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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

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**FORM 10-Q**

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

**FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2004**

**COMMISSION FILE NUMBER 0-23599**

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**MERCURY COMPUTER SYSTEMS, INC.**

(Exact name of registrant as specified in its charter)

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**MASSACHUSETTS**  
(State or other jurisdiction of  
incorporation or organization)

**04-2741391**  
(I.R.S. Employer  
Identification No.)

**199 RIVERNECK ROAD**  
**CHELMSFORD, MA**  
(Address of principal executive offices)

**01824**  
(Zip Code)

**978-256-1300**  
(Registrant's telephone number, including area code)

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Indicate by check mark whether 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 such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Exchange Act). Yes  No

Number of shares outstanding of the issuer's classes of common stock as of October 29, 2004:

<u>Class</u>	<u>Number of Shares Outstanding</u>
Common Stock, par value \$.01 per share	21,053,022

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MERCURY COMPUTER SYSTEMS, INC.

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## PART I. FINANCIAL INFORMATION

## ITEM 1. FINANCIAL STATEMENTS

## MERCURY COMPUTER SYSTEMS, INC.

## CONSOLIDATED BALANCE SHEETS

(IN THOUSANDS, EXCEPT SHARE AMOUNTS)

	September 30, 2004	June 30, 2004
	(Unaudited)	
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 125,076	\$ 148,995
Marketable securities	61,201	54,898
Accounts receivable, net of allowance of \$500	30,759	41,609
Inventory	11,793	10,746
Deferred tax assets, net	3,819	3,819
Prepaid expenses and other current assets	4,091	5,370
Total current assets	236,739	265,437
Marketable securities	54,218	34,391
Property and equipment, net	25,972	25,866
Goodwill	28,963	29,009
Acquired intangible assets, net	5,113	5,529
Deferred tax assets, net	3,612	3,612
Other assets	8,880	5,894
Total assets	\$ 363,497	\$ 369,738
<b>Liabilities and Stockholders' Equity</b>		
Current liabilities:		
Accounts payable	\$ 9,169	\$ 10,884
Accrued expenses	10,148	5,715
Accrued compensation	9,196	13,147
Amounts payable for acquisition	7,512	7,512
Notes payable	990	948
Deferred revenues and customer advances	5,847	5,851
Income taxes payable	3,564	6,922
Total current liabilities	46,426	50,979
Notes payable	135,643	135,827
Deferred compensation	1,140	1,122
Other long-term liabilities	870	953
Total liabilities	184,079	188,881
Commitments and contingencies (Note J)		
Stockholders' equity:		
Preferred stock, \$.01 par value; 1,000,000 shares authorized; no shares issued or outstanding	—	—
Common stock, \$.01 par value; 65,000,000 shares authorized; 21,053,022 and 22,355,501 shares issued at September 30, 2004 and June 30, 2004, respectively; and 21,053,383 and 21,288,855 shares outstanding at September 30, 2004 and June 30, 2004, respectively	210	223
Additional paid-in capital	15,847	53,882
Treasury stock, at cost, no shares and 1,066,646 shares at September 30, 2004 and June 30, 2004, respectively	—	(31,336)
Retained earnings	163,006	157,908
Accumulated other comprehensive income	355	180
Total stockholders' equity	179,418	180,857
Total liabilities and stockholders' equity	\$ 363,497	\$ 369,738

The accompanying notes are an integral part of the consolidated financial statements.

**MERCURY COMPUTER SYSTEMS, INC.**  
**CONSOLIDATED STATEMENTS OF INCOME**  
(UNAUDITED AND IN THOUSANDS, EXCEPT PER SHARE DATA)

	Three months ended September 30,	
	2004	2003
Net revenues	\$54,982	\$40,521
Cost of revenues	19,464	14,539
Gross profit	35,518	25,982
Operating expenses:		
Selling, general and administrative	16,023	12,796
Research and development	11,522	8,734
Total operating expenses	27,545	21,530
Income from operations	7,973	4,452
Interest income	994	429
Interest expense	(1,054)	(223)
Other income (expense), net	(189)	116
Income before income taxes	7,724	4,774
Income tax provision	2,626	1,480
Net income	\$ 5,098	\$ 3,294
Net income per share:		
Basic	\$ 0.24	\$ 0.16
Diluted	\$ 0.23	\$ 0.15
Weighted average shares outstanding:		
Basic	21,178	21,002
Diluted	21,916	21,580

The accompanying notes are an integral part of the consolidated financial statements.

**MERCURY COMPUTER SYSTEMS, INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(UNAUDITED AND IN THOUSANDS)

	Three Months Ended September 30,	
	2004	2003
Cash flows from operating activities:		
Net income	\$ 5,098	\$ 3,294
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	2,050	1,916
Impairment of acquired intangible asset	—	185
Stock-based compensation	—	176
Tax benefit from stock options	274	64
Changes in operating assets and liabilities		
Accounts receivable	10,821	3,589
Inventory	(1,046)	2,252
Prepaid expenses and other current assets	1,277	1,789
Other assets	412	(115)
Accounts payable and accrued expenses	(4,270)	(3,355)
Deferred revenues and customer advances	(4)	(161)
Other liabilities	(84)	—
Income taxes payable	(3,355)	(472)
Net cash provided by operating activities	<u>11,173</u>	<u>9,162</u>
Cash flows from investing activities:		
Purchases of marketable securities	(33,308)	(3,000)
Sales and maturities of marketable securities	7,116	5,319
Purchases of property and equipment	(1,707)	(1,011)
Net cash (used in) provided by investing activities	<u>(27,899)</u>	<u>1,308</u>
Cash flows from financing activities:		
Proceeds from exercise of stock options	867	375
Purchases of common stock	(7,844)	—
Payments of principal under notes payable	(178)	(174)
Net cash (used in) provided by financing activities	<u>(7,155)</u>	<u>201</u>
Effect of exchange rate changes on cash and cash equivalents	<u>(38)</u>	<u>21</u>
Net (decrease) increase in cash and cash equivalents	(23,919)	10,692
Cash and cash equivalents at beginning of year	148,995	27,158
Cash and cash equivalents at end of year	<u>\$ 125,076</u>	<u>\$ 37,850</u>
Cash paid during the period for:		
Interest	\$ 460	\$ 224
Income taxes	\$ 5,727	\$ 1,831

The accompanying notes are an integral part of the consolidated financial statements.

**MERCURY COMPUTER SYSTEMS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
(AMOUNTS IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA)

**A. Description of Business**

Mercury Computer Systems, Inc. (the "Company" or "Mercury") designs, manufactures and markets high-performance, real-time digital signal and image processing computer systems that transform sensor-generated data into information that can be displayed as images for human interpretation or subjected to additional computer analysis. These multicomputer systems are heterogeneous and scalable, allowing them to accommodate several different microprocessor types and to scale from a few to hundreds of microprocessors within a single system. The primary markets for the Company's products are Defense Electronics, Imaging and Visualization Solutions (IVS), and other Original Equipment Manufacturers (OEM) solutions. These markets have computing needs that benefit from the unique system architecture developed by the Company.

**B. Basis of Presentation**

The accompanying financial data as of September 30, 2004 and for the three months ended September 30, 2004 and 2003 have been prepared by the Company, without audit, pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC"). Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to such rules and regulations. However, the Company believes that the disclosures are adequate to make the information presented not misleading. These consolidated financial statements should 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 fiscal year ended June 30, 2004.

In the opinion of management, all adjustments (which include only normal recurring adjustments) necessary to present a fair statement of financial position as of September 30, 2004, results of operations for the three months ended September 30, 2004 and 2003, and cash flows for the three months ended September 30, 2004 and 2003 have been made. The results of operations for the three months ended September 30, 2004 are not necessarily indicative of the operating results for the full fiscal year or any future periods.

**C. Accounting for Stock-Based Compensation**

The Company has several stock-based employee compensation plans. The Company accounts for stock-based awards to employees using the intrinsic value method as prescribed by Accounting Principles Board ("APB") Opinion No. 25, "Accounting for Stock Issued to Employees," and related interpretations. Accordingly, no compensation expense is recorded for options issued to employees in fixed amounts with fixed exercise prices at least equal to the fair market value of the Company's common stock at the date of grant. The Company has adopted the provisions of SFAS No. 123, "Accounting for Stock-Based Compensation," as amended by SFAS No. 148, "Accounting for Stock-Based Compensation-Transition and Disclosure," through disclosure only. All stock-based awards to non-employees are accounted for at their fair value in accordance with SFAS No. 123.

**MERCURY COMPUTER SYSTEMS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

The following table illustrates the effect on net income and earnings per share as if the Company had applied the fair value recognition provisions of SFAS No. 123 to stock-based employee awards.

	Three Months Ended September 30,	
	2004	2003
Net income as reported	\$ 5,098	\$ 3,294
Add: Stock-based employee compensation expense included in reported net income, net of related tax effects	—	—
Deduct: Total stock-based employee compensation determined under fair value based method for all awards, net of related tax effects	3,425	4,132
<b>Pro forma net income (loss)</b>	<b>\$ 1,673</b>	<b>\$ (838)</b>
<b>Earnings (loss) per share:</b>		
Basic – as reported	\$ 0.24	\$ 0.16
Basic – pro forma	\$ 0.08	\$ (0.04)
Diluted – as reported	\$ 0.23	\$ 0.15
Diluted – pro forma	\$ 0.08	\$ (0.04)

The weighted average grant-date fair values for options granted during the three months ended September 30, 2004 and 2003 were \$15.93 and \$13.17, respectively, per option. The fair value of options at date of grant was estimated using the Black-Scholes option-pricing model with the following assumptions:

	Three Months Ended September 30,	
	2004	2003
Option life	6 years	6 years
Risk-free interest rate	4.0%	3.5%
Stock volatility	73%	77%
Dividend rate	0%	0%

The weighted-average fair value of stock purchase rights granted as part of the Company's Employee Stock Purchase Plan ("ESPP") during the three months ended September 30, 2004 and 2003 was \$5.42 and \$4.85, respectively. The fair value of the employees' stock purchase rights was estimated using the Black-Scholes option-pricing model with the following assumptions:

	Three Months Ended September 30,	
	2004	2003
Option life	6 months	6 months
Risk-free interest rate	2.0%	0.96%
Stock volatility	33%	57%
Dividend rate	0%	0%

**D. Inventory**

	September 30, 2004	June 30, 2004
Raw materials	\$ 3,313	\$ 1,698
Work in process	5,778	3,272
Finished goods	2,702	5,776
<b>Total</b>	<b>\$ 11,793</b>	<b>\$10,746</b>

**MERCURY COMPUTER SYSTEMS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**E. Net Income Per Share**

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

	Three Months Ended September 30,	
	2004	2003
Net income	\$ 5,098	\$ 3,294
Shares used in computation of net income per share—basic	21,178	21,002
Potential dilutive common shares:		
Stock options	738	578
Shares used in computation of net income per share—diluted	21,916	21,580
Net income per share—basic	\$ 0.24	\$ 0.16
Net income per share—diluted	\$ 0.23	\$ 0.15

Options to purchase 1,931,375 and 2,416,133 shares of common stock were not included in the calculation of diluted net income per share for the three months ended September 30, 2004 and 2003, respectively, because the option exercise prices were greater than the average market price of the Company's common stock during those periods and therefore would be antidilutive.

**F. Recent Accounting Pronouncements**

In September 2004, the FASB announced that it had reached a final consensus with respect to Emerging Issue Task Force 04-8 ("EITF 04-08"), "The Effect of Contingently Convertible Debt on Diluted Earnings per Share." The FASB's final consensus states that shares of common stock contingently issuable pursuant to contingent convertible securities should be included in diluted earnings per share computations (if dilutive) regardless of whether their market price triggers (or other contingent features) have been met. EITF 04-8 will be effective for all periods ending after December 15, 2004 and will require the Company to include an additional 4,134,962 shares, using the if-converted method (under which net income would also be adjusted to exclude imputed interest expense, net of tax), in the Company's computation of diluted earnings per share for the three-month and six-month periods ending December 31, 2004. The consensus will require the Company to show the effect of the if-converted shares on the prior period earnings per share for comparative purposes.

**G. Comprehensive Income**

The Company's total comprehensive income was as follows:

	Three Months Ended September 30,	
	2004	2003
Net income	\$ 5,098	\$ 3,294
Other comprehensive income (loss):		
Foreign currency translation adjustments	113	61
Change in unrealized loss on marketable securities	62	(4)
Other comprehensive income	175	57
Total comprehensive income	\$ 5,273	\$ 3,351



**MERCURY COMPUTER SYSTEMS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**H. Operating Segment Information**

Operating segments are defined as components of an enterprise evaluated regularly by the Company's senior management in deciding how to allocate resources and assess performance. The Company has three operating and reportable segments: Defense Electronics Group, Imaging and Visualization Solutions Group and OEM Solutions Group. These operating segments were determined based upon the nature of the products offered to customers, the market characteristics of each operating segment and the Company's management structure.

The accounting policies of the business segments are the same as those described in "Note B: Summary of Significant Accounting Policies" in the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2004. Asset information by reportable segment is not reported because the Company does not produce such information internally.

In the first quarter of fiscal 2005, the Company began reporting its operating segment results on a fully allocated basis. Segment information for the prior period has been reclassified to conform to the current presentation. The following is a summary of the Company's operations by reportable segment:

	Defense Electronics Group	Imaging and Visualization Solutions Group	OEM Solutions Group	Total
<b>THREE MONTHS ENDED SEPTEMBER 30, 2004:</b>				
Sales to unaffiliated customers	\$ 31,005	\$ 10,444	\$ 13,533	\$ 54,982
Income from operations	5,581	551	1,841	7,973
Depreciation and amortization expense	1,298	458	294	2,050
<b>THREE MONTHS ENDED SEPTEMBER 30, 2003:</b>				
Sales to unaffiliated customers	\$ 28,782	\$ 7,159	\$ 4,580	\$ 40,521
Income (loss) from operations	4,992	487	(1,027)	4,452
Depreciation and amortization expense	1,424	261	231	1,916

**I. Goodwill and Acquired Intangible Assets**

As of September 30, 2004 and June 30, 2004, goodwill of \$28,963 and \$29,009 was recorded, resulting from the acquisitions of Myriad Logic, Inc., the TGS Group (TGS), and Advanced Radio Corporation (ARC).

Acquired intangible assets consisted of the following:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Average Useful Life
<b>SEPTEMBER 30, 2004</b>				
Completed technology	\$ 5,316	\$ (2,107)	\$ 3,209	4.4 years
Customer relationships	1,710	(141)	1,569	5.0 years
Licensing agreement	365	(30)	335	5.0 years
	<u>\$ 7,391</u>	<u>\$ (2,278)</u>	<u>\$ 5,113</u>	
<b>JUNE 30, 2004</b>				
Completed technology	\$ 5,316	\$ (1,794)	\$ 3,522	4.4 years
Customer relationships	1,710	(56)	1,654	5.0 years
Licensing agreement	365	(12)	353	5.0 years
	<u>\$ 7,391</u>	<u>\$ (1,862)</u>	<u>\$ 5,529</u>	

**MERCURY COMPUTER SYSTEMS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Amortization expense related to acquired intangible assets for the three months ended September 30, 2004 and 2003 was \$416 and \$212, respectively. Estimated future amortization expense for acquired intangible assets remaining at September 30, 2004 is \$1,233 for the remainder of fiscal 2005, \$1,438 for fiscal 2006, \$857 for fiscal 2007 and 2008 and \$728 for fiscal 2009.

**J. Commitments and Contingencies**

The Company is subject to legal proceedings and claims that arise in the ordinary course of business. The Company does not believe these actions will have a material adverse effect on its financial position, results of operations or cash flows.

**K. Stock Repurchase**

In July 2004, the Company's Board of Directors extended the share repurchase program through December 2005 and authorized an increase in the total authorized dollar amount for repurchase then available to approximately \$25,000. In the first quarter of fiscal 2005, the Company purchased 300,000 shares of common stock for a total cost of \$7,844. Approximately \$17,156 remained available under the plan for future repurchases as of September 30, 2004.

Effective July 1, 2004, the Massachusetts Business Corporation Act eliminated the use of treasury shares by Massachusetts corporations. As a result, all of the Company's treasury shares were automatically converted to authorized but unissued shares on July 1, 2004. All future shares repurchased by the Company under the share repurchase program will constitute authorized but unissued shares.

**L. Product Warranty Liability**

The Company's product sales generally include a one-year hardware warranty. At the time of product shipment, the Company accrues for the estimated cost to repair or replace potentially defective products. Estimated warranty costs are based upon prior actual warranty costs for substantially similar transactions. The following table presents the changes in the Company's product warranty liability for the three months ended September 30, 2004 and 2003:

	<u>2004</u>	<u>2003</u>
Beginning balance at June 30	\$ 1,135	\$ 925
Accruals for warranties issued during the period	220	376
Settlements made during the period	(213)	(339)
Ending balance at September 30	<u>\$ 1,142</u>	<u>\$ 962</u>

## **ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

From time to time, information provided, statements made by our employees or information included in our filings with the Securities and Exchange Commission may contain statements that are not historical facts but that are "forward-looking statements" which involve risks and uncertainties. The words "may," "will," "expect," "anticipate," "continue," "estimate," "plan," "project," "intend" and similar expressions are intended to identify forward-looking statements regarding events, conditions and financial trends that may affect our future plans of operations, business strategy, results of operations and financial position. These statements are based on our current expectations and estimates as to prospective events and circumstances about which there can be no firm assurances given. Further, any forward-looking statement speaks only as of the date on which such statement is made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made. As it is not possible to predict every new factor that may emerge, forward-looking statements should not be relied upon as a prediction of actual future financial condition or results. Actual results, performances or achievements may differ materially from the anticipated future results, performances or achievements expressed or implied by these forward-looking statements. Important factors that may cause our actual results to differ from these forward-looking statements include, but are not limited to, those referenced in the section entitled "Factors that May Affect Future Results" in Part I—Item 2 of this Form 10-Q.

### **OVERVIEW**

We design, manufacture and market high-performance, real-time digital signal and image processing computer systems that transform sensor-generated data into information which can be displayed as images for human interpretation or be subjected to additional computer analysis. These multicomputer systems are heterogeneous and scalable, allowing them to accommodate several microprocessor types and to scale from a few to hundreds of microprocessors within a single system.

During the past several years, the majority of our revenue has been generated from sales of our products to the Defense Electronics Group (DEG) market, generally for use in intelligence-gathering electronic warfare systems. Our activities in this area have focused on the proof of concept, development and deployment of advanced military applications in radar, sonar and airborne surveillance. Imaging and Visualization Solutions (IVS) is another primary market that we currently serve. Our computer systems are embedded in magnetic resonance imaging (MRI), computed tomography (CT), positron emission tomography (PET), and digital X-ray machines. Our remaining revenues are derived from computer systems used in such commercial Original Equipment Manufacturers (OEM) solutions as semiconductor photomask generation, wafer inspection, baggage scanning, seismic analysis and development of new reticle inspection and wafer inspection systems.

During the first three months of fiscal year 2005, revenues increased by \$14.5 million compared to the same period in fiscal 2004, primarily as a result of a \$9.0 million increase in our OEM Solutions revenues and growth in both the DEG and IVS business units, as well as \$1.7 million of revenues associated with the acquisition of the TGS Group (TGS). Operating expenses increased \$6.0 million from the same period last year primarily due to \$4.7 million of additional operating expenses associated with the acquisition of the TGS and Advanced Radio Corporation (ARC), which were completed in the fourth quarter of fiscal 2004. Operating expenses as a percentage of revenues decreased to 50% for the three months ended September 30, 2004 as compared to 53% for the same period in fiscal 2004, primarily as a result of revenues increasing 36% from period to period. We continue to monitor key operating metrics in order to maintain an appropriate operating expense cost structure relative to our revenue growth expectations.

Going forward, business and market uncertainties may affect future results. For a discussion of key factors that could impact the future and must be managed by us, please refer to the discussion below.

## CRITICAL ACCOUNTING POLICIES AND SIGNIFICANT JUDGMENTS AND ESTIMATES

We have identified the policies discussed below as critical to understanding our business and our results of operations. The impact and any associated risks related to these policies on our business operations are discussed throughout Management's Discussion and Analysis of Financial Condition and Results of Operations where such policies affect our reported and expected financial results.

The preparation of consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities. On an on-going basis, we evaluate our estimates and judgments, including those related to revenue recognition, allowances for bad debts, warranties, contingencies, litigation, and the valuation of inventory, long-lived assets, goodwill, and income tax assets. We base our estimates on historical experience and on appropriate and customary assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Changes in our estimates from period to period, such as changes in assumptions underlying our estimates, may have a material impact on our financial condition or results of operations. Similarly, using the ends of the range of reasonably possible amounts that we determined in formulating our estimate, rather than the reported estimate, may have a material impact on our financial condition or results of operations. However, during the past three fiscal years, such changes in our estimates, including those related to accounts receivable and inventory valuation and to warranty cost accruals, have not had a material impact on our overall financial performance or on any individual line item in our financial statements.

### *Revenue Recognition and Accounts Receivable*

Revenue from system sales is recognized upon shipment provided that title and risk of loss have passed to the customer, there is persuasive evidence of an arrangement, the sales price is fixed or determinable, collection of the related receivable is reasonably assured, and customer acceptance criteria, if any, have been successfully demonstrated.

Certain contracts with customers require us to perform tests of our products prior to shipment to ensure their performance complies with our published product specifications and, on occasion, with additional customer-requested specifications. In these cases, we conduct such tests and, if they are completed successfully, include a written confirmation with each order shipped. As a result, at the time of each product shipment, we believe that no further customer testing requirements exist and that there is no uncertainty of non-acceptance by our customer. In the rare instance that customer payment is conditioned upon final acceptance testing by the customer at its own facility, we do not recognize any revenue until the final acceptance testing has been completed and written confirmation from the customer has been received.

We do not provide our customers with rights of product return, other than those related to warranty provisions that permit repair or replacement of defective goods. We accrue for anticipated warranty costs upon product shipment.

Installation of our products require insignificant effort that does not alter the capabilities of the products and may be performed by our customers or other vendors. If an order includes installation or training services that are undelivered at the time of product shipment, we defer revenue equal to the fair value of the installation or training obligations until such time as the services have been provided. We determine these fair values based on the price typically charged to our customers who purchase these services separately.

In limited circumstances, we engage in long-term contracts to design, develop, manufacture or modify complex equipment. For these contracts, we recognize revenue using the percentage-of-completion method of contract accounting, measuring progress toward completion based on contract cost incurred to date as compared with total estimated contract costs. The use of the percentage-of-completion method of accounting requires

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significant judgment relative to estimating total contract costs, including assumptions relative to the length of time to complete the contract, the nature and complexity of the work to be performed, anticipated increases in wages and prices for subcontractor services and materials, and the availability of subcontractor services and materials. Our estimates are based upon the professional knowledge and experience of our engineers, program managers and other personnel who review each long-term contract monthly to assess the contract's schedule, performance, technical matters and estimated cost at completion. When adjustments in estimated contract costs are determined, such revisions may have the effect of adjusting in the current period the earnings applicable to performance in prior periods. Anticipated losses, if any, are recognized in the period in which determined.

For transactions involving the licensing of stand-alone software products and of software that is not incidental to the product, we recognize revenue when there is persuasive evidence of an arrangement, delivery of the software has occurred, the price is fixed or determinable and collection of the related receivable is reasonably assured. Our stand-alone software products are not deemed essential to the functionality of any hardware system and do not require installation by us or significant modification or customization of the software. The fair value of maintenance agreements related to stand-alone software products is recognized as revenue ratably over the term of each maintenance agreement.

At the time of product shipment, we assess collectibility of trade receivables based on a number of factors, including past transaction and collection history with a customer and the credit-worthiness of the customer. If we determine that collectibility of a particular sale is not reasonably assured, revenue is deferred until such time as collection becomes reasonably assured, which generally occurs upon receipt of payment from the customer. After the time of sale, we assess our exposure to changes in our customers' abilities to pay outstanding receivables and record allowances for such potential bad debts.

### *Inventory*

Inventory, which includes materials, labor and manufacturing overhead, is stated at the lower of cost (first-in, first-out basis) or net realizable value. On a quarterly basis, we use consistent methodologies to evaluate inventory for net-realizable value. We record a provision for excess and obsolete inventory, consisting of on-hand and non-cancelable on-order inventory in excess of estimated usage. The excess and obsolete inventory evaluation is based upon assumptions about future demand, product mix and possible alternative uses. If actual demand, product mix or possible alternative uses are less favorable than those projected by management, additional inventory write-downs may be required.

### *Impairment of Long-Lived Assets and Goodwill*

We assess the impairment of acquired intangible assets and property and equipment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors we consider important that could indicate impairment include significant underperformance relative to prior operating results projections, significant changes in the manner of our use of the asset or the strategy for our overall business and significant negative industry or economic trends. When we determine that the carrying value of acquired intangible assets or property and equipment may not be recoverable based upon the existence of one or more of the above indicators of impairment, we measure any impairment based on a projected discounted cash flow method using a discount rate determined by our management to be commensurate with the risk inherent in our current business model.

Goodwill is assessed for impairment on a reporting unit basis at least annually or more frequently when events or circumstances occur indicating that the recorded goodwill may be impaired. If the book value of a reporting unit exceeds its fair value, the implied fair value of goodwill is compared to the carrying amount of goodwill. If the carrying amount of goodwill exceeds the implied fair value, an impairment loss is recorded in an amount equal to that excess.

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### *Income Tax Assets*

We evaluate the realizability of our deferred tax assets on a quarterly basis and assess the need for a valuation allowance. Realization of our net deferred tax assets is dependent on our ability to generate sufficient future taxable income. Except for deferred tax assets acquired in the TGS acquisition, we believe that it is more likely than not that our net deferred tax assets will be realized based on forecasted income; however, there can be no assurance that we will be able to meet our expectations of future income. We have provided a valuation allowance against the deferred tax assets acquired in the TGS acquisition.

### *Warranty Accrual*

Our product sales include a one-year hardware warranty. At the time of product shipment, we accrue for the estimated cost to repair or replace potentially defective products. Estimated warranty costs are based upon prior actual warranty costs for substantially similar products.

### **RESULTS OF OPERATIONS:**

The following tables set forth, for the periods indicated, certain financial data as a percentage of total revenues:

	Three Months Ended September 30,	
	2004	2003
Revenues	100%	100%
Cost of revenues	35.4	35.9
Gross margin	64.6	64.1
Operating expenses:		
Selling, general and administrative	29.1	31.6
Research and development	21.0	21.5
Total operating expenses	50.1	53.1
Income from operations	14.5	11.0
Other income (expense), net	(0.5)	0.8
Income before income taxes	14.0	11.8
Income tax provision	4.7	3.7
Net income	9.3%	8.1%

### REVENUES

Total revenues increased by \$14.5 million or 36% to \$55.0 million for the three months ended September 30, 2004 compared to \$40.5 million during the same period in fiscal 2004. Revenues by segment as a percentage of total revenues are as follows:

	Three Months Ended September 30,	
	2004	2003
Defense Electronics Group	56%	71%
Imaging and Visualization Solutions Group	19	18
OEM Solutions Group	25	11
Total revenues	100%	100%

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DEG revenues increased by \$2.2 million or 8% to \$31.0 million for the three months ended September 30, 2004 compared to \$28.8 million during the same period in fiscal 2004. The increase for the three months ended September 30, 2004 was primarily related to a \$2.4 million increase in shipments of signal intelligence applications, and a \$1.5 million increase in shipments of defense technologies applications, offset by a \$1.6 million decrease in shipments for radar applications.

IVS revenues increased \$3.3 million or 46% to \$10.4 million for the three months ended September 30, 2004 compared to \$7.2 million during the same period in fiscal 2004. The increase for the three months ended September 30, 2004 was primarily the result of increased shipments of products for both digital X-ray applications and products for magnetic resonance imaging (MRI) applications of \$1.6 million, and \$1.7 million of revenues associated with the acquisition of TGS, which was completed in the fourth quarter of 2004.

OEM Solutions Group revenues increased \$9.0 million or 195% to \$13.5 million for the three months ended September 30, 2004 compared to \$4.6 million during the same period in fiscal 2004. The increase in revenues was primarily related to a \$7.6 million increase of shipments of semiconductor imaging boards for developing and testing new semiconductors and a \$1.4 million increase in shipments of systems for inclusion in baggage scanning applications. Shipments of semiconductor imaging boards represented 83% and 79% of OEM Solutions Group revenues for the three months ended September 30, 2004 and 2003, respectively.

### GROSS PROFIT

Gross profit was 64.6% for the three months ended September 30, 2004, an increase of 50 basis points from the 64.1% gross profit achieved in the same period of fiscal 2004. The increase in gross margin is primarily the result of increased revenues which absorbed certain fixed manufacturing costs, partially offset by the decrease of DEG revenues as a percentage of total revenues. DEG revenues generally carry a higher margin than our other operating segments.

### SELLING, GENERAL AND ADMINISTRATIVE

Selling, general and administrative expenses increased 25% or \$3.2 million to \$16.0 million for the three months ended September 30, 2004 compared to \$12.8 million during the same period in fiscal 2004. The increase in selling, general and administrative expenses was primarily the result of an additional \$2.9 million of expenses relating to the full quarter effect of the acquisitions completed in the fourth quarter of fiscal 2004.

### RESEARCH AND DEVELOPMENT

Research and development expenses increased 32% or \$2.8 million to \$11.5 million for the three months ended September 30, 2004 compared to \$8.7 million during the same period in fiscal 2004. The increase in research and development expenses for the three months ended September 30, 2004 was primarily the result of an additional \$1.6 million of expenses relating to the full quarter effect of the acquisitions completed in the fourth quarter of fiscal 2004, as well as an increase in prototype development expenses of approximately \$1.4 million.

### INTEREST INCOME (EXPENSE), NET

Interest income, net of interest expense for the three months ended September 30, 2004 decreased by \$0.3 million to \$0.1 million of net expense. The decrease was primarily related to increased interest associated with our issuance of \$125.0 million of convertible debt in April 2004.

### INCOME TAX PROVISION

We recorded tax provisions during the three months ended September 30, 2004 reflecting a 34% effective tax rate. The increase in the effective tax rate from 29% for the fiscal year ended June 30, 2004 was due to the

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expiration of the tax credit for research and development. The effective tax rate for all periods is less than the U.S. statutory tax rate of 35% primarily due to state research and development credits, tax-exempt interest, and the extraterritorial income ("ETI") benefit. We expect our fiscal year 2005 effective tax rate to be approximately 30%, as a result of the tax credit legislation passed in October 2004.

### SEGMENT OPERATING RESULTS

Income from operations of the DEG segment increased \$0.6 million to \$5.6 million for the three months ended September 30, 2004 from \$5.0 million for the same period of fiscal 2004. The increase in income from operations of the DEG segment was primarily related to the increase in revenues of \$2.2 million.

Income from operations of the IVS segment increased \$0.1 million to \$0.6 million for the three months ended September 30, 2004 from \$0.5 million for the same period of fiscal 2004. The increase in income from operations of the IVS segment was primarily the result of increased revenues for the period, partially offset by the impact of the TGS acquisition.

Income from operations of the OEM Solutions Group segment increased \$2.8 million to \$1.8 million for the three months ended September 30, 2004 from a loss position of \$1.0 million for the same period of fiscal 2004. The increase in income from operations of the OEM segment was primarily a result of the increase in revenues for the three months ended September 30, 2004 of \$9.0 million, primarily in the semiconductor market applications.

See Note H to the financial statements included in this report for more information regarding our operating segments.

### LIQUIDITY AND CAPITAL RESOURCES

As of September 30, 2004, we had cash and marketable investments of approximately \$240.5 million. During the three months ended September 30, 2004, we generated approximately \$11.2 million in cash from operations, compared to \$9.2 million generated during the same period of fiscal 2004. The \$2.0 million increase in cash generated from operating activities is primarily due to the increase in net income of \$1.8 million.

During the three months ended September 30, 2004, our investing activities used cash of \$27.9 million, an increase in the use of cash of \$29.2 million as compared to the same period last year. The increase in the use of cash for investing activities was due to an increase of net purchases of marketable securities of \$28.5 million and an increase in purchases of property and equipment of \$0.7 million.

During the three months ended September 30, 2004, our financing activities used cash of \$7.2 million, an increase in the use of cash of \$7.4 million from the same period in fiscal 2004. The increase in the use of cash for financing activities primarily consisted of \$7.8 million cash used for the purchase of our common stock, offset by a \$0.5 million increase in proceeds from the exercise of stock options.

In July 2004, our Board of Directors extended our share repurchase program through December 2005 and authorized an increase in the total authorized dollar amount for repurchase then available to approximately \$25 million. In the first quarter of fiscal 2005, we purchased 300,000 shares at a cost of \$7.8 million. Approximately \$17.2 million remained available under the plan for future repurchases as of September 30, 2004.

The terms of our mortgage note agreements contain certain covenants, which, among other provisions, require us to maintain a minimum net worth. The mortgage note agreements also include significant prepayment penalties. We were in compliance with all covenants of the mortgage note agreements as of September 30, 2004.

The terms of our convertible notes contain certain contingent conversion provisions. Under certain circumstances, the notes will be convertible into our common stock at a conversion rate of 33.0797 shares per



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\$1,000 principal amount of the notes, subject to adjustment in certain circumstances. The conversion rate is equal to an initial conversion price of approximately \$30.23 per share. The notes are convertible into shares of our common stock contingent upon the occurrence of specified events, including if, on or prior to May 1, 2019, the closing price of our common stock is above the initial threshold price of \$36.28 for at least 20 trading days in a 30 consecutive trading-day period ending on the eleventh trading day of any fiscal quarter. The convertible notes mature on May 1, 2024 and bear interest at 2% per year, payable semiannually in arrears in May and November. The convertible notes are unsecured, rank equally in right of payment to our existing and future senior debt, and do not subject us to any financial covenants. The holders may require us to repurchase the notes, in whole or in part, on May 1, 2009, 2014 or 2019, upon a change in control, or if our common stock is neither listed nor approved for trading on specified markets. At our option, we may redeem any of the convertible notes on or after May 1, 2009 at a price equal to 100% of the principal amount of the convertible notes to be redeemed plus accrued and unpaid interest.

The following is a schedule of our commitments and contractual obligations outstanding at September 30, 2004:

<u>(in thousands)</u>	<u>Total</u>	<u>Less Than 1 Year</u>	<u>2-3 Years</u>	<u>4-5 Years</u>	<u>More Than 5 Years</u>
Notes payable	\$ 136,633	\$ 990	\$ 1,773	\$ 2,030	\$ 131,840
Interest due on notes payable	54,717	3,302	6,421	6,102	38,892
Purchase obligations	6,428	6,428	—	—	—
Operating leases	3,505	1,272	1,740	266	227
Amounts payable for acquisition	7,512	7,512	—	—	—
Other long-term liabilities	630	—	630	—	—
Deferred compensation	1,140	—	—	—	1,140
	<u>\$ 210,565</u>	<u>\$ 19,504</u>	<u>\$ 10,564</u>	<u>\$ 8,398</u>	<u>\$ 172,099</u>

Currently, our prime source of liquidity comes from cash, marketable securities and cash generated from operations. As of September 30, 2004, we had \$136.6 million of outstanding debt. Our near-term fixed commitments for cash expenditures consist primarily of payments under operating leases, mortgage notes, amounts payable for acquisition and inventory purchase commitments, as well as interest payments on our long-term debt. We do not currently have any material commitments for capital expenditures or any other material commitments aside from operating leases for our facilities and inventory purchase commitments.

If cash generated from operations is insufficient to satisfy working capital requirements, we may need to access funds through bank loans, sales of securities or other means. There can be no assurance that we will be able to raise any such capital on terms acceptable to us, on a timely basis or at all. If we are unable to secure additional financing, we may not be able to develop or enhance our products, take advantage of future opportunities, respond to competition or continue to effectively operate our business.

Based on our current plans and business conditions, we believe that existing cash and marketable securities will be sufficient to satisfy our anticipated cash requirements for at least the next twelve months.

### **Additional Information on Stock Option Plans and Grants**

#### *Stock Option Program Description*

We currently have one active plan under which we grant options: the 1997 Stock Option Plan. We have 70,660 options outstanding as of September 30, 2004, which were issued under previously terminated plans.

Stock option grants are designed to reward employees for their long-term contributions to us and provide incentives for them to remain with our company. We consider our equity compensation program critical to our operation and productivity. Approximately 77% of our employees participate in our equity compensation program.

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**Employee and Executive Option Grants**

Option grants for the period:

	Three Months Ended September 30, 2004	Year Ended June 30,	
		2004	2003
Grants during the period as a percentage of outstanding shares at the end of such period	2.9%	4.7%	4.5%
Grants to Named Executive Officers* during the period as a percentage of total options granted during such period	23.8%	13.8%	24.4%
Grants to Named Executive Officers* during the period as a percentage of outstanding shares at the end of such period	0.7%	0.6%	1.1%
Cumulative options held by Named Executive Officers* as a percentage of total options outstanding at the end of such period	22.5%	21.7%	22.0%

\* The term "Named Executive Officers" as used in these notes includes the Chief Executive Officer and the four other most highly compensated executive officers as of June 30, 2004.

**Summary of stock option activity**

	Options Outstanding	
	Number of Shares	Weighted Average Exercise Price
<b>June 30, 2003</b>	<b>4,222,766</b>	<b>\$ 24.52</b>
Grants	996,030	22.06
Exercises	(238,074)	11.00
Cancellations	(447,227)	29.29
<b>June 30, 2004</b>	<b>4,533,495</b>	<b>\$ 24.18</b>
Grants	609,900	23.64
Exercises	(64,167)	13.53
Cancellations	(46,651)	27.40
<b>September 30, 2004</b>	<b>5,032,577</b>	<b>\$ 24.22</b>

As of September 30, 2004, there were 1,273,738 shares available for future option awards.

**Summary of in-the-money and out-of-the-money option information**

	As of September 30, 2004					
	Exercisable		Unexercisable		Total	
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
In-the-money	1,566,303	\$ 15.68	1,616,270	\$ 21.35	3,182,573	\$ 18.56
Out-of-the-money (1)	1,123,419	\$ 35.06	726,585	\$ 32.26	1,850,004	\$ 33.96
<b>Total options outstanding</b>	<b>2,689,722</b>	<b>\$ 23.78</b>	<b>2,342,855</b>	<b>\$ 24.73</b>	<b>5,032,577</b>	<b>\$ 24.22</b>

(1) Out-of-the-money options are those options with an exercise price equal to or above the closing price of our common stock of \$26.80 as of September 30, 2004.

**Options Granted to Named Executive Officers during the three months ended September 30, 2004**

	Individual Grants				Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term (2)	
	Number of Securities Underlying Options Per Grant	Percent of Total Options Granted to Employees Year to Date (1)	Weighted Average Exercise Price	Expiration Date	5%	10%
James R. Bertelli	75,000	12.30%	\$ 23.46	7/28/2014	\$1,106,540	\$2,804,190
Robert D. Becker	18,000	2.95%	\$ 23.46	7/28/2014	\$ 265,570	\$ 673,006
Douglas F. Flood	10,000	1.64%	\$ 23.46	7/28/2014	\$ 147,539	\$ 373,892
Barry S. Isenstein	20,000	3.28%	\$ 23.46	7/28/2014	\$ 295,077	\$ 747,784
Craig Lund	22,000	3.60%	\$ 23.46	7/28/2014	\$ 324,585	\$ 822,562

- (1) Based on a year-to-date total of 609,900 shares subject to options granted to employees and directors under our option plans.
- (2) Amounts reported in these columns represent amounts that may be realized upon exercise of the options immediately prior to the expiration of their term assuming the specified compounded rates of appreciation (5% and 10%) of our common stock over the term of the options. These numbers are calculated based on rules promulgated by the Securities and Exchange Commission and do not reflect our estimate of future stock price increases. Actual gains, if any, on stock option exercises and common stock holdings are dependent on the timing of such exercise and the future performance of our common stock. There can be no assurance that the rates of appreciation assumed in this table can be achieved or that the amounts reflected will be received by the individuals.

**Option Exercises and Remaining Holdings of Named Executive Officers**

Name	During the three months ended September 30, 2004 Shares Acquired on Exercise	Value Realized	Number of Securities Underlying Unexercised Options as of September 30, 2004:		Values of Unexercised In-the-Money Options as of September 30, 2004: (1)	
			Exercisable	Unexercisable	Exercisable	Unexercisable
			James R. Bertelli	—	—	294,677
Robert D. Becker	—	—	63,017	70,833	\$ 190,476	\$ 324,784
Douglas F. Flood	4,000	\$ 77,168	64,435	57,875	\$ 593,560	\$ 616,908
Barry S. Isenstein	—	—	57,582	57,500	\$ 200,434	\$ 261,400
Craig Lund	—	—	85,980	54,500	\$ 736,356	\$ 244,708

- (1) Option values based on the closing price of our common stock of \$26.80 on September 30, 2004.

**Equity Compensation Plans**

The following table sets forth information as of September 30, 2004 with respect to compensation plans under which equity securities of the Company are authorized for issuance.

Plan category	(1)	(2)	(3)
	Number of securities to be issued upon exercise of outstanding options, warrants, and rights	Weighted-average exercise price of outstanding options, warrants, and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (1))
Equity compensation plans approved by shareholders(a)	5,032,577(b)	\$ 24.22	1,463,843(c)
Equity compensation plans not approved by shareholders	—	—	—
<b>TOTAL</b>	<b>5,032,577</b>	<b>\$ 24.22</b>	<b>1,463,843</b>

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- (a) Consists of the 1991, 1993, 1997 and 1998 stock option plans and our 1997 Employee Stock Purchase Plan (“ESPP”).
- (b) Does not include purchase rights under the ESPP, as the purchase price and number of shares to be purchased is not determined until the end of the relevant purchase period.
- (c) Includes 190,105 shares available for future issuance under the ESPP and 1,273,738 shares available for future issuances under the Company’s 1997 plan. We are no longer permitted to grant options under our 1991, 1993 and 1998 plans.

### **RECENT ACCOUNTING PRONOUNCEMENTS**

In September 2004, the FASB announced that it had reached a final consensus with respect to Emerging Issue Task Force 04-8 (“EITF 04-08”), “The Effect of Contingently Convertible Debt on Diluted Earnings per Share.” The FASB’s final consensus states that shares of common stock contingently issuable pursuant to contingent convertible securities should be included in diluted earnings per share computations (if dilutive) regardless of whether their market price triggers (or other contingent features) have been met. EITF 04-8 will be effective for all periods ending after December 15, 2004 and will require us to include an additional 4,134,962 shares, using the if-converted method (under which net income would also be adjusted to exclude imputed interest expense, net of tax) in our computation of diluted earnings per share for the three-month and six-month periods ending December 31, 2004. The consensus will require us to show the effect of the if-converted shares on the prior period earnings per share for comparative purposes.

### **FACTORS THAT MAY AFFECT FUTURE RESULTS**

#### **We depend heavily on defense electronics programs that incorporate our products, which may be only partially funded and are subject to potential termination and reductions in government spending.**

Sales of our computer systems, primarily as an indirect subcontractor or team member with prime contractors and in some cases directly, to the U.S. Government and its agencies, as well as foreign governments and agencies, accounted for approximately 68%, 69%, and 65% of our total revenues in fiscal 2004, 2003, and 2002, respectively, and approximately 56% of revenues for the quarter ended September 30, 2004. Our computer systems are included in many different domestic and international programs. Over the lifetime of a program, the award of many different individual contracts and subcontracts may implement our requirements. The funding of U.S. Government programs is subject to Congressional appropriations. Although multiple-year contracts may be planned in connection with major procurements, Congress generally appropriates funds on a fiscal year basis even though a program may continue for several years. Consequently, programs are often only partially funded initially, and additional funds are committed only as Congress makes further appropriations and prime contracts receive such funding. The reduction in funding or termination of a government program in which we are involved would result in a loss of anticipated future revenues attributable to that program and contracts or orders received. The U.S. Government could reduce or terminate a prime contract under which we are a subcontractor or team member irrespective of the quality of our products or services. The termination of a program or the reduction in or failure to commit additional funds to a program in which we are involved could negatively impact our revenues and have a material adverse effect on our financial condition and results of operations.

#### **We face other risks and uncertainties associated with defense-related contracts, which may have a material adverse effect on our business.**

Whether our contracts are directly with the U.S. Government, a foreign government or one of its respective agencies, or indirectly as a subcontractor or team member, our contracts and subcontracts are subject to special risks, including:

- Changes in government administration and national and international priorities, including developments in the geo-political environment such as the current “War on Terrorism,” “Operation Enduring Freedom,”

“Operation Iraqi Freedom,” and the threat of nuclear proliferation in North Korea, could have a significant impact on national or international defense spending priorities and the efficient handling of routine contractual matters. These changes could have a negative impact on our business in the future.

- Our contracts with the U.S. and foreign governments and their prime and subcontractors are subject to termination either upon default by us or at the convenience of the government or contractor if, among other reasons, the program itself has been terminated. Termination for convenience provisions generally entitle us to recover costs incurred, settlement expenses and profit on work completed prior to termination, but there can be no assurance in this regard.
- Because we contract to supply goods and services to the U.S. and foreign governments and their prime and subcontractors, we compete for contracts in a competitive bidding process and, in the event we are awarded a contract, we are subject to protests by disappointed bidders of contract awards that can result in the reopening of the bidding process and changes in governmental policies or regulations and other political factors.
- Consolidation among defense industry contractors has resulted in a few large contractors with increased bargaining power relative to us. We cannot assure that the increased bargaining power of these contractors will not adversely affect our business or results of operations in the future.
- Our customers include U.S. Government contractors who must comply with and are affected by laws and regulations relating to the formation, administration and performance of U.S. Government contracts. A violation of these laws and regulations could result in the imposition of fines and penalties to our customer or the termination of its contract with the U.S. Government. As a result, there could be a delay in our receipt of orders from our customer or a termination of such orders.
- We sell products to U.S. and international defense contractors and also directly to the U.S. Government as a commercial supplier such that cost data is not supplied. To the extent that there are interpretations or changes in the Federal Acquisition Regulations (FARs) regarding the qualifications necessary to be a commercial supplier, there could be a material adverse effect on our business and operating results.

**The loss of one or more of our largest customers could adversely affect our results of operations.**

We are dependent on a small number of customers for a large portion of our revenues. A significant decrease in the sales to or loss of any of our major customers would have a material adverse effect on our business and results of operations. For the three months ended September 30, 2004, five customers collectively accounted for 67% of our total revenues. In fiscal 2004, Argon Engineering Associates, GE Medical Systems and Northrop Grumman Corporation accounted for 12%, 11% and 11% of our total revenues respectively. Customers in the Defense Electronics Group market generally purchase our products in connection with government programs that have a limited duration, leading to fluctuating sales to any particular customer in this market from year to year. In addition, our revenues are largely dependent upon the ability of customers to develop and sell products that incorporate our products. No assurance can be given that our customers will not experience financial, technical or other difficulties that could adversely affect their operations and, in turn, our results of operations.

**Our IVS and OEM Solutions revenues currently come from a small number of customers and modalities, and any significant decrease in revenue from one of these customers or modalities could adversely impact our operating results.**

If a major IVS or OEM Solutions Group customer significantly reduces the amount of business it does with us, there would likely be an adverse impact on our operating results. GE Medical Systems, Siemens Medical and Philips Medical Systems accounted for substantially all of our IVS revenues for the fiscal years ended 2004, 2003 and 2002. In particular, GE Medical accounted for 60% of our aggregate IVS sales in fiscal 2004, 59% in fiscal 2003 and 57% in fiscal 2002. For the quarter ended September 30, 2004, GE Medical accounted for 50% of our aggregate IVS sales. Similarly, KLA-Tencor accounted for 66% of our total sales in the OEM Solutions

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Group market in fiscal 2004, 44% in fiscal 2003 and 26% in fiscal 2002. For the three months ended September 30, 2004, KLA-Tencor accounted for 72% of our total sales in the OEM Solutions Group market. Although we are seeking to broaden our commercial customer base, we expect to continue to depend on sales to a relatively small number of major customers in both the IVS and OEM Solutions Group markets. Because it often takes significant time and added cost to replace lost business, it is likely that operating results would be adversely affected if one or more of our major customers were to cancel, delay or reduce significant orders in the future. Our customer agreements typically permit the customer to discontinue future purchases without cause after timely notice.

### **Our sales to the IVS market could be adversely affected by changes in technology, strength of the economy, and health care reforms.**

The economic and technological conditions affecting our industry in general or any major IVS OEM customer in particular, may adversely affect our operating results. IVS OEM customers provide products to markets that are subject to both economic and technological cycles. Any change in the demand for medical imaging devices that renders any of our products unnecessary or obsolete, or any change in the technology in these devices, could result in a decrease in our revenues. In addition to our IVS OEM customers, the end users of their products and the health care industry generally are subject to extensive federal, state and local regulation in the U.S. as well as in other countries. Changes in applicable health care laws and regulations or new interpretations of existing laws and regulations could cause these customers or end users to demand fewer IVS products. We cannot assure you that future health care regulations or budgetary legislation or other changes in the administration or interpretation of governmental health care programs both in the U.S. and abroad will not have a material adverse effect on our business.

### **Competition from existing or new companies in the IVS business could cause us to experience downward pressure on prices, fewer customer orders, reduced margins, the inability to take advantage of new business opportunities and the loss of market share.**

IVS is a highly competitive industry, and our IVS OEM customers generally extend the competitive pressures they face throughout their respective supply chains. We are subject to competition based upon product design, performance, pricing, quality and services. Our product performance, embedded systems engineering expertise, and product quality have been important factors in our growth. While we try to maintain competitive pricing on those products which are directly comparable to products manufactured by others, in many instances our products will conform to more exacting specifications and carry a higher price than analogous products. Many of our IVS OEM customers and potential IVS OEM customers have the capacity to design and internally manufacture products that are similar to our products. We face competition from research and product development groups and the manufacturing operations of current and potential customers, who continually evaluate the benefits of internal research and product development and manufacturing versus outsourcing. This competition could result in fewer customer orders and a loss of market share.

### **If we are unable to respond adequately to our competition, we may lose existing customers and fail to win future business opportunities.**

The markets for our products are highly competitive and are characterized by rapidly changing technology, frequent product performance improvements and evolving industry standards. Competitors may be able to offer more attractive pricing or develop products that could offer performance features that are superior to our products, resulting in reduced demand for our products. Due to the rapidly changing nature of technology, we may not become aware in advance of the emergence of new competitors into our markets. The emergence of new competitors into markets historically targeted by us could result in the loss of existing customers and may have a negative impact on our ability to win future business opportunities. With continued microprocessor evolution, low-end systems could become adequate to meet the requirements of an increased number of the lesser-demanding applications within our target markets. Workstation manufacturers and other low-end single-board computer or merchant board computer companies, or new competitors, may attempt to penetrate the high-performance market for defense electronics systems, which could have a material adverse effect on our business.

**We face the continuing impact on our business from the slowdown in worldwide economies.**

The future direction of domestic and global economies could have a significant impact on our overall performance. Our business has been, and may continue to be, negatively impacted by the slowdown in the economies of the U.S., Europe, Asia and elsewhere that began during fiscal 2001. The uncertainty regarding the growth rate of the worldwide economies has caused companies to reduce capital investment and may cause further reduction of these capital investments. These reductions have been particularly severe in the electronics and semiconductor industries, which we serve. While our business may be performing better than some companies in periods of economic decline, the effects of the economic decline are being felt across all business segments and have been a contributor to the slower than normal customer orders. We cannot predict if or when the growth rate of worldwide economies will rebound, nor whether the growth rate of customer orders will rebound when the worldwide economies begin to grow. All components of forecasting and budgeting processes are dependent upon estimates of growth in the markets we serve. The prevailing economic uncertainty renders estimates of future income and expenditures even more difficult than usual. As a result, we may make significant investments and expenditures but never realize the anticipated benefits, which could adversely affect our results of operations.

**We cannot predict the consequences of future terrorist activities, but they may adversely affect the markets in which we operate, our ability to insure against risks, and our operations or profitability.**

The terrorist attacks in the U.S. on September 11, 2001, as well as the U.S.-led response, including Operation Enduring Freedom and Operation Iraqi Freedom, the potential for future terrorist activities, and the development of a Homeland Security organization have created economic and political uncertainties that could have a material adverse effect on business and the price of our common stock. These matters have caused uncertainty in the world's financial and insurance markets and may increase significantly the political, economic and social instability in the geographic areas in which we operate. These developments may adversely affect business and profitability and the prices of our securities in ways that cannot be predicted at this time.

**Implementation of our growth strategy may not be successful, which could affect our ability to increase revenues.**

Our growth strategy includes developing new products and entering new markets. Our ability to compete in new markets will depend upon a number of factors including, without limitation:

- our ability to create demand for products in new markets;
- our ability to manage growth effectively;
- our quality of new products;
- our ability to successfully integrate any acquisitions that we make;
- our ability to respond to changes in our customers' businesses by updating existing products and introducing, in a timely fashion, new products which meet the needs of our customers; and
- our ability to respond rapidly to technological change.

The failure to do any of the foregoing could have a material adverse effect on our business, financial condition and results of operations. In addition, we may face competition in these new markets from various companies that may have substantially greater research and development resources, marketing and financial resources, manufacturing capability and customer support organizations.

**We may be unable to obtain critical components from suppliers, which could disrupt or delay our ability to deliver products to our customers.**

Several components used in our products are currently obtained from sole-source suppliers. We are dependent on key vendors like LSI Logic, Xilinx and Toshiba for custom-designed ASICs and FPGAs; Motorola and IBM for PowerPC microprocessors; IBM for a specific SRAM; and Arrow and Force Computers for chassis

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and chassis components. Generally, suppliers may terminate their contracts with us without cause upon 30 days' notice and may cease offering their products upon 180 days' notice. If any of our sole-source suppliers were to limit or reduce the sale of these components, we may be unable to fulfill customer orders in a timely manner or at all. In addition, if these or other component suppliers, some of which are small companies, were to experience financial difficulties or other problems which prevented them from supplying us with the necessary components, we could experience a loss of revenues due to our inability to fulfill orders. These sole-source and other suppliers are each subject to quality and performance issues, materials shortages, excess demand, reduction in capacity and other factors that may disrupt the flow of goods to us or to our customers, which would adversely affect our business and customer relationships. We have no guaranteed supply arrangements with our suppliers and there can be no assurance that these suppliers will continue to meet our requirements. If supply arrangements are interrupted, we may not be able to find another supplier on a timely or satisfactory basis. We may incur significant set-up costs and delays in manufacturing should it become necessary to replace any key vendors due to work stoppages, shipping delays, financial difficulties or other factors.

### **We may not be able to effectively manage our relationships with contract manufacturers.**

We may not be able to effectively manage our relationship with contract manufacturers, and the contract manufacturers may not meet future requirements for timely delivery. We rely on contract manufacturers to build hardware sub-assemblies for our products in accordance with our specifications. During the normal course of business, we may provide demand forecasts to contract manufacturers up to five months prior to scheduled delivery of our products to customers. If we overestimate requirements, the contract manufacturers may assess cancellation penalties or we may be left with excess inventory, which may negatively impact our earnings. If we underestimate requirements, the contract manufacturers may have inadequate inventory, which could interrupt manufacturing of our products and result in delays in shipment to customers and revenue recognition. Contract manufacturers also build products for other companies, and they may not have sufficient quantities of inventory available or sufficient internal resources to fill our orders on a timely basis or at all.

In addition, there have been a number of major acquisitions within the contract manufacturing industry in recent periods. While there has been no significant impact on our contract manufacturers to date, future acquisitions could potentially have an adverse effect on our working relationships with contract manufacturers. Moreover, we currently rely primarily on one contract manufacturer. The failure of this contract manufacturer to fill our orders on a timely basis or in accordance with our customers' specifications could result in a loss of revenues and damage to our reputation. We may not be able to replace this primary contract manufacturer in a timely manner or without significantly increasing our costs if such contract manufacturer were to experience financial difficulties or other problems which prevented it from fulfilling our order requirements.

### **Our performance and stock price may decline if we are unable to retain and attract key personnel.**

We are largely dependent upon the skills and efforts of senior management including James R. Bertelli, our president and chief executive officer, as well as our senior managerial, sales and technical employees. None of our senior management or other key employees is subject to employment contracts. The loss of services of any executive or other key personnel could have a material adverse effect on our business, financial condition and results of operations and stock price. In addition, our future success will depend to a significant extent on the ability to attract, train, motivate and retain highly skilled technical professionals, particularly project managers, engineers and other senior technical personnel. There can be no assurance that we will be successful in retaining current or future employees.

### **We are exposed to risks associated with international operations.**

We market and sell products in international markets, and have established offices and subsidiaries in the United Kingdom, Japan, the Netherlands, France, Germany and Italy. Revenues from international operations accounted for 9%, 7% and 4% of total revenues for fiscal year 2004, 2003 and 2002, respectively, and 7% for the three months ended September 30, 2004. There are risks inherent in transacting business internationally, including:

- changes in applicable laws and regulatory requirements;



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- export and import restrictions;
- export controls relating to technology;
- tariffs and other trade barriers;
- less favorable intellectual property laws;
- difficulties in staffing and managing foreign operations;
- longer payment cycles;
- problems in collecting accounts receivable;
- political instability;
- fluctuations in currency exchange rates;
- expatriation controls; and
- potential adverse tax consequences.

There can be no assurance that one or more of these factors will not have a material adverse effect on our future international activities and, consequently, on our business and results of operations.

### **We may be unable to successfully integrate acquisitions.**

We may in the future acquire or make investments in complementary companies, products or technologies. Acquisitions may pose risks to our operations, including:

- problems and increased costs in connection with the integration of the personnel, operations, technologies or products of the acquired companies;
- unanticipated costs;
- diversion of management's attention from our core business;
- adverse effects on business relationships with suppliers and customers and those of the acquired company;
- acquired assets becoming impaired as a result of technical advancements or worse-than-expected performance by the acquired company;
- entering markets in which we have no, or limited, prior experience; and
- potential loss of key employees, particularly those of the acquired organization.

In addition, in connection with any acquisitions or investments we could:

- issue stock that would dilute existing shareholders' percentage ownership;
- incur debt and assume liabilities;
- obtain financing on unfavorable terms;
- incur amortization expenses related to acquired intangible assets or incur large and immediate write-offs;
- incur large expenditures related to office closures of the acquired companies, including costs relating to termination of employees and facility and leasehold improvement charges relating to vacating the acquired companies' premises; and
- reduce the cash that would otherwise be available to fund operations or to use for other purposes.

The failure to successfully integrate any acquisition or for acquisitions to yield expected results may negatively impact our financial condition and operating results.

**If we are unable to respond to technological developments and changing customer needs on a timely and cost-effective basis, our results of operations may be adversely affected.**

Our future success will depend in part on our ability to enhance current products and to develop new products on a timely and cost-effective basis in order to respond to technological developments and changing customer needs. Defense Electronics Group customers, in particular, demand frequent technological improvements as a means of gaining military advantage. Military planners have historically funded significantly more design projects than actual deployments of new equipment, and those systems that are deployed tend to contain the components of the subcontractors selected to participate in the design process. In order to participate in the design of new defense electronics systems, we must demonstrate the ability to deliver superior technological performance on a timely and cost-effective basis. There can be no assurance that we will secure an adequate number of Defense Electronics Group design wins in the future, that the equipment in which our products are intended to function will eventually be deployed in the field, or that our products will be included in such equipment if it eventually is deployed.

Customers in our IVS and OEM Solutions markets, including the semiconductor imaging market, also seek technological improvements through product enhancements and new generations of products. OEMs historically have selected certain suppliers whose products have been included in the OEMs' machines for a significant portion of the products' life cycles. We may not be selected to participate in the future design of any medical or semiconductor imaging equipment, or if selected, we may not generate any revenues for such design work.

The design-in process is typically lengthy and expensive, and there can be no assurance that we will be able to continue to meet the product specifications of OEM customers in a timely and adequate manner. In addition, any failure to anticipate or respond adequately to changes in technology and customer preferences, or any significant delay in product developments or introductions, could negatively impact our financial condition and results of operations, including the risk of inventory obsolescence. Because of the complexity of our products, we have experienced delays from time to time in completing products on a timely basis. If we are unable to design, develop or introduce competitive new products on a timely basis, our future operating results may be adversely affected.

**We may be unsuccessful in protecting our intellectual property rights.**

Our ability to compete effectively against other companies in our industry depends, in part, on our ability to protect our current and future proprietary technology under patent, copyright, trademark, trade secret and unfair competition laws. We cannot assure you that our means of protecting our proprietary rights in the United States or abroad will be adequate, or that others will not develop technologies similar or superior to our technology or design around the proprietary rights we own. In addition, management may be distracted and may incur substantial costs in attempting to protect our proprietary rights.

Also, despite the steps taken by us to protect our proprietary rights, it may be possible for unauthorized third parties to copy or reverse-engineer aspects of our products, develop similar technology independently or otherwise obtain and use information that we regard as proprietary, and we may be unable to successfully identify or prosecute unauthorized uses of our technology. Further, with respect to our issued patents and patent applications, we cannot assure you that any patents from any pending patent applications (or from any future patent applications) will be issued, that the scope of any patent protection will exclude competitors or provide competitive advantages to us, that any of our patents will be held valid if subsequently challenged or that others will not claim rights in or ownership of the patents (and patent applications) and other proprietary rights held by us.

**If we become subject to intellectual property infringement claims, we could incur significant expenses and could be prevented from selling specific products.**

We may become subject to claims that we infringe the intellectual property rights of others in the future. We cannot assure you that, if made, these claims will not be successful. Any claim of infringement could cause us to

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incur substantial costs defending against the claim even if the claim is invalid, and could distract management from other business. Any judgment against us could require substantial payment in damages and could also include an injunction or other court order that could prevent us from offering certain products.

### **Our need for continued investment in research and development may increase expenses and reduce our profitability.**

Our industry is characterized by the need for continued investment in research and development. If we fail to invest sufficiently in research and development, our products could become less attractive to potential customers and our business and financial condition could be materially adversely affected. As a result of the need to maintain or increase spending levels in this area and the difficulty in reducing costs associated with research and development, our operating results could be materially harmed if our research and development efforts fail to result in new products or if revenues fall below expectations. In addition, as a result of our commitment to invest in research and development, spending levels of research and development expenses as a percent of revenues may fluctuate in the future.

### **Our results of operations are subject to fluctuation from period to period and may not be an accurate indication of future performance.**

We have experienced fluctuations in operating results in large part due to the sale of computer systems in relatively large dollar amounts to a relatively small number of customers. Our quarterly results may be subject to fluctuations resulting from a number of other factors, including:

- the timing of significant orders;
- delays in completion of internal product development projects;
- delays in shipping computer systems and software programs;
- delays in acceptance testing by customers;
- a change in the mix of products sold to the DEG, IVS and other markets;
- production delays due to quality problems with outsourced components;
- shortages and costs of components;
- the timing of product line transitions; and
- declines in quarterly revenues from previous generations of products following announcement of replacement products containing more advanced technology.

Results of operations in any period should not be considered indicative of the results to be expected for any future period.

In addition, from time to time, we have entered into contracts, referred to as development contracts, to engineer a specific solution based on modifications to standard products. Gross margins from development contract revenues are typically lower than gross margins from standard product revenues. We intend to continue to enter into development contracts and anticipate that the gross margins associated with development contract revenues will continue to be lower than gross margins from standard product sales.

Another factor contributing to fluctuations in our quarterly results is the fixed nature of expenditures on personnel, facilities and marketing programs. Expense levels for these programs are based, in significant part, on expectations of future revenues. If actual quarterly revenues are below management's expectations, our results of operations will likely be adversely affected. Our operating results, from time to time, may be below the expectations of public market analysts and investors, which could have a material adverse effect on the market price of our common stock.

**We have benefited from certain tax benefits that may expire or be repealed.**

In the past, we have benefited from certain tax provisions that have reduced our effective tax rate and cash paid for taxes. One of these benefits, the credit for increasing research activities, expired on June 30, 2004. On October 4, 2004, legislation was passed to retroactively extend this tax credit through December 2005. We have also utilized benefits under the extraterritorial income exclusion, or (ETI) tax regime. The ETI regime was ruled an illegal trade subsidy by the World Trade Organization and, as a result, the European Union imposed trade sanctions against the United States that would have increased substantially over time if the ETI regime were not repealed. On October 22, 2004 legislation was enacted to repeal the ETI regime for transactions entered into after December 31, 2004, subject to a phase-out to allow current beneficiaries to claim reduced ETI benefits for transactions entered into during 2005 and 2006. In addition to the repeal of ETI, this legislation created a deduction from taxable income that will apply to taxpayers with “qualified production activities income.” It is expected that we will qualify for this deduction beginning with fiscal 2006, but we cannot assure you that these tax provisions will be beneficial to us. We are in the process of assessing the overall impact of the legislation on our effective tax rate calculation. Our expenses for income taxes could be significantly higher in the future if there are further changes in the tax law applicable to us or we fail to qualify for certain tax benefits.

**The trading price of our common stock may continue to be volatile which may adversely affect business, and investors in our common stock may experience substantial losses.**

Our stock price, like that of other technology companies, has been volatile. The stock market in general, and technology companies in particular, may continue to experience volatility in their stock prices. This volatility may or may not be related to operating performance. In addition, the continued threat of terrorism in the U.S. and abroad, the resulting military action and heightened security measures undertaken in response to that threat may cause continued volatility in securities markets. When the market price of a stock has been volatile, holders of that stock will sometimes institute securities class action litigation against the company that issued the stock. If any stockholders were to institute a lawsuit, we could incur substantial costs defending the lawsuit. Also, the lawsuit could divert the time and attention of management.

**We significantly increased our leverage as a result of the sale of convertible senior notes.**

In connection with our sale of convertible senior notes in April 2004, we incurred additional indebtedness of \$125 million. The degree to which we will be leveraged could, among other things:

- make it difficult for us to make payments on the convertible notes;
- make it difficult for us to obtain financing for working capital, acquisitions or other purposes on favorable terms, if at all;
- make us more vulnerable to industry downturns and competitive pressures; and
- limit our flexibility in planning for, or reacting to changes in, our business.

Our ability to meet our debt service obligations will depend upon our future performance, which will be subject to financial, business and other factors affecting our operations, many of which are beyond our control. We may not have enough funds or be able to arrange for additional financing to pay the principal at maturity or to repurchase the notes when tendered in accordance with their terms, which would constitute an event of default under the related indenture.

**Provisions in our organizational documents and Massachusetts law could make it more difficult for a third party to acquire us.**

Provisions of our charter and by-laws could have the effect of discouraging a third party from making a proposal to acquire our company and could prevent certain changes in control, even if some shareholders might consider the proposal to be in their best interests. These provisions include a classified board of directors, advance notice to our board of directors of shareholders proposals and director nominations, and limitations on

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the ability of shareholders to remove directors and to call shareholders meetings. In addition, we may issue shares of any class or series of preferred stock in the future without shareholder approval upon such terms as our board of directors may determine. The rights of holders of common stock will be subject to, and may be adversely affected by, the rights of the holders of any such class or series of preferred stock that may be issued.

We also are subject to the Massachusetts General Laws which, subject to certain exceptions, prohibit a Massachusetts corporation from engaging in a broad range of business combinations with any "interested shareholder" for a period of three years following the date that such shareholder becomes an interested shareholder. These provisions could discourage a third party from pursuing an acquisition of our company at a price considered attractive by many shareholders.

### **ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

There were no material changes in our exposure to market risk from June 30, 2004 to September 30, 2004.

### **ITEM 4. CONTROLS AND PROCEDURES**

We conducted an evaluation under the supervision and with the participation of our management, including the Company's Chief Executive Officer and Chief Financial Officer (our Principal Executive Officer and Principal Financial Officer, respectively) regarding the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this report. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures are effective to ensure that material information relating to our company, including its consolidated subsidiaries, is made known to them by others within our company and its consolidated subsidiaries. We continue to review our disclosure controls and procedures and may from time to time make changes aimed at enhancing their effectiveness and to ensure that our systems evolve with our company's business.

There was no change in our internal control over financial reporting that occurred during the quarter ended September 30, 2004 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**PART II. OTHER INFORMATION****ITEM 1. LEGAL PROCEEDINGS**

We are subject to legal proceedings and claims that arise in the ordinary course of business. We do not believe these actions will have a material adverse effect on our financial position, results of operations or cash flows.

**ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS**

The following table sets forth information as of and for the quarter ended September 30, 2004 with respect to our share repurchase program. (Table in thousands except share data).

<u>Period of Repurchase</u>	<u>Total Number of Shares Purchased During the Quarter Ended September 30, 2004</u>	<u>Average Price Paid Per Share</u>	<u>Approximate Dollar Value of Shares that May Yet be Purchased Under the Program</u>
July 1-31, 2004	—	\$ —	\$ —
August 1-31, 2004	300,000	26.15	17,156
September 1-30, 2004	—	—	—
<b>Total</b>	<b>300,000</b>	<b>\$ 26.15</b>	<b>\$ 17,156</b>

In fiscal 2003, we announced a share repurchase program under which our Board of Directors had authorized the repurchase of up to \$25,000 of our common stock. In July 2004, our Board extended the repurchase program through December 2005 and approved an increase in the total authorized dollar amount for repurchase then available to \$25,000.

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**ITEM 6. EXHIBITS**

<b>ITEM NO.</b>	<b>DESCRIPTION OF EXHIBIT</b>
3.1	Restated Articles of Organization, as amended. (Incorporated herein by reference to Exhibit 3.1 of the Company's Annual Report on Form 10-K for the year ended June 30, 2003).
3.2*	By-laws, as amended.
10.1*	Form of Stock Option Agreement under 1997 Stock Option Plan
12.1*	Ratios of Earnings to Fixed Charges
31.1*	Certification of the Company's Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certification of the Company's Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1**	Certification of the Company's Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2**	Certification of the Company's Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

\* Filed with this Form 10-Q.

\*\* Furnished with this Form 10-Q. This certification shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that section, nor shall it be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934.





BY-LAWS  
of  
MERCURY COMPUTER SYSTEMS, INC.  
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BY-LAWS  
of  
MERCURY COMPUTER SYSTEMS, INC.

ARTICLE 1  
Articles of Organization

The name and purposes of the Corporation shall be as set forth in the Articles of Organization. These By-Laws, the powers of the Corporation and its Directors and stockholders, and all matters concerning the conduct and regulation of the business of the Corporation, shall be subject to such provisions in regard thereto, if any, as are set forth in the Articles of Organization. All references in these By-Laws to the Articles of Organization shall be construed to mean the Articles of Organization of the Corporation as from time to time amended or restated.

ARTICLE 2  
Fiscal Year

Except as from time to time otherwise determined by the Directors, the fiscal year of the Corporation shall be the twelve months ending on June 30.

ARTICLE 3  
Meetings of Stockholders

Section 3.1 Annual Meeting

The annual meeting of the stockholders shall be held at 10:00 o'clock A.M. on the first Wednesday of October in each year. Purposes for which an annual meeting is to be held, additional to those prescribed by law and by these By-Laws, may be specified by the President or by the Directors.

If such annual meeting has not been held on the day herein provided therefor, a special meeting of the stockholders in lieu of the annual meeting may be held, and any business transacted or elections held at such special meeting shall have the same effect as if transacted or held at the annual meeting, and in such case all references in these By-Laws, except in this Section 3.1, to the annual meeting of the stockholders shall be deemed to refer to such special meeting. Any such special meeting shall be called, and the purposes thereof shall be specified in the call, as provided in Section 3.2 of this Article 3.

To be properly brought before the meeting, business must be of a nature that is appropriate for consideration at an annual meeting and must be (i) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the Board of Directors, (ii) otherwise properly brought before the meeting by or at the direction of the Board of Directors, or (iii) otherwise properly brought before the meeting by a stockholder. In addition to any other applicable requirements, for business to be properly brought before the annual meeting by a stockholder, the stockholder must have given timely notice thereof in writing to the Clerk of the Corporation. To be timely, each such notice must be given either by personal delivery or by United States mail, postage prepaid, to the Clerk of the Corporation not later than (1) with respect to a matter to be brought before an annual meeting of stockholders or special meeting in lieu of an annual meeting, sixty (60) days prior to the date set forth in the By-Laws for the annual meeting and (2) with respect to a matter to be brought before a special meeting of the stockholders not in lieu of an annual meeting, the close of business on the tenth (10th) day following the date on which notice of such meeting is first given to stockholders. The notice shall set forth (i) information concerning the stockholder, including his or her name and address; (ii) a representation that the stockholder is entitled to vote at such meeting and intends to appear

in person or by proxy at the meeting to present the matter specified in the notice, and (iii) such other information as would be required to be included in a proxy statement soliciting proxies for the presentation of such matter to the meeting.

Notwithstanding anything in these By-Laws to the contrary, no business shall be transacted at the annual meeting except in accordance with the procedures set forth in this Section; provided, however, that nothing in this Section shall be deemed to preclude discussion by any stockholder of any business properly brought before the annual meeting in accordance with these By-Laws.

### Section 3.2 Special Meetings

A special meeting of the stockholders may be called at any time by the President, or by a majority of the Directors acting by vote or by written instrument or instruments signed by them. A special meeting of the stockholders shall be called by the Clerk, or in the case of death, absence, incapacity or refusal of the Clerk, by any other officer, upon written application of one or more stockholders who hold at least forty (40) percent in interest of the capital stock entitled to vote thereat. Such call shall state the time, place and purposes of the meeting. In the event that none of the officers is able or willing to call a special meeting, the supreme judicial or superior court, upon application of one or more stockholders who hold at least forty (40) percent in interest of the capital stock entitled to vote thereat, shall have jurisdiction in equity to authorize one or more of such stockholders to call a meeting by giving notice as is required by law.

### Section 3.3 Place of Meetings

All meetings of the stockholders shall be held at the principal office of the Corporation in Massachusetts, unless a different place within Massachusetts or, if permitted by the Articles of Organization, elsewhere within the United States is designated by the President, or by a majority

of the Directors acting by vote or by written instrument or instruments signed by them. Any adjourned session of any meeting of the stockholders shall be held at such place within Massachusetts or, if permitted by the Articles of Organization, elsewhere within the United States as is designated in the vote of adjournment.

Section 3.4 Notice of Meetings

A written notice of the place, date and hour of a meetings of stockholders stating the purposes of the meeting shall be given at least seven (7) days before the meeting to each stockholder entitled to vote thereat, by leaving such notice with him or at his residence or usual place of business or by mailing it, postage prepaid, and addressed to such stockholder at his address as it appears in the records of the Corporation. Such notice shall be given by the Clerk, or in the case of the death, absence, incapacity or refusal of the Clerk, by any other officer or by a person designated either by the Clerk, by the person or persons calling the meeting, by any stockholder or group of stockholders applying for such meeting pursuant to Section 3.2 of Article 3 of these By-Laws or by the Board of Directors. Whenever notice of a meeting is required to be given a stockholder under any provision of law, of the Articles of Organization, or of these By-Laws, a written waiver thereof, executed before or after the meeting by such stockholder or his attorney thereunto authorized, and filed with the records of the meeting, shall be deemed equivalent to such notice.

Section 3.5 Quorum and Adjournment

At any meeting of the stockholders, a quorum for the election of any Director or for the consideration of any question shall consist of a majority in interest of all stock issued, outstanding and entitled to vote at such election or upon such question, respectively, except that if two or more classes of stock are entitled to vote as separate classes for the election of

any Director or upon any question, then in the case of each such class a quorum for the election of any Director or for the consideration of such question shall consist of a majority in interest of all stock of that class issued, outstanding and entitled to vote thereon. Stock owned by the Corporation, if any, shall be disregarded in determining any quorum. Both abstentions and broker non-votes are to be counted for the purpose of determining the existence of a quorum for the transaction of business at any meeting. Whether or not a quorum is present, any meeting may be adjourned from time to time by a majority of the votes properly cast upon the question, and the meeting may be held as adjourned without further notice. In addition, the presiding officer at any Shareholders Meeting shall have the authority to reschedule or adjourn any such meeting if (a) no quorum is present for the transaction of business; (b) the board of directors determines that an adjournment is necessary or appropriate to enable the shareholders to consider fully information which the board of directors determines has not been made sufficiently or timely available to shareholders; or (c) the board of directors determines that adjournment is otherwise in the best interests of the company.

When a quorum for an election is present at any meeting, a plurality of the votes properly cast for any office shall elect such office. When a quorum for the consideration of a question is present at any meeting, a majority of the votes properly cast upon the question shall decide the question; except that if two or more classes of stock are entitled to vote as separate classes upon such question, then in the case of each such class a majority of the votes of such class properly cast upon the question shall decide the vote of that class upon the question; and except in any case where a larger vote is required by law or by the Articles of Organization. For purposes of determining the number of shares voting on a particular proposal, abstentions and broker nonvotes are not to be counted as votes cast or shares voting.

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### Section 3.6 Action without Meeting

Any action required or permitted to be taken at any meeting of the stockholders may be taken without a meeting if all stockholders entitled to vote on the matter consent to the action in writing and the written consents are filed with the records of the meetings of stockholders. Such consents shall be treated for all purposes as a vote at a meeting.

### Section 3.7 Proxies and Voting

Except as may otherwise be provided in the Articles of Organization, stockholders entitled to vote shall have one vote for each share of stock entitled to vote owned by them. Stockholders entitled to vote may vote in person or by proxy. No proxy dated more than six (6) months before the meeting named therein shall be valid and no proxy shall be valid after the final adjournment of such meeting; provided, however, that a proxy coupled with an interest sufficient in law to support an irrevocable power, including, without limitation, an interest in the shares or in the Corporation generally, may be irrevocable if it so provides, need not specify the meeting to which it relates, and shall be valid and enforceable until the interest terminates, or for such shorter period as may be specified in the proxy. A proxy with respect to stock held in the name of two or more persons shall be valid if executed by any one of them unless at or prior to the exercise of the proxy the Corporation receives specific written notice to the contrary from any one of them. A proxy purporting to be executed by or on behalf of a stockholder shall be deemed valid unless challenged at or prior to its exercise and the burden of proving invalidity shall rest on the challenger. Proxies shall be filed with the Clerk, or person performing the duties of clerk, at the meeting, or any adjournment thereof, before being voted.

The Corporation shall not, directly or indirectly, vote upon any share of its own stock. Both abstentions and broker non-votes are to be counted as present for the purpose of determining the existence of a quorum for the transaction of business at any meeting. However,



for purposes of determining the number of shares voting a Particular proposal, abstentions and broker non-votes are not to be counted as votes cast or shares voting.

## ARTICLE 4

### Directors

#### Section 4.1 Enumeration, Election and Term of Office

The business and affairs of this corporation shall be managed under the direction of a Board of Directors consisting of not fewer than three (3) nor more than fifteen (15) Directors, the exact number to be determined from time to time by resolution adopted by the affirmative vote of a majority of the entire Board of Directors, such Board of Directors to be divided into such classes and elected by such stockholders as have the right to vote thereon, for such terms as are provided in the Articles of Organization. Each Director shall hold office until his successor shall have been elected and qualified, subject to Article 6 of these By-Laws. Whenever used in these By-Laws, the phrase "entire Board of Directors" shall mean that number of Directors fixed by the most recent resolution adopted pursuant to the preceding sentence prior to the date as of which a determination of the number of Directors then constituting the entire Board of Directors shall be relevant for any purpose under these By-Laws. Subject to the foregoing limitations and the requirements of the Articles of Organization, the Board of Directors may be enlarged by the stockholders at any meeting or by the affirmative vote of a majority of the entire Board of Directors then in office.

Nominations for the election of Directors may be made by the Board of Directors or a committee appointed by the Board of Directors or by any stockholder entitled to vote generally in the election of Directors. However, any stockholder entitled to vote generally in the election of Directors may nominate one or more persons for election as Directors at a meeting only if written notice of such stockholder's intent to make such nomination or nominations has been

given, either by personal delivery or by United States mail, postage prepaid, to the Clerk of the Corporation not later than (1) with respect to an election to be held at an annual meeting of stockholders or special meeting in lieu of an annual meeting, sixty (60) days prior to the date for the annual meeting set forth in the By-Laws and (2) with respect to an election to be held at a special meeting of stockholders not in lieu of an annual meeting, the close of business on the tenth (10th) day following the date on which notice of such meeting is first given to stockholders. Each such notice to the Clerk shall set forth (i) the name and address of the stockholder and each of his or her nominees; (ii) a representation that the stockholder is entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice; (iii) a description of all arrangements or understandings between the stockholder and each such nominee; (iv) such other information as would be required to be included in a proxy statement soliciting proxies or the election of the nominees of such stockholder; and (v) the consent of each nominee to serve as a Director of the Corporation if so elected. The Corporation may require any proposed nominee to furnish such other information as may reasonably be required by the Corporation to determine the eligibility of such proposed nominee to serve as a Director of the Corporation. The presiding officer of the meeting may, if the facts warrant, determine that a nomination was not made in accordance with the foregoing procedure, and if such officer should so determine, he or she shall so declare to the meeting and the defective nomination shall be disregarded.

No Director need be a stockholder. Any election of Directors by the stockholders shall be by ballot if so requested by any stockholder entitled to vote thereon.

#### Section 4.2 Powers

The business of the Corporation shall be managed by the Board of Directors, which shall exercise all the powers of the Corporation except as otherwise required by law, by the Articles of

Organization or by these By-Laws. In the event of one or more vacancies in the Board of Directors the remaining Directors, if at least two (2) Directors still remain in office, may exercise the powers of the full Board until such vacancy or vacancies are filled.

#### Section 4.3 Meetings of Directors

Regular meetings of the Directors may be held without notice at such places and at such times as may be fixed from time to time by the Directors. A regular meeting of the Directors may be held without notice immediately following an annual meeting of stockholders or any special meeting held in lieu thereof.

Special meetings of Directors may be called by the Chairman of the Board, the President, the Treasurer or any two (2) or more Directors, or if there shall be less than three (3) Directors, by any one (1) Director, and shall be held at such time and place as specified in the call. Reasonable notice of each special meeting of the Directors shall be given to each Director. Such notice may be given by the Secretary or Assistant Secretary of the Board, the Clerk or any Assistant Clerk or by the officer or one of the Directors calling the meeting. Notice to a Director shall in any case be sufficient if sent by telegram or telecopier at least forty-eight (48) hours or, by mail at least ninety-six (96) hours before the meeting addressed to the Director at his or her usual or last known business or residence address, or if given to him or her at least forty-eight (48) hours before the meeting in person or by telephone or by handing him or her a written notice. Notice of a meeting need not be given to any Director if a written waiver of notice, executed by him or her before or after the meeting, is filed with the records of the meeting, or to any Director who attends the meeting without protesting prior thereto or at its commencement the lack of notice to him or her. A notice or waiver of notice need not specify the purposes of the meeting.

Section 4.4 Quorum of Directors

At any meeting of the Directors, a quorum for any election or for the consideration of any question shall consist of a majority of the Directors then in office. Whether or not a quorum is present any meeting may be, adjourned from time to time by a majority of the votes properly cast upon the question, and the meeting may be held as adjourned without further notice. When a quorum is present at any meeting, the votes of a majority of the Directors present shall be requisite and sufficient for election to any office and shall decide any question brought before such meeting, except in any case where a larger vote is required by law, by the Articles of Organization or by these By-Laws.

Section 4.5 Consent in Lieu of Meeting and Participation in Meetings by Communications Equipment

Any action required or permitted to be taken at any meeting of the Directors may be taken without a meeting if all the Directors consent to the action in writing, and the written consents are filed with the records of the meetings of the Directors. Such consents shall be treated for all purposes as a vote of the Directors at a meeting.

Members of the Board of Directors or any Committee designated thereby may participate in a meeting of such Board or Committee by means of a conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other at the same time and participation by such means shall constitute presence in person at a meeting.

Section 4.6 Committees

By vote of a majority of the Directors then in office, the Directors may elect from their own number an Executive Committee or other Committees and may by like vote delegate to any such Committee some or all of their powers except those which by law may not be delegated.

ARTICLE 5

Officers

Section 5.1 Enumeration, Election and Term of Office

The officers of the Corporation shall include a President, a Treasurer and a Clerk, who shall be chosen by the Directors at their first meeting following an annual meeting of the stockholders. Each of the officers shall hold office until the next annual election to the office which he or she holds and until his or her successor is chosen and qualified or until he or she sooner dies, resigns, is removed or becomes disqualified. The Directors may choose one of their number to be Chairman of the Board and determine his or her powers, duties and term of office. The Directors may at any time appoint such other officers, including one or more Vice Presidents, Assistant Treasurers, Assistant Clerks, a Secretary of the Board and an Assistant Secretary of the Board as they deem wise, and may determine their respective powers, duties and terms of office.

The Corporation may also designate individuals as divisional, group, or segment vice presidents or vice presidents of a particular function, which individual shall carry such title on a non-executive basis and not as an executive officer of the Corporation. Said non-executive vice presidents may be designated by the Board of Directors or by the President pursuant to Board resolutions so-authorizing the President to appoint non-executive vice presidents on a particular occasion or from time to time in his or her discretion, said honorary vice presidents to be titled "Vice President (specific area of function)."

No officer need be a stockholder or a Director except that the Chairman of the Board shall be a Director. The same person may hold more than one office, except that no person shall be both President and Clerk.

Section 5.2 President and Chairman of the Board

The President shall be the Chief Executive Officer of the Corporation and, subject to the control and direction of the Directors, shall have general supervision and control of the business of the Corporation. The President shall preside at all meetings of the stockholders at which he or she is present, and, if the President is a Director, at all meetings of the Directors, if there shall be no Chairman of the Board or in the absence of the Chairman of the Board.

If there shall be a Chairman of the Board, such person shall make his or her counsel available to the other officers of the Corporation, and shall have such other duties and powers as may from time to time be conferred on him or her by the Directors. The Chairman of the Board shall preside at all meetings of the Directors at which he or she is present, and, in the absence of the President, at all meetings of stockholders.

Section 5.3 Treasurer and Assistant Treasurer

The Treasurer shall have the custody of the funds and valuable books and papers of the Corporation, except such as are directed by these By-Laws to be kept by the Clerk or by the Secretary of the Board. The Treasurer shall perform all other duties usually incident to such office, and shall be at all times subject to the control and direction of the Directors. If required by the Directors, the Treasurer shall give bond in such form and amount and with such sureties as shall be determined by the Directors.

If the Treasurer is absent or unavailable, any Assistant Treasurer shall have the duties and powers of Treasurer and shall have such further duties and powers as the Directors shall from time to time determine.

Section 5.4 Clerk and Assistant Clerk

If the Corporation shall not have a resident agent appointed pursuant to law, the Clerk shall be a resident of the Commonwealth of Massachusetts. The Clerk shall record all

proceedings of the stockholders in a book to be kept therefor. In case a Secretary of the Board is not elected, the Clerk shall also record all proceedings of the Directors in a book to be kept therefor.

If the Corporation shall not have transfer agent, the Clerk shall also keep or cause to be kept the stock and transfer records of the Corporation, which shall contain the names of all stockholders and the record address and the amount of stock held by each.

If the Clerk is absent or unavailable, any Assistant Clerk shall have the duties and powers of the Clerk and shall have such further duties and powers as the Directors shall from time to time determine.

Section 5.5 Secretary of the Board and Assistant Secretary.

If a Secretary of the Board is elected, such person shall record all proceedings of the Directors in a book to be kept therefor.

If the Secretary of the Board is absent or unavailable, any Assistant Secretary shall have the duties and powers, of the Secretary and shall have such further duties and powers as the Directors shall from time to time determine.

If no Secretary or Assistant Secretary has been elected, or if, having been elected, no Secretary or Assistant Secretary is present at a meeting of the Directors, the Clerk or an Assistant Clerk shall record the proceedings of the Directors.

Section 5.6 Temporary Clerk and Temporary Secretary.

If no Clerk or Assistant Clerk shall be present at any meeting of the stockholders, or if no Secretary, Assistant Secretary, Clerk or Assistant Clerk shall be present at any meeting of the Directors, the person presiding at the meeting shall designate a Temporary Clerk or Secretary to perform the duties of Clerk or Secretary.

Section 5.7 Other Powers and Duties

Each officer shall, subject to these By-Laws and to the control and direction of the Directors, have in addition to the duties and powers specifically set forth in these By-Laws, such duties and powers as are customarily incident to such office and such additional duties and powers as the Directors may from time to time determine.

ARTICLE 6

Resignations, Removals and Vacancies

Section 6.1 Resignations

Any Director or officer may resign at any time by delivering his or her resignation in writing to the President or the Clerk or to a meeting of the Directors. Such resignations shall take effect at such time as is specified therein, or if no such time is so specified, then upon delivery thereof to the President or the Clerk or to a meeting of the Directors.

Section 6.2 Removals

Directors, including Directors elected by the Directors to fill vacancies in the Board, may be removed from office (a) with cause by vote of the holders of a majority of the shares issued and outstanding and entitled to vote generally in the election of Directors; (b) with or without cause by vote of the holders of at least 80% of the votes entitled to be cast by the holders of all shares of the Corporation entitled to vote generally in the election of Directors, voting together as a single class; (c) with cause by vote of a majority of the Directors then in office; or (d) without cause by vote of at least 80% of the Directors then in office (including the Director to be removed in calculating said percentage); provided that the Directors, of a class elected by a particular class of shareholders may be removed only by vote of the holders of a majority of the shares of such class.



The Directors may terminate or modify the authority of any agent or employee. The Directors may remove any officer from office with or without assignment of cause by vote of a majority of the Directors then in office.

If cause is assigned for removal of any Director or officer, such Director or officer may be removed only after reasonable notice and opportunity to be heard before the body proposing to remove him.

No Director or officer who resigns or is removed shall have any right to any compensation as such Director or officer for any period following his resignation or removal, or any right to damages on account of such removal, whether his compensation be by the month or by the year or otherwise; provided, however, that the foregoing provision shall not prevent such Director or officer from obtaining damages for breach of any contract of employment legally binding upon the Corporation.

### Section 6.3 Vacancies

Any vacancy in the Board of Directors, including a vacancy resulting from an enlargement of the Board, may be filled by the Directors by vote of a majority of the Remaining Directors then in office, though less than a quorum, or by the stockholders at a meeting called for the purpose, provided that any vacancy created by the stockholders may be filled by the stockholders at the same meeting. Any Director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the class of Directors in which the new Directorship was created or the vacancy occurred and until such Director's successor shall have been elected and qualified or until he or she sooner dies, resigns, is removed or becomes disqualified.

If the office of any officer becomes vacant, the Directors may choose or appoint a successor by vote of a majority of the Directors present at the meeting at which such choice or appointment is made.

Each such successor shall hold office for the unexpired term of the Director's predecessor and until a successor shall be chosen or appointed and qualified, or until he or she sooner dies, resigns, is removed or becomes disqualified.

## ARTICLE 7

### Indemnification of Directors and Others

#### Section 7.1 Definitions

For purposes of this Article 7:

(a) "Director/officer" means any person who is serving or has served as a Director, officer or employee of the Corporation appointed or elected by the Board of Directors or the stockholders of the Corporation, or any Director, officer or employee of the Corporation who is serving or has served at the request of the Corporation as a Director, officer, trustee, principal, partner, employee or other agent of any other organization.

(b) "Proceeding" means any action, suit or proceeding, civil or criminal, brought or threatened in or before any court, tribunal, administrative or legislative body or agency.

(c) "Expense" means any fine or penalty, and any liability fixed by a judgment, order, decree or award in a Proceeding, any amount reasonably paid in settlement of a Proceeding and any professional fees and other disbursements reasonably incurred in connection with a Proceeding.

Section 7.2 Right to Indemnification

Except as limited by law or as provided in Sections 7.3 and 7.4 of this Article 7, each Director/officer (and his heirs and personal representatives) shall be indemnified by the Corporation against any Expense incurred by such Director/officer in connection with each Proceeding in which he or she is involved as a result of his or her serving or having served as a Director/officer.

Section 7.3 Indemnification not Available

No indemnification shall be provided to a Director/officer with respect to a Proceeding as to which it shall have been adjudicated that he or she did not act in good faith in the reasonable belief that his or her action was in the best interests of the Corporation.

Section 7.4 Compromise or Settlement

In the event that a Proceeding is compromised or settled so as to impose any liability or obligation on a Director/officer or upon the Corporation, no indemnification shall be provided as to said Director officer with respect to such Proceeding if such Director/officer shall have been adjudicated not to have acted in good faith in the reasonable belief that his or her action was in the best interests of the Corporation.

Section 7.5 Advances

The Corporation shall pay sums on account of indemnification in advance of a final disposition of a Proceeding upon receipt of an undertaking by the Director/officer to repay such sums if it is subsequently established that he or she is not entitled to indemnification pursuant to Sections 7.3 and 7.4 hereof, which undertaking may be accepted without reference to the financial ability of such person to make repayment.

Section 7.6 Not Exclusive

Nothing in this Article 7 shall limit any lawful rights to indemnification existing independently of this Article 7.

Section 7.7 Insurance

The provisions of this Article 7 shall not limit the power of the Board of Directors to authorize the purchase and maintenance of insurance on behalf of any Director/officer against any Expense, whether or not the Corporation would have the power to indemnify such Director/officer against such Expense under this Article 7.

ARTICLE 8

Stock

Section 8.1 Stock Authorized

The total number of shares and the par value, if any, of each class of stock which the Corporation is authorized to issue, and if more than one class is authorized, the descriptions, preferences, voting powers, qualifications and special and relative rights and privileges as to each class and any series thereof, shall be as stated in the Articles of Organization.

Section 8.2 Issue of Authorized Unissued Capital Stock

Any unissued capital stock from time to time authorized under the Articles of Organization and amendments thereto may be issued by vote of the Directors. No stock shall be issued unless the cash, so far as due, or the property, services or expenses for which it was authorized to be issued, has been actually received or incurred by, or conveyed or rendered to, the Corporation, or is in its possession as surplus.

Section 8.3 Certificates of Stock

Each stockholder shall be entitled to a certificate in such form as may be prescribed from time to time by the Directors, stating the number and the class and the designation of the series,

if any, of the shares held by such stockholder. Such certificates shall be signed by the President or a Vice President and by the Treasurer or an Assistant Treasurer. Such signatures may be facsimiles if the certificate is signed by a transfer agent, or by a registrar, other than a Director, officer or employee of the Corporation. In case any officer has signed or whose facsimile signature has been placed on such certificate shall have ceased to be such officer before such certificate is issued, it may be issued by the Corporation with the same effect as if he or she were such officer at the time of its issue. Every certificate issued by the Corporation for shares of stock at a time when such shares are subject to any restriction on transfer pursuant to the Articles of Organization, the By-Laws or any agreement to which the Corporation is a party, shall have the restriction noted conspicuously on the certificate and shall also set forth on the face or back of the certificate either the full text of the restriction, or a statement of the existence of such restriction and a statement that the Corporation will furnish a copy thereof to the holder of such certificate upon written request and without charge. Every stock certificate issued by the Corporation at a time when it is authorized to issue more than one class or series of stock shall set forth upon the face or back of the certificate either the full text of the preferences, voting powers, qualifications and special and relative rights of the shares of each class and series if any, authorized to be issued, as set forth in the Articles of Organization, or a statement of the existence of such preferences, powers, qualifications and rights and a statement that the Corporation will furnish a copy thereof to the holder of such certificate upon written request and without charge.

#### Section 8.4 Replacement Certificate

In case of the alleged loss or destruction or the mutilation of a certificate of stock, a new certificate may be issued in place thereof, upon such conditions as the Directors may determine.

#### Section 8.5 Transfers

Subject to the restrictions, if any, imposed by the Articles of Organization, the By-Laws or any agreement to which the Corporation is a party, shares of stock shall be transferred on the books of the Corporation only by the surrender to the Corporation or its transfer agent of the certificate representing such shares properly endorsed or accompanied by a written assignment of such shares or by a written power of attorney to sell, assign or transfer such shares, properly executed, with necessary transfer stamps affixed, and with such proof that the endorsement, assignment or power of attorney is genuine and effective as the Corporation or its transfer agent may reasonably require. Except as may otherwise be required by law, the Corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes, including the payment of dividends and the right to vote with respect thereto, regardless of any transfer, pledge or other disposition of such stock, until the shares have been transferred on the books of the Corporation in accordance with the requirements of these By-Laws. It shall be the duty of each stockholder to notify the Corporation of his or her post office address.

#### Section 8.6 Record Date

The Directors may fix in advance a time, which shall be not more than sixty (60) days before the date of any meeting of stockholders or the date for the payment of any dividend or the making of any distribution to stockholders or the last day on which the consent or dissent of stockholders may be effectively expressed for any purpose, as the record date for determining the stockholders having the right to notice of and to vote at such meeting and any adjournment thereof or the right to receive such dividend or distribution or the right to give such consent or dissent, and in such case only stockholders of record on such date shall have such right, notwithstanding any transfer of stock on the books of the Corporation after the record date; or

without fixing such record date the Directors may for any such purposes close the transfer books for all or any part of such period.

If no record date is fixed and the transfer books are not closed:

(1) The record date for determining stockholders having the right 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.

(2) The record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board of Directors acts with respect thereto.

## ARTICLE 9

### Miscellaneous Provisions

#### Section 9.1 Execution of Papers

All deeds, leases, transfers, contracts, bonds, notes, releases, checks, drafts and other obligations authorized to be executed on behalf of the Corporation shall be signed by the President or the Treasurer except as the Directors may generally or in particular cases otherwise determine.

#### Section 9.2 Voting of Securities

Except as the Directors may generally or in particular cases otherwise determine the President or the Treasurer may, on behalf of the Corporation (i) waive notice of any meeting of stockholders or shareholders of any other corporation, or of any association, trust or firm, of which any securities are held by this Corporation; (ii) appoint any person or persons to act as proxy or attorney-in-fact for the Corporation, with or without substitution, at any such meeting; and (iii) execute instruments of consent to stockholder or shareholder action taken without a meeting.

Section 9.3 Corporate Seal

The seal of the Corporation shall be a circular die with the name of the Corporation, the word "Massachusetts" and the year of its incorporation cut or engraved thereon, or shall be in such other form as the Board of Directors or the stockholders may from time to time determine.

Section 9.4 Corporate Records

The original, or attested copies, of the Articles of Organization, By-Laws, and the records of all meetings of incorporators and stockholders, and the stock and transfer records, which shall contain the names of all stockholders and the record address and the amount of stock held by each, shall be kept in Massachusetts for inspection by the stockholders at the principal office of the Corporation or at an office of the Clerk, or if the Corporation shall have a transfer agent or a resident agent, at an office of either of them. Said copies and records need not all be kept in the same office.

ARTICLE 10

Amendments

These By-Laws may be altered, amended or repealed or new By-Laws enacted by the affirmative vote of a majority of the entire Board of Directors (if notice of the proposed alteration or amendment is contained in the notice of the meeting at which such vote is taken or if all Directors are present) or at any regular meeting of the stockholders (or at any special meeting thereof duly called for that purpose) by the affirmative vote of a majority of the shares represented and entitled to vote at such meeting (if notice of the proposed alteration or amendment is contained in the notice of such meeting).

Notwithstanding anything contained in the preceding paragraph of this Article 10 to the contrary until January 1, 1999, either (i) the affirmative vote of the holders of at least eighty (80%) percent of the votes entitled to be cast by the holders of all shares of the Corporation



entitled to vote generally in the election of Directors, voting together as a single class, or (ii) the affirmative vote of a majority of the entire Board of Directors with the concurring vote of a majority of the Continuing Directors voting separately and as a subclass of Directors, shall be required to alter, amend or repeal or adopt any provision inconsistent with, Section 3.1 of Article 3, Section 4.1 of Article 4, Section 6.2 and Section 6.3 of Article 6 amid this paragraph of this Article 10. For purposes of this Article 10, the term "Continuing Director" shall have the meaning ascribed to it in Article 6 of the Articles of Organization of the Corporation. Subsequent to January 1, 1999, the foregoing sections may be altered, amended or repealed in accordance with the first paragraph of this Article 10.2. The purposes for which the corporation is formed are as follows: To manufacture, sell, invent, design, develop, distribute, lease and to engage in all aspects of the production of micro-computer based products; to invent, design, discover, or acquire formulae, processes, improvements, inventions, designs, patents, licenses, copyrights, trademarks, trade names and trade secrets applicable to the foregoing and to hold, use, sell, license and otherwise deal in or dispose of the same; to acquire by purchase, deed, mortgage, lease or by any other method and to hold, maintain, operate, improve, develop, sell, exchange, lease, mortgage, pledge, hypothecate, loan money upon and otherwise deal in real and personal property of every kind, character and description and wheresoever situated, including without limitation the stock and securities of the corporation or of any other corporation; to lend money upon credit or security to, to guarantee or assume obligations of, and to aid in any other manner other concerns wherever and however organized, any obligations of which or any interest in which shall be held by the corporation or in the affairs or prosperity of which the corporation has a lawful interest and to do all acts and things designed to protect, improve and enhance the value of such obligations and interests; and to carry on any business permitted and enjoy all rights and powers granted by the Commonwealth of Massachusetts to a corporation organized under Chapter 15D of the General Laws, as amended.

*As amended September 22, 2004.*

**Notice of Grant of Stock Options  
and Option Agreement**

**Mercury Computer Systems, Inc.**  
ID: [            ]  
199 Riverneck Road  
Chelmsford, MA 01824

[Name]  
Plan:  
[Address]

**Option Number:** [        ]  
**1997**  
**ID:** [        ]

Effective [        ], you have been granted a(n) Incentive Stock Option to buy [        ] shares of Mercury Computer Systems, Inc. (the Company) stock at [        ] per share.

The total option price of the shares granted is [        ]

Shares in each period will become fully vested on the date shown.

Shares	Vest Type	Full Vest	Expiration
[        ]	On Vest Date	[        ]	[        ]
[        ]	On Vest Date	[        ]	[        ]
[        ]	On Vest Date	[        ]	[        ]
[        ]	On Vest Date	[        ]	[        ]

By your signature and the Company's signature below, you and the Company agree that these options are granted under and governed by the terms and conditions of the Company's Stock Option Plan as amended and the Option Agreement, all of which are attached and made a part of this document.

Mercury Computer Systems, Inc.

Date

[Name]

Date

**FORM of OPTION AGREEMENT**

**Terms and Conditions**

1. Term.

**[Terms for Employees]**

This Stock Option shall terminate and no portion will be exercisable on the earliest of the following: (i) the expiration date, (ii) [—] days after the Optionee ceases to be an employee of the Company or one of its subsidiaries, (iii) the date the Optionee ceases to be an employee of the Company or one of its subsidiaries if such termination of employment is because of dismissal for cause or because the Optionee is in breach of any employment agreement, (iv) 12 months from the date the Optionee ceases to be an employee if such termination of employment is because the Optionee has become permanently disabled (within the meaning of Section 22(e)(3) of the Code), (v) 12 months from the date of death in the event of the death of the Optionee, or (vi) five years after the Optionee ceases to be an employee of the Company or one of its subsidiaries if such termination of employment is because of the Optionee's retirement on or after attaining the minimum age, completing the minimum number of years of service and satisfying all other conditions specified for retirement status under the Company's Retirement Policy Statement.

**[Terms for Board of Directors]**

This Stock Option shall terminate and no portion will be exercisable on the earliest of the following: (i) the expiration date, (ii) 12 months from the date of death in the event of the death of the Optionee while serving as a director, or (iii) five years after the Optionee ceases to be a director of the Company if such cessation is for any reason other than death.

2. Manner of Exercise.

(a) From time to time on or prior to the expiration of this Stock Option, the Optionee may give written notice to the Company of his election to purchase some or all of the shares of Mercury Computer Systems, Inc. ("Stock") purchasable at the time of such notice. This notice shall specify the number of shares of Stock to be purchased.

Payment of the purchase price for the shares may be made by one or more of the following methods: (i) in cash, by certified or bank check or other instrument acceptable to the Company; (ii) through the delivery of shares of Stock that have been purchased by the Optionee on the open market or that have been beneficially owned by the Optionee for at least six months; (iii) a combination of (i) and (ii); or (iv) by the Optionee delivering to the Company a properly executed exercise notice together with irrevocable instructions to a broker to promptly deliver to the Company cash or a check payable and acceptable to the Company to pay the option purchase price, provided that in the event the Optionee chooses to pay the option purchase price as so provided, the Optionee and the broker shall comply with such procedures and enter into such agreements of indemnity and other agreements as the Company shall prescribe as a condition of such payment procedure. Payment instruments will be received subject to collection.

(b) Certificates for shares of Stock purchased upon exercise of this Stock Option shall be issued and delivered to the Optionee upon compliance to the satisfaction of the Company with all requirements under applicable laws or regulations in connection with such issuance and with the requirements hereof and of the Plan. The determination of the Company as to such compliance shall be final and binding on the Optionee. The Optionee shall not be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Stock subject to this Stock Option unless and until this Stock Option shall have been exercised pursuant to the terms hereof, the Company shall have issued and delivered the shares to the Optionee, and the Optionee's name shall have been entered as the stockholder of record on the books of the Company. Thereupon, the Optionee shall have full voting, dividend and other ownership rights with respect to such shares of Stock.

(c) The minimum number of shares of Stock with respect to which this Stock Option may be exercised at any one time shall be 50 shares, unless the number of shares with respect to which this Stock Option is being exercised is the total number of shares subject to exercise under this Stock Option at the time.

3. Restrictions. This Stock Option may be cancelled, rescinded, suspended, withheld or otherwise limited or restricted by the Committee at any time, and any gain realized or payment received as a result of the exercise of this Stock Option may be subject to recapture by the Company if the Optionee engages in any Detrimental Activity prior to or during the six months following any exercise, payment or delivery pursuant to this Stock Option.

4. Incorporation of Plan. Notwithstanding anything herein to the contrary, this Stock Option shall be subject to and governed by all the terms and conditions of the Plan. Capitalized terms in this Agreement shall have the meaning specified in the Plan, unless a different meaning is specified herein.

5. Transferability. This Agreement is personal to the Optionee, is non-assignable and is not transferable in any manner, by operation of law or otherwise, other than by will or the laws of descent and distribution. This Stock Option is exercisable only by the Optionee's legal representative or legatee. All references herein to the Optionee shall be read to include the Optionee's representative or legatee.

## MERCURY COMPUTER SYSTEMS, INC.

**COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES**  
**(Dollars in thousands)**

	Year Ended June 30, 2000	Year Ended June 30, 2001	Year Ended June 30, 2002	Year Ended June 30, 2003	Year Ended June 30, 2004	Three Months Ended September 30, 2004
Income before income taxes	\$ 36,345	\$ 45,124	\$ 21,983	\$ 32,870	\$ 32,233	\$ 7,724
Fixed charges:						
Interest expense	731	1,065	987	923	1,441	1,054
Rentals:						
Buildings, office equipment and other	175	158	278	310	367	78
Total fixed charges	\$ 906	\$ 1,223	\$ 1,265	\$ 1,233	\$ 1,808	\$ 1,132
Income before income taxes plus fixed charges	\$ 37,251	\$ 46,347	\$ 23,248	\$ 34,103	\$ 34,041	\$ 8,856
Ratio of earnings to fixed charges (A)	41.1	37.9	18.4	27.7	18.8	7.82

(A) The ratio of earnings to fixed charges is calculated by dividing (a) earnings before income taxes and fixed charges by (b) fixed charges. Fixed charges include interest expense under operating leases the Company deems a reasonable approximation of the interest factor.

## CERTIFICATION

I, James R. Bertelli, President and Chief Executive Officer of Mercury Computer Systems, Inc., certify that:

1. I have reviewed this quarterly report on Form 10-Q of Mercury Computer Systems, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 1, 2004

/s/ JAMES R. BERTELLI

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**James R. Bertelli**  
**PRESIDENT AND CHIEF EXECUTIVE OFFICER**  
**[PRINCIPAL EXECUTIVE OFFICER]**

## CERTIFICATION

I, Robert E. Hult, Senior Vice President and Chief Financial Officer of Mercury Computer Systems, Inc., certify that:

1. I have reviewed this quarterly report on Form 10-Q of Mercury Computer Systems, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 1, 2004

/s/ ROBERT E. HULT

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**Robert E. Hult**  
**SENIOR VICE PRESIDENT AND**  
**CHIEF FINANCIAL OFFICER**  
**[PRINCIPAL FINANCIAL OFFICER]**

Mercury Computer Systems, Inc.

Certification Pursuant To  
18 U.S.C. Section 1350,  
As Adopted Pursuant To  
Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Quarterly Report of Mercury Computer Systems, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2004 as filed with the Securities and Exchange Commission (the "Report"), I, James R. Bertelli, President and Chief Executive Officer of the Company, certify, pursuant to Section 1350 of Chapter 63 of Title 18, United States Code, that the Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 1, 2004

/s/ JAMES R. BERTELLI

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**James R. Bertelli**  
**PRESIDENT AND CHIEF EXECUTIVE OFFICER**



Mercury Computer Systems, Inc.

Certification Pursuant To  
18 U.S.C. Section 1350,  
As Adopted Pursuant To  
Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Quarterly Report of Mercury Computer Systems, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2004 as filed with the Securities and Exchange Commission (the "Report"), I, Robert E. Hult, Senior Vice President and Chief Financial Officer of the Company, certify, pursuant to Section 1350 of Chapter 63 of Title 18, United States Code, that the Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 1, 2004

/s/ ROBERT E. HULT

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**Robert E. Hult**  
SENIOR VICE PRESIDENT AND  
CHIEF FINANCIAL OFFICER