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

### FORM 10-Q

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

For the quarterly period ended December 31, 2010

Commission File Number	Registrant; State of Incorporation; Address and Telephone Number	IRS Employer Identification No.
001-34974	Aeroflex Holding Corp. Delaware 35 South Service Road P.O. Box 6022 Plainview, NY 11803-0622 (516) 694-6700	01-0899019
033-88878	Aeroflex Incorporated Delaware 35 South Service Road P.O. Box 6022 Plainview, NY 11803-0622 (516) 694-6700	11-1974412

Indicate by check mark whether the registrants (1) have 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 registrants were required to file such reports), and (2) have been subject to such filing requirements for the past 90 days.

A e r o f l e xYes "No x Holding Corp. A e r o f l e xYes x No" Incorporated

Indicate by check mark whether the registrants have submitted electronically and posted on their corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

A e r o f l e xYes "No" Holding Corp. A e r o f l e xYes " No " Incorporated

Indicate by check mark whether each registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

	Large accelerated	Accelerated	Non-accelerated	Smaller reporting
	filer	filer	filer	company
Aeroflex Holding Corp.			Х	
Aeroflex Incorporated			Х	

Indicate by check mark whether the registrants are shell companies (as defined in Rule 12b-2 of the Exchange Act).

A e r o f l e xYes "No x Holding Corp. A e r o f l e xYes "No x Incorporated

Number of shares of common stock outstanding as of February 9, 2011:

Aeroflex Holding Corp	84,789,180 shares
Aeroflex Incorporated -	1,000 shares

Aeroflex Incorporated meets the conditions set forth in General Instruction H(1)(a) and (b) of Form 10-Q and is therefore filing this Form with the reduced disclosure format.

#### **OVERVIEW**

This quarterly report on Form 10-Q for the period ended December 31, 2010 is a combined quarterly report being separately filed by two registrants: Aeroflex Holding Corp. ("Aeroflex Holding") and Aeroflex Incorporated ("Aeroflex"), a direct wholly-owned subsidiary of Aeroflex Holding. Unless the context provides otherwise, references to "we," "our," "the Company," or "us" refer collectively to Aeroflex Holding and its subsidiary, Aeroflex, including Aeroflex's consolidated subsidiaries.

Filing a combined report which contains full financial information of both Aeroflex Holding and its wholly owned subsidiary Aeroflex is both economical and efficient, as Aeroflex Holding is a holding company which does not conduct business operations on its own - all business operations are conducted by Aeroflex and its consolidated subsidiaries. All assets, liabilities, income, expenses and cash flows presented for all periods represent those of Aeroflex and its subsidiaries, except for activity related to Aeroflex Holding's equity and earnings per share. Aeroflex Holding's only asset is its investment in Aeroflex. As such, other than any discussions of liquidity and capital resources (including indebtedness and cash flows), equity and earnings per share, controls and procedures, unregistered sales of equity securities, use of proceeds and any material differences between Aeroflex Holding and Aeroflex which would require separate disclosures, all information presented in this quarterly report will be combined and pertain to both Aeroflex Holding and Aeroflex.

In this Form 10-Q, unless the context requires otherwise, references to (i) the term "Sponsors" refers collectively to affiliates of or funds managed by The Veritas Capital Fund III, L.P., Golden Gate Private Equity, Inc., and GS Direct, LLC, which indirectly control Aeroflex Holding, and (ii) "fiscal year" refers to the twelve months ended June 30 of the applicable year. For example, "fiscal 2010" refers to the twelve months ended June 30, 2010.

Aeroflex Holding's board of directors authorized an increase of Aeroflex Holding's authorized shares of common stock to 300,000,000 and a 65,000,000 for 1 common stock split, both of which became effective on November 18, 2010. Aeroflex Holding's stockholders' equity has been retroactively adjusted to give effect to the stock split for all periods presented by reclassifying the par value of the additional shares issued in connection with the split from additional paid-in capital to common stock. In addition, all share numbers and per share amounts in Aeroflex Holding's consolidated financial statements have been retroactively adjusted to give effect to the stock split.

On November 19, 2010, Aeroflex Holding consummated an initial public offering ("IPO") of common stock in which it sold 19,789,180 shares of common stock, par value of \$.01 per share, at a price of \$13.50 per share. Aeroflex Holding received net proceeds of \$244.1 million from the IPO, after deducting underwriting discounts and offering expenses, including a \$2.5 million transaction fee which was paid to affiliates of the Sponsors under the advisory agreement with them for services directly attributable to the equity offering ("Transaction Fee"). Aeroflex Holding used the net proceeds of the IPO to make a capital contribution to Aeroflex. In connection with the IPO, Aeroflex:

- Repurchased an aggregate of \$186.6 million of its senior unsecured notes and senior subordinated unsecured term loans and paid the related expenses;
- •Paid a \$16.9 million termination fee to affiliates of the Sponsors to terminate the advisory agreement with them, which, including the related write-off of prepaid advisory fees, resulted in an \$18.1 million expense ("Termination Fee"); and
- •Entered into an amendment of the credit agreement with the lenders of its senior secured credit facility, for which a \$3.3 million fee was paid to the lenders.

### AEROFLEX HOLDING CORP. AND SUBSIDIARIES

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### Aeroflex Holding Corp. and Subsidiaries Unaudited Condensed Consolidated Balance Sheets (In thousands, except share and per share data )

	December 31, 2010			June 30, 2010	
Assets					
Current assets:					
Cash and cash equivalents	\$	70,643	\$	100,663	
Marketable securities		8,357		-	
Accounts receivable, less allowance for doubtful					
accounts of \$2,101 and \$1,821		131,222		141,595	
Inventories		153,880		126,568	
Deferred income taxes		26,030		28,018	
Prepaid expenses and other current assets		11,252		10,983	
Total current assets		401,384		407,827	
Property, plant and equipment, net		99,889		101,662	
Non-current marketable securities, net		-		9,769	
Deferred financing costs, net		17,435		20,983	
Other assets		23,204		21,818	
Intangible assets with definite lives, net		214,085		238,313	
Intangible assets with indefinite lives		113,844		109,894	
Goodwill		458,034		445,874	
Total assets	\$	1,327,875	\$	1,356,140	
Liabilities and Stockholders' Equity					
Current liabilities:					
Current portion of long-term debt	\$	360	\$	21,817	
Accounts payable		36,967		28,803	
Advance payments by customers and deferred revenue		23,185		30,741	
Income taxes payable		1,654		4,615	
Accrued payroll expenses		19,098		23,082	
Accrued expenses and other current liabilities		52,944		58,817	
Total current liabilities		134,208		167,875	
Long-term debt		695,908		880,030	
Deferred income taxes		88,066		138,849	
Defined benefit plan obligations		5,605		5,763	
Other long-term liabilities		12,983		12,639	
Total liabilities		936,770		1,205,156	
Stockholders' equity:					
Preferred stock \$.01 par value; 50,000,000 shares authorized,					
no shares issued and outstanding		-		-	
Common stock, par value \$.01 per share; 300,000,000 shares					
authorized; 84,789,180 and 65,000,000 shares issued and outstanding		848		650	
Additional paid-in capital		642,961		398,291	
L 1		,		/ -	

Accumulated other comprehensive income (loss)	(41,102)	(53,575)
Accumulated deficit	(211,602)	(194,382)
Total stockholders' equity	391,105	150,984
Total liabilities and stockholders' equity	\$ 1,327,875	\$ 1,356,140

See combined notes to unaudited condensed consolidated financial statements.

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### Aeroflex Holding Corp. and Subsidiaries Unaudited Condensed Consolidated Statements of Operations (In thousands, except per share data)

	Thre	e Months End 2010	led Do	ecember 31, 2009
Net sales	\$	181,579	\$	166,739
Cost of sales		86,739		80,081
Gross profit		94,840		86,658
Selling, general and administrative costs		38,266		31,573
Research and development costs		21,656		17,261
Amortization of acquired intangibles		15,843		15,514
Termination of Sponsor Advisory Agreement		18,133		-
Restructuring charges		6,293		64
		100,191		64,412
Operating income (loss)		(5,351)		22,246
Other income (expense):				
Interest expense		(20,713)		(21,418)
Loss on extinguishment of debt		(25,178)		-
Gain from a bargain purchase of a business		173		-
Other income (expense), net		(378)		422
Total other income (expense)		(46,096)		(20,996)
Income (loss) before income taxes		(51,447)		1,250
Provision (benefit) for income taxes		(40,044)		11,864
Net income (loss)	\$	(11,403)	\$	(10,614)
Net income (loss) per common share - Basic	\$	(0.15)	\$	(0.16)
Weighted average number of common shares outstanding - Basic		74,034		65,000

See combined notes to unaudited condensed consolidated financial statements.

### Aeroflex Holding Corp. and Subsidiaries Unaudited Condensed Consolidated Statements of Operations (In thousands, except per share data)

	Six	Months Ende 2010	ed De	cember 31, 2009
Net sales	\$	337,510	\$	296,855
Cost of sales		162,844		145,124
Gross profit		174,666		151,731
Selling, general and administrative costs		74,969		61,703
Research and development costs		43,814		34,442
Amortization of acquired intangibles		31,806		31,119
Termination of Sponsor Advisory Agreement		18,133		-
Restructuring charges		8,092		251
Loss on liquidation of foreign subsidiary		-		7,696
		176,814		135,211
Operating income (loss)		(2,148)		16,520
Other income (expense):				
Interest expense		(41,951)		(42,457)
Loss on extinguishment of debt		(25,178)		-
Gain from a bargain purchase of a business		173		-
Other income (expense), net		(407)		479
Total other income (expense)		(67,363)		(41,978)
Income (loss) before income taxes		(69,511)		(25,458)
Provision (benefit) for income taxes		(52,291)		5,699
Trovision (benefit) for moone taxes		(52,291)		5,077
Net income (loss)	\$	(17,220)	\$	(31,157)
Net income (loss) per common share - Basic	\$	(0.25)	\$	(0.48)
Weighted average number of common shares outstanding - Basic		69,517		65,000

See combined notes to unaudited condensed consolidated financial statements.

### Aeroflex Holding Corp. and Subsidiaries Unaudited Condensed Consolidated Statement of Stockholders' Equity and Comprehensive Income (Loss) (In thousands)

							А	dditional			Other				
			Commo	n	Stoc	k		Paid-in	C	om	prehensive	Ac	cumulated	Com	prehensive
	Total	S	nares		Par	Value		Capital	I	nco	ome(Loss)		Deficit	Inco	ome (Loss)
Balance, June 30, 2010	\$ 150,984		65,000		\$	650	\$	398,291		\$	(53,575)	\$	(194,382)		
Proceeds from issuance															
of common stock	244,097		19,789			198		243,899			-		-		
Share-based															
compensation	1,026		-			-		1,026			-		-		
Other changes	(255)		-			-		(255	)		-		-		
Other comprehensive															
income (loss)	12,473		-			-		-			12,473		-	\$	12,473
Net income (loss)	(17,220)		-			-		-			-		(17,220)		(17,220)
Balance, December 31,															
2010	\$ 391,105		84,789		\$	848	\$	642,961		\$	(41,102)	\$	(211,602)	\$	(4,747)

See combined notes to unaudited condensed consolidated financial statements.

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### Aeroflex Holding Corp. and Subsidiaries Unaudited Condensed Consolidated Statements of Cash Flows (In thousands)

	Six Months Ended Decemb			cember 31,
		2010		2009
Cash flows from operating activities:				
Net income (loss)	\$	(17,220)	\$	(31,157)
Adjustments to reconcile net income (loss) to net cash provided by (used in)				
operating activities:				
Depreciation and amortization		41,534		41,774
Gain from a bargain purchase of a business		(173)		-
Acquisition related adjustment to cost of sales		998		246
Loss on liquidation of foreign subsidiary		-		7,696
Loss on extinguishment of debt		25,178		-
Deferred income taxes				