE FOLLOWING FACTORS, AMONG OTHERS: THE FAILURE TO CORRECTLY TIMELY IDENTIFY AND CORRECT Y2K PROBLEMS, EITHER BY THE COMPANY OR ITS KEY SUPPLIERS OR CUSTOMERS.

MOST REASONABLY LIKELY WORST CASE SCENARIO(S)

Having reasonably determined that the Company's own hardware and software systems will be substantially Y2K compliant and that its products inherently have no date code-related issues, management believes that the worst case scenarios would most likely involve massive, simultaneous Y2K-related disruptions from the Company's key external raw material suppliers and/or service providers. For these worst case scenarios to have maximum adverse impact on the Company, the vendors

15

in question would either need to be sole-source providers or their peer companies, who would otherwise be potential second-source suppliers, would also need to undergo similar Y2K-related disruption. Examples on the material supplier side would include extended and substantial disruptions of the Company's key raw material suppliers of: silicon wafers, leadframes, specialty chemicals and gasses. Examples on the service provider side would include extended, substantial disruptions of the Company's third-party semiconductor assembly firms, telecommunications and datacommunications services, airfreight and delivery services, or the worldwide banking system. The Company believes that such massive and simultaneous disruptions of the supply of basic goods and services due to Y2K-related issues are highly unlikely to occur.

CONTINGENCY PLANS

The Company has made no contingency plans for handling Y2K issues because it believes that the steps it has taken to assess its own hardware and software systems and those of its key vendors and suppliers are adequate to ensure minimal disruption to its business processes. In the event of random, unforeseen Y2K problems (such as the failure of specific pieces of process equipment, or the temporary inability of certain vendors to provide materials or services) the Company believes that these types of issues will most likely be able to be resolved in the normal course of business, including the potential use of alternate suppliers, in most cases.

LIQUIDITY AND CAPITAL RESOURCES

The Company had \$27.8 million in cash and cash equivalents at September 30, 1998, a decrease of \$4.4 million from the March 31, 1998 balance. The Company has an unsecured line of credit with a syndicate of domestic banks totaling \$90.0 million. Borrowings under the domestic line of credit as of September 30, 1998 were \$45.0 million. The domestic line of credit requires the Company to achieve certain financial ratios and operating results. The Company was in compliance with these covenants at September 30, 1998. The Company also has an unsecured short term line of credit totaling \$29.8 million with certain foreign banks. Borrowings under the foreign line of credit as of September 30, 1998 were \$1.8 million. There are no covenants related to the foreign line of credit. At September 30, 1998, an aggregate of \$73.0 million of these facilities was available, subject to financial covenants and ratios with which the Company was in compliance. The Company's ability to fully utilize these facilities is dependent on the Company remaining in compliance with such covenants and ratios.

During the six months ended September 30, 1998, the Company generated \$49.3 million of cash from operating activities, a decrease of \$42.1 million from the six months ended September 30, 1997. The decrease in cash flow from operations was primarily due to a special charge which decreased profitability, a lower accounts payable balance as a result of lower capital purchases, an increase in inventories and an increase in accounts receivable.

It is anticipated that the Company's investment in working capital will continue to grow in line with sales growth. Inventory turns are expected to remain relatively consistent over the balance of this fiscal year reflecting the current net sales projection and capacity reductions of the Company's 5-inch wafer fab. The accounts receivables balance grew in the quarter ending September 30, 1998, primarily due to reduced shipment linearity in the quarter associated with the implementation of a new information system. It is anticipated that accounts receivable balances will return to historical levels in future quarters, in relationship to sales.

THE FOREGOING STATEMENTS REGARDING INVESTMENT IN WORKING CAPITAL, INVENTORY TURNS AND ACCOUNTS RECEIVABLE BALANCES FOR FUTURE QUARTERS ARE FORWARD LOOKING STATEMENTS. ACTUAL RESULTS COULD DIFFER

16

MATERIALLY BECAUSE OF THE FOLLOWING FACTORS, AMONG OTHERS: THE LEVEL OF ORDERS THAT ARE RECEIVED AND CAN BE SHIPPED IN A QUARTER; TIMELINESS OF CUSTOMER INVOICING; INVENTORY MIX AND TIMING OF CUSTOMER ORDERS; COMPETITION AND COMPETITIVE PRESSURES ON PRICING AND PRODUCT AVAILABILITY; CUSTOMERS' INVENTORY LEVELS, ORDER PATTERNS AND SEASONALITY; THE CYCLICAL NATURE OF BOTH THE SEMICONDUCTOR INDUSTRY AND THE MARKETS ADDRESSED BY THE COMPANY'S PRODUCTS; MARKET ACCEPTANCE OF THE PRODUCTS OF BOTH THE COMPANY AND ITS CUSTOMERS; DEMAND FOR THE COMPANY'S PRODUCTS; FLUCTUATIONS IN PRODUCTION YIELDS, PRODUCTION EFFICIENCIES AND OVERALL CAPACITY UTILIZATION; CHANGES IN PRODUCT MIX; AND ABSORPTION OF FIXED COSTS, LABOR AND OTHER FIXED MANUFACTURING COSTS; AND COLLECTION OF ACCOUNTS RECEIVABLE AND DAYS OUTSTANDING.

The Company's level of capital expenditures varies from time to time as a result of actual and anticipated business conditions. Capital expenditures in the six months ended September 30, 1998 and 1997 were \$24.2 million and \$78.6 million, respectively. Capital expenditures were primarily for the expansion of production capacity and the addition of research and development equipment in each of these periods. The Company currently intends to spend approximately \$75.0 million during the next 12 months for additional capital equipment to increase capacity at its existing wafer fabrication facilities to expand product test operations and to develop in-house assembly capacity. The Company expects capital expenditures will be financed by cash flow from operations, available debt arrangements and other sources of financing. The Company believes that the capital expenditures anticipated to be incurred over the next 12 months will provide sufficient manufacturing capacity to meet its currently anticipated needs.

Net cash used in financing activities was \$29.5 million for the six months ended September 30, 1998. Net cash provided by financing activities was \$4.4 million for the six months ended September 30, 1997. Proceeds from sale of stock and put options were \$7.0 million and \$7.2 million for the six months ended September 30, 1998 and 1997, respectively. Payments on long term debt and capital lease obligations were \$2.5 million and \$2.7 million for the six months ended September 30, 1998 and 1997, respectively. Proceeds from lines of credit were \$23.8 million for the six months ended September 30, 1998. Cash expended for the purchase of the Company's Common Stock was \$57.9 million for the six months ended September 30, 1998.

During the six months ended September 30, 1998, the Company purchased 2,222,500 shares of Common Stock at an aggregate cost of \$57,890,000 and had outstanding 950,000 put options at prices ranging from \$22.30 to \$38.81. Subsequent to September 30, 1998, the Company purchased 625,000 shares of Common Stock at an aggregate cost of \$12,430,000. The Company also has outstanding puts, a costless collar and a net share settled forward contract. See Note 8 to "Condensed Consolidated Financial Statements." These derivative transactions could obligate the Company to purchase shares of the Company's Common Stock in

the future if the stock price is below the strike price of the instruments.

The Company expects from time to time to purchase shares of Common Stock in connection with its authorized Common Stock repurchase plan.

The Company believes that its existing sources of liquidity combined with cash generated from operations will be sufficient to meet the Company's currently anticipated cash requirements for at least the next 12 months. However, the semiconductor industry is capital intensive. In order to remain competitive, the Company must continue to make significant investments in capital equipment, for both production and research and development. The Company may seek additional equity or debt financing during the next 12 months for the capital expenditures required to maintain or expand the Company's wafer fabrication and product test facilities or other purposes. The timing and amount of any such capital requirements will depend on a number of factors, including demand for the Company's products, product mix, changes in industry conditions and competitive factors. There can be no assurance that such

17

financing will be available on acceptable terms, and any additional equity financing could result in additional dilution to existing investors.

PART II. OTHER INFORMATION

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

- (a) The Annual Meeting of Stockholders of the Company was held on August 10, 1998 (the "Meeting").
- (b) Steve Sanghi, Albert J. Hugo-Martinez, L.B. Day and Matthew W. Chapman were elected as Directors at the Meeting.
- (c) The results of the vote on the matters voted upon at the Meeting were as follows:
 - (i) ELECTION OF DIRECTORS:

<TABLE>
<CAPTION>

	FOR	WITHHELD/ABSTAIN
<S>	<C>	<C>
Steve Sanghi	42,412,735	48,071
Albert J. Hugo-Martinez	42,357,110	103,696
L.B. Day	42,357,061	103,745
Matthew W. Chapman	41,042,481	1,418,325

</TABLE>

- (ii) RATIFICATION OF APPOINTMENT OF KPMG PEAT MARWICK LLP AS THE COMPANY'S INDEPENDENT AUDITORS FOR THE FISCAL YEAR ENDING MARCH 31, 1999:

FOR	AGAINST	ABSTAIN
42,398,471	36,271	26,064

The foregoing matters are described in more detail in the Registrant's definitive proxy statement dated July 6, 1998 relating to the Meeting.

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K.

- (a) Exhibits.
 - 3.1 By-Laws of Registrant as amended through August 10, 1998.
 - 3.2 Modification Agreement dated as of November 4, 1998 to the Credit Agreement dated as of October 28, 1997 among Registrant, the Banks named therein, Bank One, Arizona, N.A., as Administrative Agent and The First National Bank of Chicago, as Documentation Agent
- (b) Reports on Form 8-K.

The registrant did not file any reports on Form 8-K during the quarter ended September 30, 1998.

18

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: November 9, 1998

By: /s/ C. Philip Chapman

C. Philip Chapman
Vice President, Chief Financial Officer
and Secretary (Duly Authorized Officer, and
Principal Financial and Accounting Officer)

AMENDED AND RESTATED BYLAWS
 OF
 MICROCHIP TECHNOLOGY INCORPORATED
 AMENDED THROUGH AUGUST 10, 1998
 TABLE OF CONTENTS

<TABLE>
 <CAPTION>

	Page ----
<S>	<C>
ARTICLE I - CORPORATE OFFICES.....	1
1.1 Registered Office.....	1
1.2 Other Offices.....	1
ARTICLE II -STOCKHOLDERS.....	1
2.1 Place of Meetings.....	1
2.2 Annual Meeting.....	1
2.3 Special Meeting.....	2
2.4 Notice of Stockholders Meetings.....	2
2.5 Manner of Giving Notice; Affidavit of Notice.....	2
2.6 Quorum.....	2
2.7 Adjourned Meeting; Notice.....	3
2.8 Voting.....	3
2.9 Waiver of Notice.....	3
2.10 Stockholder Action by Written Consent Without a Meeting.....	3
2.11 Record Date for Stockholder Notice; Voting; Giving Consents.....	4
2.12 Proxies.....	5
2.13 List of Stockholders Entitled to Vote.....	5
2.14 Conduct of Business.....	6
2.15 Inspectors of Election.....	6
2.16 Inspectors of Election and Procedures for Counting Written Consents.....	6
2.17 Election Not To Be Subject to Arizona Control Share Acquisitions Statute.....	7
ARTICLE III -DIRECTORS.....	8
3.1 Powers.....	8
3.2 Number of Directors.....	8
3.3 Election, Qualification and Term of Office of Directors.....	8
3.4 Resignation and Vacancies.....	9
3.5 Place of Meetings; Meetings by Telephone.....	10
3.6 Regular Meetings.....	10
3.7 Special Meetings; Notice.....	10
3.8 Quorum.....	10
3.9 Waiver of Notice.....	11
3.10 Adjourned Meeting; Notice.....	11
3.11 Board Action by Written Consent Without a Meeting.....	11
3.12 Fees and Compensation of Directors.....	11
3.13 Approval of Loans to Officers.....	11
3.14 Removal of Directors.....	12
3.15 Conduct of Business.....	12
3.16 Presumption of Assent.....	12
ARTICLE IV -COMMITTEES.....	12
4.1 Committees of Directors.....	12
4.2 Committee Minutes.....	13
4.3 Meetings and Action of Committees.....	13
ARTICLE V -OFFICERS.....	13
5.1 Officers.....	13

</TABLE>

<TABLE>
 <CAPTION>

<S>	<C>
5.2 Appointment of Officers.....	14

5.3	Subordinate Officers.....	14
5.4	Removal and Resignation of Officers.....	14
5.5	Vacancies in Offices.....	14
5.6	Chairman of the Board.....	14
5.7	President.....	14
5.8	Vice Presidents.....	14
5.9	Secretary.....	15
5.10	Chief Financial Officer.....	15
5.11	Treasurer.....	15
5.12	Assistant Secretary.....	16
5.13	Assistant Treasurer.....	16
5.14	Authority and Duties of Officers.....	16
5.15	Representation of Shares of Other Corporations.....	16
ARTICLE VI	-INDEMNITY.....	16
6.1	Indemnification of Directors and Officers.....	16
6.2	Indemnification of Others.....	17
6.3	Insurance.....	17
ARTICLE VII	-RECORDS AND REPORTS.....	17
7.1	Maintenance and Inspection of Records.....	17
7.2	Inspection by Directors.....	17
ARTICLE VIII	-GENERAL MATTERS.....	18
8.1	Checks.....	18
8.2	Execution of Corporate Contracts and Instruments.....	18
8.3	Stock Certificates; Partly Paid.....	18
8.4	Special Designation on Certificates.....	18
8.5	Lost Certificates.....	19
8.6	Construction; Definitions.....	19
8.7	Dividends.....	19
8.8	Fiscal Year.....	19
8.9	Seal.....	19
8.10	Transfer of Stock.....	20
8.11	Stock Transfer Agreements.....	20
8.12	Registered Stockholders.....	20
8.13	Notices.....	20
ARTICLE IX	-AMENDMENTS.....	20

</TABLE>

--ii-
AMENDED AND RESTATED BYLAWS OF

MICROCHIP TECHNOLOGY INCORPORATED
AS AMENDED THROUGH AUGUST 10, 1998

ARTICLE I
CORPORATE OFFICES

1.1 REGISTERED OFFICE. The registered office of the corporation shall be in the City of Dover, County of Kent, State of Delaware. The name of the registered agent of the corporation at such location is The Corporation Trust Company.

1.2 OTHER OFFICES. The corporation may also have offices at such other places both within and without the State of Delaware as the board of directors may from time to time determine or the business of the corporation may require.

ARTICLE II
STOCKHOLDERS

2.1 PLACE OF MEETINGS. Meetings of stockholders shall be held at any place, within or outside the State of Delaware, designated by the board of directors. In the absence of any such designation, stockholders' meetings shall be held at the registered office of the corporation.

2.2 ANNUAL MEETING. The annual meeting of stockholders shall be held, each year, on a date and at a time designated by the board of directors. At the meeting, directors shall be elected and any other proper business may be transacted.

To be properly brought before an annual meeting business must be (a) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the board of directors, (b) otherwise properly brought before the meeting by or at the direction of the board of directors, or (c) otherwise properly brought before the meeting by a stockholder. For business to be properly brought before the meeting by a stockholder, the secretary of the corporation must have received notice in writing from the stockholder not less than thirty (30) days nor more than sixty (60) days prior to the meeting; PROVIDED, HOWEVER, that if less than thirty-five (35) days' notice of the meeting is given to stockholders, such notice shall have been received by the secretary not later than the close of business on the seventh (7th) day following the day on which the notice of meeting was mailed. Such written notice to the secretary shall set forth, as to each matter the stockholder proposes to bring before the annual meeting: (i) a brief description of the business, (ii) the name and address, as they appear on the corporation's books, of the

stockholder proposing such business, (iii) the number of shares of stock of the corporation beneficially owned by such stockholder, and (iv) any material interest of such stockholder in such business. Notwithstanding any provision in the bylaws to the contrary, no business shall be conducted at an annual meeting except in accordance with the procedures set forth in this Section 2.2.

2.3 SPECIAL MEETING. A special meeting of the stockholders may be called at any time by the board of directors or by the chairman of the board or by one or more stockholders owning in the aggregate not less than fifty percent (50%) of the entire capital stock of the corporation issued and outstanding and entitled vote.

If a special meeting is called by any person or persons other than the board of directors, the request shall be in writing, specifying the time of such meeting and the general nature of the business proposed to be transacted, and shall be delivered personally or sent by registered mail or by telegraphic or other facsimile transmission to the chairman of the board, the president, chief executive officer or the secretary of the corporation. No business may be transacted at such special meeting otherwise than specified in such notice. The officer receiving the request shall cause notice to be promptly given to the stockholders entitled to vote, in accordance with the provisions of Sections 2.4 and 2.5, that a meeting will be held at the time requested by the person or persons who called the meeting, not less than thirty-five (35) nor more than sixty (60) days after the receipt of the request. If the notice is not given within twenty (20) days after the receipt of the request, the person or persons requesting the meeting may give the notice. Nothing contained in this paragraph of this Section 2.3 shall be construed as limiting, fixing, or affecting the time when a meeting of stockholders called by action of the board of directors may be held.

2.4 NOTICE OF STOCKHOLDERS MEETINGS. All notices of meetings of stockholders shall be in writing and shall be sent or otherwise given in accordance with Section 2.5 of these bylaws not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting, except as otherwise provided herein or required by law (meaning, here and hereinafter, as required from time to time by the General Corporation Law of Delaware or the certificate of incorporation of the corporation). The notice shall specify the place, date, and hour of the meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called.

2.5 MANNER OF GIVING NOTICE; AFFIDAVIT OF NOTICE. Written notice of any meeting of stockholders, if mailed, is given when deposited in the United States mail, postage prepaid, directed to the stockholder at his address as it appears on the records of the corporation. An affidavit of the secretary or an assistant secretary or of the transfer agent of the corporation that the notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

2.6 QUORUM. At any meeting of the stockholders, the holders of a majority, present in person or by proxy, of all of the shares of the stock entitled to vote at the meeting shall constitute a quorum for all purposes, unless or except to the extent that the presence of a larger number may be required by law. Where a separate vote by a class or classes is required, a majority, present in person or by proxy, of the shares of such class or classes entitled to take action with respect to that vote on

-2-

that matter shall constitute a quorum. If a quorum shall fail to attend any meeting, the chairman of the meeting may adjourn the meeting to another place, date or time.

If a notice of any adjourned special meeting of stockholders is sent to all stockholders entitled to vote thereat, stating that it will be held with those present constituting a quorum, those present at such adjourned meeting shall constitute a quorum (but in no event shall a quorum consist of less than one-third of the shares entitled to vote at the meeting), and all matters shall be determined by a majority of the votes cast at such meeting, except as otherwise required by law.

2.7 ADJOURNED MEETING; NOTICE. When a meeting is adjourned to another time or place, unless these bylaws otherwise require, notice need not be given of the adjourned meeting if the time and place thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting the corporation may transact any business that might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

2.8 VOTING. The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of Section 2.11 of these bylaws, subject to the provisions of Sections 217 and 218 of the General Corporation Law of Delaware (relating to voting rights of fiduciaries,

pledgers and joint owners of stock and to voting trusts and other voting agreements).

Each stockholder shall have one (1) vote for every share of stock entitled to vote that is registered in his or her name on the record date for the meeting (as determined in accordance with Section 2.11 of these bylaws), except as otherwise provided herein or required by law.

All elections shall be determined by a plurality of the votes cast, and except as otherwise required by law or provided herein, all other matters shall be determined by a majority of the votes cast affirmatively or negatively.

2.9 WAIVER OF NOTICE. Whenever notice is required to be given under any provision of the General Corporation Law of Delaware or of the certificate of incorporation or these bylaws, a written waiver thereof, signed by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders need be specified in any written waiver of notice unless so required by the certificate of incorporation or these bylaws.

2.10 STOCKHOLDER ACTION BY WRITTEN CONSENT WITHOUT A MEETING. Any action required or able to be taken at any annual or special meeting of stockholders may be taken without a meeting,

-3-

without prior notice, and without a vote if a consent or consents in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted and shall be delivered to the corporation at its registered office in Delaware, its principal place of business, or to an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery to the corporation's registered office shall be made by hand or by certified or registered mail, return receipt requested.

Every written consent shall bear the date of signature of each stockholder who signs the consent and no written consent shall be effective to take the corporate action referred to therein unless, within sixty (60) days after the date the earliest dated consent is delivered to the corporation, a written consent or consents signed by holders of a sufficient number of votes to take action are delivered to the corporation in the manner prescribed in the first paragraph of this section.

Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing. If the action which is consented to is such as would have required the filing of a certificate under any section of the General Corporation Law of Delaware if such action had been voted on by stockholders at a meeting thereof, then the certificate filed under such section shall state, in lieu of any statement required by such section concerning any vote of stockholders, that written notice and written consent have been given as provided in Section 228 of the General Corporation Law of Delaware.

2.11 RECORD DATE FOR STOCKHOLDER NOTICE; VOTING; GIVING CONSENTS. In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the board of directors may fix a record date, which shall not be more than sixty (60) nor less than ten (10) days before the date of such meeting, nor more than sixty (60) days prior to any other action.

If the board of directors does not so fix a record date:

(i) The record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held.

(ii) The record date for determining stockholders entitled to receive payment of any dividend or other distribution or allotment of rights or to exercise any rights of change, conversion or exchange of stock or for any other purpose shall be at the close of business on the day on which the board of directors adopts the resolution relating thereto.

-4-

In order that the corporation may determine the stockholders entitled

to consent to corporate action in writing without a meeting, the board of directors may fix a record date, which record date shall neither precede nor be more than ten (10) days after the date upon which such resolution is adopted by the board of directors. Any stockholder of record seeking to have the stockholders authorize or take action by written consent shall, by written notice to the secretary, request the board of directors to fix a record date. The board of directors shall promptly, but in all events within ten (10) days after the date on which such notice is received, adopt a resolution fixing the record date.

If the board of directors has not fixed a record date within such time, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the board of directors is required by law, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the corporation in the manner prescribed in the first paragraph of Section 2.10 of these bylaws. If the board of directors has not fixed a record date within such time and prior action by the board of directors is required by law, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting shall be at the close of business on the date on which the board of directors adopts the resolution taking such prior action.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the board of directors may fix a new record date for the adjourned meeting.

2.12 PROXIES. Each stockholder entitled to vote at a meeting of stockholders or to express consent or dissent to corporate action in writing without a meeting may authorize another person or persons to act for him by a written proxy, filed in accordance with the procedure established for the meeting or taking of action in writing, but no such proxy shall be voted or acted upon after three (3) years from its date, unless the proxy provides for a longer period. Any copy, facsimile telecommunication or other reliable reproduction of the writing or transmission created pursuant to this Section 2.12 may be substituted or used in lieu of the original writing or transmission for any and all purposes for which the original writing or transmission could be used, provided that such copy, facsimile telecommunication or other reproduction shall be a complete reproduction of the entire original writing or transmission. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212(c) of the General Corporation Law of Delaware.

2.13 LIST OF STOCKHOLDERS ENTITLED TO VOTE. The officer who has charge of the stock ledger of a corporation shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten (10) days prior to the meeting, either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the

-5-

meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. Such list shall presumptively determine the identity of the stockholders entitled to vote at the meeting and the number of shares held by each of them.

2.14 CONDUCT OF BUSINESS. The Board of Directors will appoint a Chairman of the meeting, and he/she shall be authorized to be the final authority on all matters of procedure at the meeting. The rules provided below will govern the conduct of the meeting of stockholders and will be strictly enforced to maintain an orderly meeting. Robert's Rules of Order will not be applicable and will not be utilized.

(i) METHOD OF OBTAINING THE FLOOR. Stockholders who desire to address the meeting must raise their hands and wait to be recognized by the Chairman. Only when a stockholder is recognized as having the floor may he or she address the meeting.

(ii) DISCUSSION. Persons addressing the meeting must limit their remarks to the issue then under consideration by the stockholders and to not more than five minutes in duration. A stockholder will be permitted to address the meeting on a particular issue not more than three times.

(iii) STOCKHOLDER PROPOSALS. Stockholders will only be permitted to address the meeting on proposals that are included in the proxy statement and proxy relating to that meeting.

2.15 INSPECTORS OF ELECTION. The corporation may, and to the extent required by law, shall, in advance of any meeting of stockholders, appoint one

or more inspectors to act at the meeting and make a written report thereof. The corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the person presiding at the meeting may, and to the extent required by law, shall, appoint one or more inspectors to act at the meeting. Each inspector, before entering upon the discharge of his duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his ability. Every vote taken by ballots shall be counted by an inspector or inspectors appointed by the chairman of the meeting.

2.16 INSPECTORS OF ELECTION AND PROCEDURES FOR COUNTING WRITTEN CONSENTS. Within three (3) business days after receipt of the earliest dated consent delivered to the corporation in the manner provided in Section 228(c) of the Delaware General Corporation Law or the determination by the board of directors of the corporation that the corporation should seek corporate action by written consent, as the case may be, the secretary may engage nationally recognized independent inspectors of elections for the purpose of performing a ministerial review of the validity of the consents and revocations. The cost of retaining inspectors of election shall be borne by the corporation.

Consents and revocations shall be delivered to the inspectors upon receipt by the corporation, the stockholder or stockholders soliciting consents or soliciting revocations in opposition to action

-6-

by consent proposed by the corporation (the "Soliciting Stockholders") or their proxy solicitors or other designated agents. As soon as consents and revocations are received, the inspectors shall review the consents and revocations and shall maintain a count of the number of valid and unrevoked consents. As soon as practicable after the earlier of (i) sixty (60) days after the date of the earliest dated consent delivered to the corporation in the manner provided in Section 228(c) of the Delaware General Corporation Law or (ii) a written request therefor by the corporation or the Soliciting Stockholders (whichever is soliciting consents) (which request, except in the case of corporate action by written consent taken pursuant to the solicitations of not more than ten (10) persons, may be made no earlier than after such reasonable amount of time after the commencement date of the applicable solicitation of consents as is necessary to permit the inspectors to commence and organize their count, but in no event less than five (5) days after such commencement date), notice of which request shall be given to the party opposing the solicitation of consents, if any, which request shall state that the corporation or Soliciting Stockholders, as the case may be, have a good faith belief that the requisite number of valid and unrevoked consents to authorize or take the action specified in the consents has been received in accordance with these bylaws, the inspectors shall issue a preliminary report to the corporation and the Soliciting Stockholders stating: (i) the number of valid consents; (ii) the number of valid revocations; (iii) the number of valid and unrevoked consents; (iv) the number of invalid consents; (v) the number of invalid revocations; and (vi) whether, based on their preliminary count, the requisite number of valid and unrevoked consents has been obtained to authorize or take the action specified in the consents.

Unless the corporation and the Soliciting Stockholders shall agree to a shorter or longer period, the corporation and the Soliciting Stockholders shall have 48 hours to review the consents and revocations and to advise the inspectors and the opposing party in writing as to whether they intend to challenge the preliminary report of the inspectors. If no written notice of an intention to challenge the preliminary report is received within 48 hours after the inspectors' issuance of the preliminary report, the inspectors shall issue to the corporation and the Soliciting Stockholders their final report containing the information from the inspectors' determination with respect to whether the requisite number of valid and unrevoked consents was obtained to authorize and take the action specified in the consents. If the corporation or the Soliciting Stockholders issue written notice of an intention to challenge the inspectors' preliminary report within 48 hours after the issuance of that report, a challenge session shall be scheduled by the inspectors as promptly as practicable. A transcript of the challenge session shall be recorded by a certified court reporter. Following completion of the challenge session, the inspectors shall as promptly as practicable issue their final report to the corporation and the Soliciting Stockholders, which report shall contain the information included in the preliminary report, plus all changes made to the vote totals as a result of the challenge and a certification of whether the requisite number of valid and unrevoked consents was obtained to authorize or take the action specified in the consents. A copy of the final report of the inspectors shall be included in the book in which the proceedings of meetings of stockholders are recorded.

2.17 ELECTION NOT TO BE SUBJECT TO ARIZONA CONTROL SHARE ACQUISITIONS STATUTE. The corporation elects not to be subject to Title 10, Chapter 23, Article 2 of the Arizona Revised Statutes relating to "Control Share Acquisitions."

-7-

3.1 POWERS. Subject to the provisions of the General Corporation Law of Delaware and any limitations in the certificate of incorporation or these bylaws relating to action required to be approved by the stockholders or by the outstanding shares, the business and affairs of the corporation shall be managed and all corporate powers shall be exercised by or under the direction of the board of directors.

3.2 NUMBER OF DIRECTORS. The number of directors of the corporation shall be four (4). This number may be changed by a duly adopted amendment to the certificate of incorporation or by an amendment to this bylaw adopted by resolution of the board of directors or by the stockholders.

No reduction of the authorized number of directors shall have the effect of removing any director before that director's term of office expires.

3.3 ELECTION, QUALIFICATION AND TERM OF OFFICE OF DIRECTORS. Except as provided in Section 3.4 of these bylaws, at each annual meeting of stockholders, directors of the corporation shall be elected to hold office until the expiration of the term for which they are elected, and until their successors have been duly elected and qualified; except that if any such election shall not be so held, such election shall take place at a stockholders' meeting called and held in accordance with the Delaware General Corporation Law.

Directors need not be stockholders unless so required by the certificate of incorporation or these bylaws, wherein other qualifications for directors may be prescribed.

Nominations for election to the board of directors of the corporation at an annual meeting of stockholders may be made by the board or on behalf of the board by a nominating committee appointed by the board, or by any stockholder of the corporation entitled to vote for the election of directors at such meeting. Such nominations, other than those made by or on behalf of the board, shall be made by notice in writing received by the secretary of the corporation not less than thirty (30) days nor more than sixty (60) days prior to the date of the annual meeting; PROVIDED, HOWEVER, that if less than thirty-five (35) days notice of the meeting is given to stockholders, such nomination shall have been received by the secretary not later than the close of business on the seventh (7th) day following the day on which the notice was mailed. Such notice shall set forth (i) the name and address of the stockholder who intends to make the nomination; (ii) a representation that the nominating stockholder is a holder of record of stock of the corporation entitled to vote at such meeting and intends to appear in person or by proxy at the meeting and nominate the person or persons specified in the notice; (iii) the number of shares of stock held beneficially and of record by the nominating stockholder; (iv) the name, age, business address and, if known, residence address of each nominee proposed in such notice; (v) the principal occupation or employment of such nominee;

-8-

(vi) the number of shares of stock of the corporation beneficially owned by each such nominee; (vii) a description of all arrangements or understandings between the nominating stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nomination or nominations are to be made by the nominating stockholder; (viii) any other information concerning the nominee that must be disclosed of nominees in proxy solicitations pursuant to Regulation 14A under the Securities Exchange Act of 1934; and (ix) the consent of such nominee to serve as a director of the corporation if so elected.

The chairman of the annual meeting may, if the facts warrant, determine and declare to the meeting that a nomination was not made in accordance with the foregoing procedure. If such determination and declaration is made, the defective nomination shall be disregarded.

3.4 RESIGNATION AND VACANCIES. Any director may resign at any time upon written notice to the corporation. When one or more directors so resigns and the resignation is effective at a future date, only a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each director so chosen shall hold office as provided in this section in the filling of other vacancies.

Unless otherwise provided in the certificate of incorporation or these bylaws:

(i) Vacancies and newly created directorships resulting from any increase in the authorized number of directors elected by all of the stockholders having the right to vote as a single class may be filled only by a majority of the directors then in office, even if less than a quorum, or by a sole remaining director.

(ii) Whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the certificate of incorporation, vacancies and newly created directorships

of such class or classes or series may be filled only by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected.

If at any time, by reason of death or resignation or other cause, the corporation should have no directors in office, then any officer or any stockholder or an executor, administrator, trustee or guardian of a stockholder, or other fiduciary entrusted with like responsibility for the person or estate of a stockholder, may call a special meeting of stockholders in accordance with the provisions of the certificate of incorporation or these bylaws, or may apply to the Court of Chancery for a decree summarily ordering an election as provided in Section 211 of the General Corporation Law of Delaware.

If, at the time of filling any vacancy or any newly created directorship, the directors then in office constitute less than a majority of the whole board (as constituted immediately prior to any such increase), then the Court of Chancery may, upon application of any stockholder or stockholders

-9-

holding at least ten (10) percent of the total number of the shares at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office as aforesaid, which election shall be governed by the provisions of Section 211 of the General Corporation Law of Delaware as far as applicable.

3.5 PLACE OF MEETINGS; MEETINGS BY TELEPHONE. The board of directors of the corporation may hold meetings, both regular and special, either within or outside the State of Delaware.

Unless otherwise restricted by the certificate of incorporation or these bylaws, members of the board of directors, or any committee designated by the board of directors, may participate in a meeting of the board of directors, or any committee, by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

3.6 REGULAR MEETINGS. Regular meetings of the board of directors shall be held at such place or places, on such date or dates, and at such time or times as shall have been established by the board of directors and publicized among all directors. A notice of each regular meeting shall not be required.

3.7 SPECIAL MEETINGS; NOTICE. Special meetings of the board of directors for any purpose or purposes may be called at any time by the president or secretary of the corporation, or by any two of the directors then in office and shall be held at a place, on a date and at a time as such officer or such directors shall fix. Notice of the place, date and time of special meetings, unless waived, shall be given to each director by mailing written notice not less than two (2) days before the meeting or by sending a facsimile transmission of the same not less than two (2) hours before the time of the holding of the meeting. If the circumstances warrant, notice may also be given personally or by telephone not less than two (2) hours before the time of the holding of the meeting. Oral notice given personally or by telephone may be communicated either to the director or to a person at the office of the director who the person giving the notice has reason to believe will promptly communicate it to the director. Unless otherwise indicated in the notice thereof, any and all business may be transacted at a special meeting.

3.8 QUORUM. At all meetings of the board of directors, a majority of the authorized number of directors shall constitute a quorum for the transaction of business and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the board of directors, except as may be otherwise specifically provided by statute or by the certificate of incorporation. If a quorum is not present at any meeting of the board of directors, then the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present.

-10-

A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the required quorum for that meeting.

3.9 WAIVER OF NOTICE. Whenever notice is required to be given under any provision of the General Corporation Law of Delaware or of the certificate of incorporation or these bylaws, a written waiver thereof, signed by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the directors, or members of a committee of

directors, need be specified in any written waiver of notice unless so required by the certificate of incorporation or these bylaws.

3.10 ADJOURNED MEETING; NOTICE. If a quorum is not present at any meeting of the board of directors, then the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present.

3.11 BOARD ACTION BY WRITTEN CONSENT WITHOUT A MEETING. Unless otherwise restricted by the certificate of incorporation or these bylaws, any action required or permitted to be taken at any meeting of the board of directors, or of any committee thereof, may be taken without a meeting if all members of the board or committee, as the case may be, consent thereto in writing and the writing or writings are filed with the minutes of proceedings of the board or committee.

3.12 FEES AND COMPENSATION OF DIRECTORS. Unless otherwise restricted by the certificate of incorporation or these bylaws, the board of directors shall have the authority to fix the compensation of directors. The directors may be paid their expenses, if any, of attendance of each meeting of the board of directors and may be paid a fixed sum for attendance at each meeting of the board of directors or a stated salary as director. No such payment shall preclude any director from serving the corporation in any other capacity and receiving compensation therefor. Members of special or standing committees may be allowed like compensation for attending committee meetings.

3.13 APPROVAL OF LOANS TO OFFICERS. The corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or of its subsidiaries, including any officer or employee who is a director of the corporation or its subsidiaries, whenever, in the judgment of the directors, such loan, guaranty or assistance may reasonably be expected to benefit the corporation. The loan, guaranty or other assistance may be with or without interest and may be unsecured, or secured in such manner as the board of directors shall approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing in this section contained shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

-11-

3.14 REMOVAL OF DIRECTORS. Unless otherwise restricted by statute, by the certificate of incorporation or by these bylaws, any director or the entire board of directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors.

No reduction of the authorized number of directors shall have the effect of removing any director prior to the expiration of such director's term of office.

3.15 CONDUCT OF BUSINESS. At any meeting of the board of directors, business shall be transacted in such order and manner as the board may from time to time determine, and all matters shall be determined by the vote of a majority of the directors present, except as otherwise provided herein or required by law.

3.16 PRESUMPTION OF ASSENT. A director of the corporation who is present at a meeting of the board of directors at which action on any corporate matter is taken shall be conclusively presumed to have assented to the action taken unless his dissent shall be entered in the minutes of the meeting or unless he shall file his written dissent to such action with the person acting as the secretary of the meeting before the adjournment thereof or shall forward such dissent by registered mail to the secretary of the corporation immediately after the adjournment of the meeting. Such right to dissent shall not apply to a director who voted in favor of such action.

ARTICLE IV COMMITTEES

4.1 COMMITTEES OF DIRECTORS. The board of directors may, by resolution passed by a majority of the whole board, designate one or more committees, with each committee to consist of one or more of the directors of the corporation. The board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the board of directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the board of directors or in the bylaws of the corporation, shall have and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers that may require it; but no such committee shall have the power or authority to (i) amend the certificate of incorporation (except that a committee may, to the extent authorized in the resolution or resolutions providing for the

issuance of shares of stock adopted by the board of directors as provided in Section 151(a) of the General Corporation Law of Delaware, fix the designation and any of the preferences or rights of such shares relating to dividends, redemption, dissolution, any distribution of assets of the corporation or the conversion into, or the exchange of

-12-

such shares for, shares of any other class or classes or any other series of the same or any other class or classes of stock of the corporation or fix the number of shares of any series of stock or authorize the increase or decrease of the shares of any series), (ii) adopt an agreement of merger or consolidation under Section 251 or 252 of the General Corporation Law of Delaware, (iii) recommend to the stockholders the sale, lease or exchange of all or substantially all of the corporation's property and assets, (iv) recommend to the stockholders a dissolution of the corporation or a revocation of a dissolution, or (v) amend the bylaws of the corporation; and, unless the board resolution establishing the committee, a supplemental resolution of the board of directors, the bylaws or the certificate of incorporation expressly so provide, no such committee shall have the power or authority to declare a dividend, to authorize the issuance of stock, or to adopt a certificate of ownership and merger pursuant to Section 253 of the General Corporation Law of Delaware.

4.2 COMMITTEE MINUTES. Each committee shall keep regular minutes of its meetings and report the same to the board of directors when required.

4.3 MEETINGS AND ACTION OF COMMITTEES. Meetings and actions of committees shall be governed by, and held and taken in accordance with, the provisions of Article III of these bylaws, Section 3.5 (place of meetings and meetings by telephone), Section 3.6 (regular meetings), Section 3.7 (special meetings and notice), Section 3.8 (quorum), Section 3.9 (waiver of notice), Section 3.10 (adjournment and notice of adjournment), and Section 3.11 (action without a meeting), with such changes in the context of those bylaws as are necessary to substitute the committee and its members for the board of directors and its members; provided, however, that the time of regular meetings of committees may be determined either by resolution of the board of directors or by resolution of the committee, that special meetings of committees may also be called by resolutions of the board of directors, and that notice of special meetings of committees shall also be given to all alternate members, who shall have the right to attend all meetings of the committee. The board of directors may adopt rules for the government of any committee not inconsistent with the provisions of these bylaws.

ARTICLE V OFFICERS

5.1 OFFICERS. The officers of the corporation shall be a president, a secretary, and a chief financial officer. The corporation may also have, at the discretion of the board of directors, a chairman of the board, one or more vice presidents, one or more assistant secretaries, a controller, one or more assistant controllers, a treasurer, one or more assistant treasurers, and any such other officers as may be appointed in accordance with the provisions of Section 5.3 of these bylaws. Any number of offices may be held by the same person.

-13-

5.2 APPOINTMENT OF OFFICERS. The officers of the corporation, except such officers as may be appointed in accordance with the provisions of Section 5.3 or 5.5 of these bylaws, shall be appointed by the board of directors.

5.3 SUBORDINATE OFFICERS. The board of directors may appoint, or empower the president to appoint, such other officers and agents as the business of the corporation may require, each of whom shall hold office for such period, have such authority, and perform such duties as are provided in these bylaws or as the board of directors may from time to time determine.

5.4 REMOVAL AND RESIGNATION OF OFFICERS. Any officer may be removed, either with or without cause, by an affirmative vote of the majority of the board of directors at any regular or special meeting of the board or, except in the case of an officer chosen by the board of directors, by any officer upon whom such power of removal may be conferred by the board of directors.

Any officer may resign at any time by giving written notice to the corporation. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice; and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective.

5.5 VACANCIES IN OFFICES. Any vacancy occurring in any office of the corporation shall be filled in the manner prescribed in these bylaws for regular appointments to that office.

5.6 CHAIRMAN OF THE BOARD. The chairman of the board, if such an officer be elected, shall, if present, preside at meetings of the board of directors and exercise and perform such other powers and duties as may from time

to time be assigned to him by the board of directors or as may be prescribed by these bylaws. If there is no president, then the chairman of the board shall also be the chief executive officer of the corporation and shall have the powers and duties prescribed in Section 5.7 of these bylaws.

5.7 PRESIDENT. Subject to such supervisory powers, if any, as may be given by the board of directors to the chairman of the board, if there be such an officer, the president shall be the chief executive officer of the corporation and shall, subject to the control of the board of directors, have general supervision, direction, and control of the business and the officers of the corporation. He shall preside at all meetings of the stockholders and, in the absence or nonexistence of a chairman of the board, at all meetings of the board of directors. He shall have the general powers and duties of management usually vested in the office of president of a corporation and shall have such other powers and duties as may be prescribed by the board of directors or these bylaws.

5.8 VICE PRESIDENTS. In the absence or disability of the president, the vice presidents, if any, in order of their rank as fixed by the board of directors or, if not ranked, a vice president designated by the board of directors, shall perform all the duties of the president and when so acting shall have all the powers of, and be subject to all the restrictions upon, the president. The vice presidents shall have such other powers and perform such other duties as from time to time may be

-14-

prescribed for them respectively by the board of directors, these bylaws, the president or the chairman of the board.

5.9 SECRETARY. The secretary shall keep or cause to be kept, at the principal executive office of the corporation or such other place as the board of directors may direct, a book of minutes of all meetings and actions of directors, committees of directors, and stockholders. The minutes shall show the time and place of each meeting, whether regular or special (and, if special, how authorized and the notice given), the names of those present at directors' meetings or committee meetings, the number of shares present or represented at stockholders' meetings, and the proceedings thereof.

The secretary shall keep, or cause to be kept, at the principal executive office of the corporation or at the office of the corporation's transfer agent or registrar, as determined by resolution of the board of directors, a share register, or a duplicate share register, showing the names of all stockholders and their addresses, the number and classes of shares held by each, the number and date of certificates evidencing such shares, and the number and date of cancellation of every certificate surrendered for cancellation.

The secretary shall give, or cause to be given, notice of all meetings of the stockholders and of the board of directors required to be given by law or by these bylaws. He shall keep the seal of the corporation, if one be adopted, in safe custody and shall have such other powers and perform such other duties as may be prescribed by the board of directors or by these bylaws.

5.10 CHIEF FINANCIAL OFFICER. The chief financial officer shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the properties and business transactions of the corporation, including accounts of its assets, liabilities, receipts, disbursements, gains, losses, capital, retained earnings, and shares. The books of account shall at all reasonable times be open to inspection by any director.

The chief financial officer shall deposit all money and other valuables in the name and to the credit of the corporation with such depositories as may be designated by the board of directors. He shall disburse the funds of the corporation as may be ordered by the board of directors, shall render to the president and directors, whenever they request it, an account of all of his transactions as chief financial officer and of the financial condition of the corporation, and shall have such other powers and perform such other duties as may be prescribed by the board of directors or these bylaws. The duties of the chief financial officer may be allocated by the board of directors among one or more persons, in its discretion.

5.11 TREASURER. The treasurer shall have such powers and discharge such duties relating to the financial aspects of the corporation's business as may be prescribed by the board of directors or the chief financial officer.

-15-

5.12 ASSISTANT SECRETARY. The assistant secretary, or, if there is more than one, the assistant secretaries in the order determined by the stockholders or board of directors (or if there be no such determination, then in the order of their election) shall, in the absence of the secretary or in the event of his or her inability or refusal to act, perform the duties and exercise the powers of the secretary and shall perform such other duties and have such other powers as the board of directors or the stockholders may from time to time prescribe.

5.13 ASSISTANT TREASURER. The assistant treasurer, or, if there is

more than one, the assistant treasurers in the order determined by the stockholders or board of directors (or if there be no such determination, then in the order of their election), shall, in the absence of the treasurer or in the event of his or her inability or refusal to act, perform the duties and exercise the powers of the treasurer and shall perform such other duties and have such other powers as the board of directors or the stockholders may from time to time prescribe.

5.14 AUTHORITY AND DUTIES OF OFFICERS. In addition to the foregoing authority and duties, all officers of the corporation shall respectively have such authority and perform such duties in the management of the business of the corporation as may be designated from time to time by the board of directors or the stockholders.

5.15 REPRESENTATION OF SHARES OF OTHER CORPORATIONS. The chairman of the board, the president, any vice president, the treasurer, the secretary or assistant secretary of this corporation, or any other person authorized by the board of directors or the president or a vice president, is authorized to vote, represent, and exercise on behalf of this corporation all rights incident to any and all shares of any other corporation or corporations standing in the name of this corporation. The authority granted herein may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by such person having the authority.

ARTICLE VI INDEMNITY

6.1 INDEMNIFICATION OF DIRECTORS AND OFFICERS. The corporation shall, to the maximum extent and in the manner permitted by the General Corporation Law of Delaware, indemnify each of its directors and executive officers against expenses (including attorneys' fees), judgments, fines, settlements, and other amounts actually and reasonably incurred in connection with any proceeding, arising by reason of the fact that such person is or was an agent of the corporation. For purposes of this Section 6.1, a "director" or "executive officer" of the corporation includes any person (i) who is or was a director or executive officer of the corporation, (ii) who is or was serving at the request of the corporation as a director or executive officer of another corporation partnership, joint venture, trust or other enterprise, or (iii) who was a director or executive officer of a corporation which was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

-16-

6.2 INDEMNIFICATION OF OTHERS. The corporation shall have the power, to the extent and in the manner permitted by the General Corporation Law of Delaware, to indemnify each of its employees and agents (other than directors and executive officers) against expenses (including attorney's fees), judgments, fines, settlements, and other amounts actually and reasonably incurred in connection with any proceeding, arising by reason of the fact that such person is or was an agent of the corporation. For purposes of this Section 6.2, an "employee" or "agent" of the corporation (other than a director or executive officer) includes any person (i) who is or was an employee or agent of the corporation, (ii) who is or was serving at the request of the corporation as an employee or agent of another corporation, partnership, joint venture, trust or other enterprise, or (iii) who was an employee or agent of a corporation which was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

6.3 INSURANCE. The corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him and incurred by him in any such capacity, or arising out of his status as such, whether or not the corporation would have the power to indemnify him against such liability under the provisions of the General Corporation Law of Delaware.

ARTICLE VII RECORDS AND REPORTS

7.1 MAINTENANCE AND INSPECTION OF RECORDS. The corporation shall, either at its principal executive office or at such place or places as designated by the board of directors, keep a record of its stockholders listing their names and addresses and the number and class of shares held by each stockholder, a copy of these bylaws as amended to date, accounting books, and other records.

7.2 INSPECTION BY DIRECTORS. Any director shall have the right to examine the corporation's stock ledger, a list of its stockholders, and its other books and records for a purpose reasonably related to his position as a director. The Court of Chancery is hereby vested with the exclusive jurisdiction to determine whether a director is entitled to the inspection sought. The Court may summarily order the corporation to permit the director to inspect any and

all books and records, the stock ledger, and the stock list and to make copies or extracts therefrom. The Court may, in its discretion, prescribe any limitations or conditions with reference to the inspection, or award such other and further relief as the Court may deem just and proper.

-17-
ARTICLE VIII
GENERAL MATTERS

8.1 CHECKS. From time to time, the board of directors shall determine by resolution which person or persons may sign or endorse all checks, drafts, other orders for payment of money, notes or other evidences of indebtedness that are issued in the name of or payable to the corporation, and only the persons so authorized shall sign or endorse those instruments.

8.2 EXECUTION OF CORPORATE CONTRACTS AND INSTRUMENTS. The board of directors, except as otherwise provided in these bylaws, may authorize any officer or officers, or agent or agents, to enter into any contract or execute any instrument in the name of and on behalf of the corporation; such authority may be general or confined to specific instances. Unless so authorized or ratified by the board of directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

8.3 STOCK CERTIFICATES; PARTLY PAID. The shares of a corporation shall be represented by certificates, provided that the board of directors of the corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the corporation. Notwithstanding the adoption of such a resolution by the board of directors, every holder of stock represented by certificates and upon request every holder of uncertificated shares shall be entitled to have a certificate signed by, or in the name of the corporation by the chairman or vice-chairman of the board of directors, or the president or vice-president, and by the treasurer or an assistant treasurer, or the secretary or an assistant secretary of such corporation representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he were such officer, transfer agent or registrar at the date of issue.

The corporation may issue the whole or any part of its shares as partly paid and subject to call for the remainder of the consideration to be paid therefor. Upon the face or back of each stock certificate issued to represent any such partly paid shares, upon the books and records of the corporation in the case of uncertificated partly paid shares, the total amount of the consideration to be paid therefor and the amount paid thereon shall be stated. Upon the declaration of any dividend on fully paid shares, the corporation shall declare a dividend upon partly paid shares of the same class, but only upon the basis of the percentage of the consideration actually paid thereon.

8.4 SPECIAL DESIGNATION ON CERTIFICATES. If the corporation is authorized to issue more than one class of stock or more than one series of any class, then the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or

-18-
series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate that the corporation shall issue to represent such class or series of stock; provided, however, that, except as otherwise provided in Section 202 of the General Corporation Law of Delaware, in lieu of the foregoing requirements there may be set forth on the face or back of the certificate that the corporation shall issue to represent such class or series of stock a statement that the corporation will furnish without charge to each stockholder who so requests the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

8.5 LOST CERTIFICATES. Except as provided in this Section 8.5, no new certificates for shares shall be issued to replace a previously issued certificate unless the latter is surrendered to the corporation and cancelled at the same time. The corporation may issue a new certificate of stock or uncertificated shares in the place of any certificate theretofore issued by it, alleged to have been lost, stolen or destroyed, and the corporation may require the owner of the lost, stolen or destroyed certificate, or his legal representative, to give the corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or uncertificated shares.

8.6 CONSTRUCTION; DEFINITIONS. Unless the context requires otherwise, the general provisions, rules of construction, and definitions in the General Corporation Law of Delaware shall govern the construction of these bylaws. Without limiting the generality of this provision, the singular number includes the plural, the plural number includes the singular, and the term "person" includes both a corporation and a natural person.

8.7 DIVIDENDS. The directors of the corporation, subject to any restrictions contained in (i) the General Corporation Law of Delaware or (ii) the certificate of incorporation, may declare and pay dividends upon the shares of its capital stock. Dividends may be paid in cash, in property, or in shares of the corporation's capital stock.

The directors of the corporation may set apart out of any of the funds of the corporation available for dividends a reserve or reserves for any proper purpose and may abolish any such reserve. Such purposes shall include but not be limited to equalizing dividends, repairing or maintaining any property of the corporation, and meeting contingencies.

8.8 FISCAL YEAR. The fiscal year of the corporation shall be fixed by resolution of the board of directors and may be changed by the board of directors.

8.9 SEAL. The corporation may adopt a corporate seal, which may be altered at pleasure, and may use the same by causing it or a facsimile thereof to be impressed or affixed or in any other manner reproduced.

-19-

8.10 TRANSFER OF STOCK. Upon surrender to the corporation or the transfer agent of the corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignment or authority to transfer, it shall be the duty of the corporation to issue a new certificate to the person entitled thereto, cancel the old certificate, and record the transaction in its books.

8.11 STOCK TRANSFER AGREEMENTS. The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes owned by such stockholders in any manner not prohibited by the General Corporation Law of Delaware.

8.12 REGISTERED STOCKHOLDERS. The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends and to vote as such owner, shall be entitled to hold liable for calls and assessments the person registered on its books as the owner of shares, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of another person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

8.13 NOTICES. Except as otherwise specifically provided herein or required by law, all notices required to be given to any stockholder, director, officer, employee or agent shall be in writing and may in every instance be effectively given by hand delivery, by mail, postage paid, or by facsimile transmission. Any such notice shall be addressed to such stockholder, director, officer, employee or agent at his last known address as it appears on the books of the corporation. The time when such notice shall be deemed received, if hand delivered, or dispatched, if sent by mail or facsimile, transmission, shall be the time of the giving of the notice.

ARTICLE IX
AMENDMENTS

Any of these bylaws may be altered, amended or repealed by the affirmative vote of a majority of the board of directors or, with respect to bylaw amendments placed before the stockholders for approval and except as otherwise provided herein or required by law, by the affirmative vote of the holders of a majority of the shares of the corporation's stock entitled to vote in the election of directors, voting as one class.

-20-

CERTIFICATE OF ADOPTION OF AMENDMENT TO AMENDED AND
RESTATED BYLAWS

OF

MICROCHIP TECHNOLOGY INCORPORATED

The undersigned hereby certifies that she is a duly elected, qualified, and acting Assistant Secretary of Microchip Technology Incorporated and that the foregoing Amended and Restated Bylaws, as amended, comprising twenty-one(21)

pages, were adopted as the Bylaws of the corporation on August 10, 1998 by the Board of Directors of the corporation.

IN WITNESS WHEREOF, the undersigned has hereunto set his hand and affixed the corporate seal this ____ day of August, 1998.

Mary K. Simmons
ASSISTANT SECRETARY

SECOND MODIFICATION AGREEMENT

BY THIS SECOND MODIFICATION AGREEMENT (the "Agreement"), made and entered into as of the 4th day of November, 1998, BANK ONE, ARIZONA, NA, a national banking association, as administrative agent for the Banks (as hereinafter defined) (the "Administrative Agent"), and MICROCHIP TECHNOLOGY INCORPORATED, a Delaware corporation (the "Borrower"), in consideration of the mutual covenants herein contained and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby confirm and agree as follows:

RECITALS:

A. Borrower, the Administrative Agent, The First National Bank of Chicago, a national banking association, as Documentation Agent and the "Banks" named therein entered into that Credit Agreement dated October 28, 1997 to provide financial accommodations to the Borrower as provided therein, which Credit Agreement (as modified, the "Credit Agreement") was previously modified by that Modification Agreement, dated as of the 30th day of March, 1998.

B. Borrower and the Administrative Agent, with the consent of the Banks, desire to modify the Credit Agreement as set forth herein.

C. All undefined capitalized terms used herein shall have the meaning given them in the Credit Agreement.

AGREEMENT:

SECTION 1. ACCURACY OF RECITALS.

1.1 Borrower acknowledges the accuracy of the Recitals.

SECTION 2. MODIFICATIONS.

2.1 The Credit Agreement is hereby amended as hereinafter provided, which amendments (the "Credit Agreement Amendments") are effective as of October 28, 1997:

2.1.1 Section 6.10 of the Credit Agreement is hereby amended to read as follows:

Section 6.10 [Intentionally left blank.]

2.1.2 Section 6.11 of the Credit Agreement is hereby amended to read as follows:

SECTION 6.11 DEBT/WORTH RATIO. At any time, permit the ratio of Consolidated Debt to Consolidated Effective Tangible Net Worth to be greater than 0.9 to 1.0.

2.1.3 Exhibit "F" to the Credit Agreement is amended to read as attached hereto.

2.2 Each of the Loan Documents is modified to provide that it shall be a default or an event of default thereunder if Borrower shall fail to comply with any of the covenants of Borrower herein or if any representation or warranty by Borrower herein is materially incomplete, incorrect, or misleading as of the date hereof.

2.3 Each reference in the Loan Documents to any of the Loan Documents is hereby amended to be a reference to such document as modified herein.

SECTION 3. RATIFICATION OF LOAN DOCUMENTS.

The Loan Documents are ratified and affirmed by Borrower and shall remain in full force and effect as modified herein.

SECTION 4. BORROWER REPRESENTATIONS AND WARRANTIES.

Borrower represents and warrants to the Banks:

4.1 No default or event of default under any of the Loan Documents as modified herein, nor any event, that, with the giving of notice or the passage of time or both, would be a default or an event of default under the Loan Documents as modified herein has occurred and is continuing.

4.2 There has been no material adverse change taken as a whole, in the financial condition of Borrower or any other person whose financial statement has been delivered to the Administrative Agent in connection with the Loans from the most recent financial statement received by the Administrative Agent.

4.3 Each and all representations and warranties of Borrower in the Loan Documents are accurate in all material respects on the date hereof.

4.4 Borrower has no claims, counterclaims, defenses, or set-offs with respect to the Loans or the Loan Documents as modified herein.

4.5 The Loan Documents as modified herein are the legal, valid, and binding obligation of Borrower, enforceable against Borrower in accordance with their terms.

-2-

SECTION 5. BORROWER COVENANTS.

Borrower covenants with the Banks:

5.1 Borrower shall execute, deliver, and provide to the Administrative Agent such additional agreements, documents, and instruments as reasonably required by the Banks to effectuate the intent of this Agreement.

5.2 Borrower fully, finally, and absolutely and forever releases and discharges the Banks and the Administrative Agent and their present and former directors, shareholders, officers, employees, agents, representatives, successors and assigns, and their separate and respective heirs, personal representatives, successors and assigns, from any and all actions, causes of action, claims, debts, damages, demands, liabilities, obligations, and suits, of whatever kind or nature, in law or equity of Borrower, whether now known or unknown to Borrower, and whether contingent or matured, (i) in respect of the Loans, the Loan Documents, or the actions or omissions of the Banks and the Administrative Agent in respect of the Loans or the Loan Documents and (ii) arising from events occurring prior to the date of this Agreement.

SECTION 6. CONDITIONS PRECEDENT.

The agreements of the Banks and the Administrative Agent and the modifications contained herein shall not be binding upon the Banks until the Banks have executed and delivered consents to this Agreement and waivers to the Covenant Defaults and the Administrative Agent has received, at Borrower's expense, all of the following, all of which shall be in form and content satisfactory to the Administrative Agent and shall be subject to approval by Administrative Agent:

6.1 An original of this Agreement fully executed by the Borrower.

6.2 Such resolutions or authorizations and such other documents as the Administrative Agent may require relating to the existence and good standing of the Borrower, and the authority of any person executing this Agreement or other documents on behalf of the Borrower.

6.3 Payment of all the internal and external costs and expenses incurred by the Administrative Agent in connection with this Agreement (including, without limitation, inside and outside attorneys, expenses, and fees).

SECTION 7. INTEGRATION, ENTIRE AGREEMENT, CHANGE, DISCHARGE, TERMINATION, OR WAIVER.

The Loan Documents as modified herein contain the complete understanding and agreement of Borrower and the Banks in respect of the Loans and supersede all prior representations, warranties, agreements, arrangements, understandings, and negotiations. No provision of the Loan Documents as modified herein may be changed, discharged, supplemented, terminated, or waived except in a writing signed by the parties thereto.

-3-

SECTION 8. BINDING EFFECT.

The Loan Documents as modified herein shall be binding upon and shall inure to the benefit of Borrower and the Banks and their successors and assigns and the executors, legal administrators, personal representatives, heirs, devisees, and beneficiaries of Borrower, provided, however, Borrower may not assign any of its right or delegate any of its obligation under the Loan Documents and any purported assignment or delegation shall be void.

SECTION 9. CHOICE OF LAW.

This Agreement shall be governed by and construed in accordance with the laws of the State of Arizona, without giving effect to conflicts of law principles.

SECTION 10. COUNTERPART EXECUTION.

This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same document. Signature pages may be detached from the counterparts and attached to a single copy of this Agreement to physically form one document.

DATED as of the date first above stated.

MICROCHIP TECHNOLOGY INCORPORATED,
a Delaware corporation

By: _____
Name: _____
Title: _____

BORROWER

BANK ONE, ARIZONA, NA, a national banking
association

By: _____
Name: _____
Title: _____

ADMINISTRATIVE AGENT

<TABLE> <S> <C>

<ARTICLE> 5
<MULTIPLIER> 1000
<CURRENCY> U.S. DOLLARS

<S>	<C>
<PERIOD-TYPE>	6-MOS
<FISCAL-YEAR-END>	MAR-31-1999
<PERIOD-START>	APR-01-1998
<PERIOD-END>	SEP-30-1998
<EXCHANGE-RATE>	1
<CASH>	27795
<SECURITIES>	0
<RECEIVABLES>	63925
<ALLOWANCES>	0
<INVENTORY>	71340
<CURRENT-ASSETS>	208056
<PP&E>	317712
<DEPRECIATION>	0
<TOTAL-ASSETS>	529901
<CURRENT-LIABILITIES>	127138
<BONDS>	45856
<PREFERRED-MANDATORY>	0
<PREFERRED>	0
<COMMON>	54
<OTHER-SE>	346739
<TOTAL-LIABILITY-AND-EQUITY>	529901
<SALES>	203269
<TOTAL-REVENUES>	203269
<CGS>	102538
<TOTAL-COSTS>	102538
<OTHER-EXPENSES>	0
<LOSS-PROVISION>	0
<INTEREST-EXPENSE>	1562
<INCOME-PRETAX>	41558
<INCOME-TAX>	11221
<INCOME-CONTINUING>	30337
<DISCONTINUED>	0
<EXTRAORDINARY>	0
<CHANGES>	0
<NET-INCOME>	30337
<EPS-PRIMARY>	0.59
<EPS-DILUTED>	0.56

</TABLE>