

ANALOGIC CORP

FORM 10-Q (Quarterly Report)

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**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 April 30, 2017

OR

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

For the transition period from _____ to _____

Commission File Number 0-6715



ANALOGIC CORPORATION

(Exact name of registrant as specified in its charter)

Massachusetts
(State or other jurisdiction of
incorporation or organization)
8 Centennial Drive, Peabody, Massachusetts
(Address of principal executive offices)

04-2454372
(I.R.S. Employer
Identification No.)
01960
(Zip Code)

(978) 326-4000

(Registrant's telephone number, including area code)

(Former name, former address and former fiscal year, if changed since last report.)

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 has submitted electronically and posted on its 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). Yes No

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to section 13(a) of the Exchange Act.

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

As of May 30, 2017, there were 12,470,526 shares of common stock outstanding.

ANALOGIC CORPORATION
Form 10Q – Quarterly Report
For the Quarterly Period Ended April 30, 2017
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Part I. FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited)

ANALOGIC CORPORATION
CONSOLIDATED BALANCE SHEETS
(Unaudited in thousands, except share and per share data)

	April 30, 2017	July 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	\$ 158,633	\$ 118,697
Accounts receivable, net of allowance for doubtful accounts of \$1,160 and \$1,070 as of April 30, 2017 and July 31, 2016, respectively	93,560	112,412
Inventory	144,344	145,513
Income tax receivable	1,902	3,004
Prepaid expenses and other current assets	10,229	9,178
Total current assets	408,668	388,804
Property, plant, and equipment, net	105,539	107,790
Intangible assets, net	27,406	45,194
Goodwill	2,344	73,915
Deferred income taxes	19,051	10,671
Other assets	4,669	6,523
Total assets	\$ 567,677	\$ 632,897
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 29,211	\$ 28,575
Accrued employee compensation and benefits	17,906	18,108
Accrued income tax	2,361	1,610
Accrued warranty	6,205	6,296
Accrued restructuring charges	2,442	5,248
Deferred revenue	4,702	5,359
Customer deposits	4,028	3,476
Contingent consideration	-	4,534
Other current liabilities	5,478	5,261
Total current liabilities	72,333	78,467
Long-term liabilities:		
Accrued income taxes, net of current portion	1,858	2,174
Contingent consideration, net of current portion	-	7,705
Other long-term liabilities	11,772	13,374
Total long-term liabilities	13,630	23,253
Guarantees, commitments and contingencies (Note 15)		
Stockholders' Equity:		
Common stock, \$0.05 par value; 30,000,000 shares authorized and 12,471,169 shares issued and outstanding as of April 30, 2017; 30,000,000 shares authorized and 12,396,765 shares issued and outstanding as of July 31, 2016	622	619
Capital in excess of par value	156,635	149,005
Retained earnings	335,317	390,013
Accumulated other comprehensive loss	(10,860)	(8,460)
Total stockholders' equity	481,714	531,177
Total liabilities and stockholders' equity	\$ 567,677	\$ 632,897

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

ANALOGIC CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited, in thousands, except per share data)

	Three Months Ended April 30,		Nine Months Ended April 30,	
	2017	2016	2017	2016
Net revenue:				
Product	\$ 120,791	\$ 126,376	\$ 371,373	\$ 366,443
Engineering	1,371	1,604	3,448	4,354
Total net revenue	122,162	127,980	374,821	370,797
Cost of sales:				
Product	68,667	71,340	210,149	202,410
Engineering	1,334	1,707	3,180	3,736
Total cost of sales	70,001	73,047	213,329	206,146
Gross profit	52,161	54,933	161,492	164,651
Operating expenses:				
Research and product development	14,900	16,464	46,962	50,269
Selling and marketing	16,356	15,796	51,894	46,278
General and administrative	10,377	13,208	27,978	48,712
Restructuring	2,080	1,839	2,379	8,269
Asset impairment charges	73,051	-	83,474	-
Total operating expenses	116,764	47,307	212,687	153,528
(Loss) income from operations	(64,603)	7,626	(51,195)	11,123
Other income (expense), net	57	(934)	(357)	(4,899)
(Loss) income before income taxes	(64,546)	6,692	(51,552)	6,224
(Benefit) provision for income taxes	(4,882)	1,722	(1,934)	2,863
Net (loss) income	\$ (59,664)	\$ 4,970	\$ (49,618)	\$ 3,361
Net (loss) income per common share:				
Basic	\$ (4.78)	\$ 0.40	\$ (3.98)	\$ 0.27
Diluted	\$ (4.78)	\$ 0.40	\$ (3.98)	\$ 0.27
Weighted average shares outstanding:				
Basic	12,486	12,392	12,457	12,412
Diluted	12,486	12,553	12,457	12,623
Dividends declared and paid per share	\$ 0.10	\$ 0.10	\$ 0.30	\$ 0.30

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

ANALOGIC CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited, in thousands)

	Three Months Ended April 30,		Nine Months Ended April 30,	
	2017	2016	2017	2016
Net (loss) income	\$ (59,664)	\$ 4,970	\$ (49,618)	\$ 3,361
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustment, net of tax	178	3,551	(2,415)	303
Unrecognized gain on pension benefits, net of tax	58	26	167	76
Unrealized (loss) gain on foreign currency forward contracts, net of tax	(324)	373	(153)	358
Total other comprehensive (loss) income, net of tax	(88)	3,950	(2,401)	737
Total comprehensive (loss) income	\$ (59,752)	\$ 8,920	\$ (52,019)	\$ 4,098

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

ANALOGIC CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited, in thousands)

	Nine Months Ended April 30,	
	2017	2016
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net (loss) income	\$ (49,618)	\$ 3,361
Adjustments to reconcile net income to net cash provided by operating activities:		
Benefit from deferred income taxes	(8,402)	(2,681)
Depreciation and amortization	19,221	17,157
Asset impairment charges	83,474	-
Share-based compensation expense	6,450	7,144
Write down of demo equipment to net realizable value	1,557	2,496
Provision for excess and obsolescence inventory	287	775
Excess tax benefit from share-based compensation	(158)	(300)
Change in fair value of contingent consideration	(10,238)	-
Provision for doubtful accounts, net of recovery	88	67
(Gain) loss on sale of property, plant and equipment	(57)	-
Net changes in operating assets and liabilities:		
Accounts receivable	18,295	23,518
Inventory	(5,547)	(24,160)
Prepaid expenses and other assets	596	(2,194)
Accounts payable	608	2,006
Accrued liabilities	(2,845)	11,573
Deferred revenue	(641)	(743)
Customer deposits	554	(85)
Accrued income taxes and income taxes receivable	1,174	(3,839)
Other liabilities	(1,423)	796
Cash paid for contingent consideration	(100)	-
NET CASH PROVIDED BY OPERATING ACTIVITIES	53,275	34,891
CASH FLOWS FROM INVESTING ACTIVITIES:		
Additions to property, plant, and equipment	(7,741)	(9,664)
Acquisition of businesses, net of cash acquired	-	(8,026)
Proceeds from the sale of property, plant, and equipment	30	66
NET CASH USED IN INVESTING ACTIVITIES	(7,711)	(17,624)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Issuance of stock pursuant to exercise of stock options, employee stock purchase plan, restricted stock plans, and non-employee director stock plan	3,090	3,397
Repurchase of common stock	(1,584)	(11,793)
Shares repurchased for taxes for vested employee restricted stock grants	(1,128)	(1,774)
Excess tax benefit from share-based compensation	158	300
Dividends paid to shareholders	(3,771)	(3,726)
Cash paid for financing cost	-	(499)
Contingent consideration paid for business acquisitions	(1,900)	-
NET CASH USED IN FINANCING ACTIVITIES	(5,135)	(14,095)
EFFECT OF EXCHANGE RATE CHANGES ON CASH	(493)	1,152
NET INCREASE IN CASH AND CASH EQUIVALENTS	39,936	4,324
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	118,697	123,800
CASH AND CASH EQUIVALENTS, END OF PERIOD	\$ 158,633	\$ 128,124
Supplemental disclosures of cash flow information:		
Non-cash transfer of demonstration inventory to fixed asset	\$ 3,506	\$ -

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

ANALOGIC CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited, in millions, except share and per share data)

1. Basis of presentation

Throughout this Quarterly Report on Form 10-Q, unless the context states otherwise, the words “we,” “us,” “our” and “Analogic” refer to Analogic Corporation and all of its subsidiaries taken as a whole, and “our board of directors” refers to the board of directors of Analogic Corporation.

Our unaudited consolidated financial statements presented herein have been prepared pursuant to the rules of the United States Securities and Exchange Commission, or SEC, for quarterly reports on Form 10-Q. Preparing financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, and expenses. We report our financial condition and results of operations on a fiscal year basis ending on July 31st of each year. The nine months ended April 30, 2017 and 2016 represent the third quarters of fiscal years 2017 and 2016, respectively.

In our opinion, the accompanying unaudited consolidated financial statements contain all adjustments (consisting solely of normal recurring adjustments) necessary for a fair statement of the results for all interim periods presented. The results of operations for the three and nine months ended April 30, 2017 are not necessarily indicative of the operating results for the full year. These statements should be read in conjunction with the consolidated financial statements and notes thereto for the fiscal year ended July 31, 2016, or fiscal year 2016, included in our Annual Report on Form 10-K as filed with the SEC on September 27, 2016. The year-end balance sheet data was derived from audited financial statements, but does not include all disclosures required by generally accepted accounting principles, or GAAP, in the United States of America.

Consolidation

The unaudited consolidated financial statements presented herein include our accounts and those of our subsidiaries, all of which are wholly owned. All intercompany accounts and transactions have been eliminated in consolidation.

In determining whether we are the primary beneficiary of an entity and therefore required to consolidate, we apply a qualitative approach that determines whether we have both (1) the power to direct the economically significant activities of the entity and (2) the obligation to absorb losses of, or the right to receive benefits from, the entity that could potentially be significant to that entity. We have not been required to consolidate the activity of any entity due to these considerations.

Reclassifications and revisions to prior period financial statements

Certain financial statement items have been reclassified to conform to the current period presentation. We separately presented write down of demo equipment to net realizable value and provision for excess and obsolescence inventory on our April 30, 2016 Consolidated Statements of Cash Flows to conform to the current period presentation. There was no impact on our Consolidated Statements of Operations as a result of these reclassifications.

2. Recent accounting pronouncements

Accounting pronouncements issued and recently adopted

None.

Accounting pronouncements issued and not yet effective

Clarifying the Definition of a Business

In January 2017, the FASB issued ASU No. 2017-01, “*Business Combinations (Topic 805): Clarifying the Definition of a Business.*” The amendments provide the requirements needed for a set to be a business and establish a practical way to determine when a set is not a business. To be considered a business, an acquisition would have to include an input and a substantive process that together significantly contribute to the ability to create outputs. An output is the result of inputs and substantive processes that provide goods or services to customers, other revenue, or investment income, such as dividends and interest. The amendments narrow the definition of outputs and align it with how outputs are described in Topic 606 “Revenue from Contracts with Customers”. The amendments are effective for annual periods beginning after December 15, 2017, including interim periods within those periods. Early adoption is permitted. The standard will be effective for us in fiscal years beginning August 1, 2018. We are currently evaluating the impact of the adoption of this update on our consolidated financial statements.

Classification of Certain Cash Receipts and Cash Payments

In August 2016, the FASB issued ASU No. 2016-15, “*Statement of Cash Flows (Topic 230)*.” The amendments provide guidance on the eight specific cash flow statement presentation and classification issues as follows: (1) debt prepayment or debt extinguishment costs; (2) settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing; (3) contingent consideration payments made after a business combination; (4) proceeds from the settlement of insurance claims; (5) proceeds from the settlement of corporate-owned life insurance policies, including bank-owned life insurance policies; (6) distributions received from equity method investees; (7) beneficial interests in securitization transactions; and (8) separately identifiable cash flows and application of the predominance principle. The amendments are effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted. The standard will be effective for us in the first quarter of our fiscal year ending July 31, 2019. We are currently evaluating the impact of the adoption of this update on our consolidated financial statements.

Improvements to employee share-based payment accounting

In March 2016, the FASB issued ASU No. 2016-09, “*Improvements to Employee Share-Based Payment Accounting*,” which amends ASC 718, “*Stock Based Compensation*.” The amendments require that all excess tax benefits be recorded as an income tax benefit or expense in the income statement and be classified as an operating activity in the statement of cash flows. Entities may also elect to estimate the amount of forfeitures or recognize them as they occur. The amendments are effective for fiscal years, and interim periods within those years, beginning after December 15, 2016. The standard will be effective for us in the first quarter of our fiscal year ending July 31, 2018 and early adoption is permitted. We are currently evaluating the impact of the adoption of this update on our consolidated financial statements.

Leases

In February 2016, the FASB issued ASU No. 2016-02, “*Leases (Topic 842)*”. The standard requires lessees to recognize assets and liabilities for most leases on the balance sheet. For income statement purposes, the standard requires leases to be classified as either operating or finance. The standard is effective for annual and interim periods beginning after December 15, 2018. Early adoption is permitted. The standard will be effective for us in the first quarter of our fiscal year ending July 31, 2020. Adoption requires application of the new guidance for all periods presented. We are currently evaluating the impact of the adoption of this standard on our consolidated financial statements.

Revenue from contracts with customers

In May 2014, the FASB issued ASU No. 2014-09, “*Revenue from Contracts with Customers (Topic 606)*”. This update affects any entity that either enters into contracts with customers to transfer goods or services or enters into contracts for the transfer of nonfinancial assets. This update will supersede existing revenue recognition requirements and most industry-specific guidance. This update also supersedes some cost guidance, including revenue recognition guidance for construction-type and production-type contracts. The update’s core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. In doing so, companies will need to use more judgment and make more estimates than under today’s guidance. These may include identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. This update should be applied either on a retrospective or modified retrospective basis. This update was originally effective for us in the first quarter of our fiscal year ending July 31, 2018. Early adoption was not permitted. In August 2015, the FASB approved a one year delay of the effective date of the new revenue standard for public entities. Therefore, this update would be effective for us in the first quarter of our fiscal year ending July 31, 2019. The standard permits entities to early adopt, but only as of the original effective date (i.e. one year earlier). We are expected to adopt the new standard in the first quarter of our fiscal year 2019 effective August 01, 2018. We are still in the early stage of assessing the adoption method and analyzing the impact of the adoption of this update on our consolidated financial statements. We are unable to quantify the impact at this time. We established a project plan and an implementation team. The implementation team continues to apprise both management and the Audit Committee of project status on a recurring basis.

3. Accounts receivable, net

Our accounts receivable arise primarily from products sold and services provided in North America, Europe and Asia. The balance in accounts receivable represents the amount due from our domestic and foreign original equipment manufacturers, or OEM, customers, distributors and end users. We perform ongoing credit evaluations of our customers’ financial condition and continuously monitor collections and payments from our customers and maintain a provision for estimated credit losses based upon specific customer collection issues that have been identified. We accrue reserves against trade receivables for estimated losses that may result from a customer’s inability to pay. Amounts determined to be uncollectible are charged or written off against the reserve. To date, our historical write-offs of accounts receivable have been minimal.

Our top ten customers combined accounted for approximately 61% and 62% of our total net revenue for each of the three months ended April 30, 2017 and 2016, respectively and 63% and 62% of our total net revenue for the nine months ended April 30, 2017 and 2016 respectively. Set forth in the table below are customers which individually accounted for 10% or more of our net revenue.

	Three Months Ended April 30,		Nine Months Ended April 30,	
	2017	2016	2017	2016
Koninklijke Philips Electronics N.V., or Philips	14%	14%	14%	13%
Siemens AG	11%	11%	12%	13%
L-3 Communications Corporation, or L-3	11%	10%	10%	*
Toshiba Corporation, or Toshiba	*	*	*	11%

Note (*): Total net revenue was less than 10% in this period.

The following table summarizes our customers with net accounts receivable balances greater than or equal to 10% of our total net accounts receivable balance:

	As of April 30, 2017	As of July 31, 2016
L-3	12%	17%
Philips	21%	15%

4. Inventory

The components of inventory, net of allowance for obsolete, unmarketable or slow-moving inventories, are summarized as follows:

(in millions)	As of April 30, 2017	As of July 31, 2016
Raw materials	\$ 68.4	\$ 68.6
Work in process	47.5	45.6
Finished goods	28.4	31.3
Total inventory	\$ 144.3	\$ 145.5

5. Intangible assets and goodwill

Intangible assets

Intangible assets include the value assigned to intellectual property and other technology, patents, customer contracts and relationships, and trade names. The estimated useful lives for all of these intangible assets, excluding a trade name determined to have an indefinite life, range between 1 to 14 years. Indefinite-lived intangible assets consist of trade names acquired in business combinations. The carrying values of our indefinite-lived intangible assets were \$7.6 million at both nine months ended April 30, 2017 and July 31, 2016.

Finite-lived intangible assets are summarized as follows:

(in millions)	Weighted Average Amortization Period	As of April 30, 2017			As of July 31, 2016		
		Cost	Accumulated Amortization/ Write-Offs	Net	Cost	Accumulated Amortization	Net
Developed technologies	10 years	\$ 17.7	\$ 13.9	\$ 3.8	\$ 29.9	\$ 15.1	\$ 14.8
Customer relationships	13 years	43.7	27.7	16.0	47.1	25.2	21.9
Trade names	3 years	0.9	0.9	-	1.9	1.0	0.9
Total finite-lived intangible assets		\$ 62.3	\$ 42.5	\$ 19.8	\$ 78.9	\$ 41.3	\$ 37.6

Amortization expense related to acquired intangible assets was \$1.9 million and \$5.9 million for the three and nine months ended April 30, 2017, respectively. Amortization expense related to acquired intangible assets was \$2.3 million and \$6.3 for the three and nine months ended April 30, 2016, respectively.

During the three months ended April 30, 2017, management noted impairment indicators related to the Oncura intangible assets which had a carrying value of \$3.1 million. Oncura is part of our Ultrasound operating segment. Management performed an impairment test based on the projected future cash flows. Further disruption in the sales channel of our vet business in the third quarter of fiscal year 2017 resulted in lower revenues than anticipated for the quarter and a reduced revenue forecast of our Oncura reporting unit, as compared with our prior estimates resulting in the recording of an impairment charge of \$3.1 million, including a write-off of customer relationship of \$2.4 million and a write-off of trade name of \$0.7 million. We recorded these amounts in the asset impairment charges caption in our accompanying unaudited consolidated statements of operations. For more information on the acquisition of Oncura, please refer to *Note 3. Business combination* in our Annual Report on Form 10-K for fiscal year 2016, as filed with the SEC on September 27, 2016.

During the three months ended April 30, 2017, management noted impairment indicators related to the PocketSonic intangible assets which had a carrying value of \$8.1 million. PocketSonic is part of our Ultrasound operating segment. Management performed an impairment test based on the projected future cash flows and based on a decision during the third quarter of fiscal year 2017 to forgo further investment in the business, the Company recorded an impairment charge of \$8.1 million, consisting of technology of \$8.1 million. We recorded these amounts in the asset impairment charges caption in our accompanying unaudited consolidated statements of operations. For more information on the acquisition of PocketSonic, please refer to *Note 3. Business combination* in our Annual Report on Form 10-K for fiscal year 2016, as filed with the SEC on September 27, 2016.

During the nine months ended April 30, 2017, intangible asset impairment charges were \$11.9 million.

The estimated future amortization expense related to intangible assets for the five succeeding fiscal years is expected to be as follows:

(in millions)	Estimated Future Amortization Expense
Remaining 2017	\$ 1.5
2018	\$ 5.0
2019	\$ 3.8
2020	\$ 3.4
2021	\$ 3.0
Thereafter	\$ 3.1
	\$ 19.8

Goodwill

Analogic has goodwill balances of \$2.3 million at April 30, 2017 and \$73.9 million at July 31, 2016. We review periodically or more frequently if indicators are present or changes in circumstances suggest that it is more likely than not that impairment may exist and we perform a formal goodwill impairment test in the second quarter of each fiscal year.

Changes in the carrying amount of goodwill by reportable segments for the nine months ended April 30, 2017 are as follows:

(in millions)	Medical Imaging	Ultrasound	Security and Detection	Total Goodwill
Balance as of July 31, 2016				
Goodwill	\$ 1.8	\$ 71.6	\$ 0.5	\$ 73.9
Impairment losses	-	(71.6)	-	(71.6)
Balance as of April 30, 2017				
Goodwill	1.8	71.6	0.5	73.9
Accumulated impairment losses	-	(71.6)	-	(71.6)
	\$ 1.8	\$ -	\$ 0.5	\$ 2.3

We have four reporting units with goodwill—Medical Imaging, Ultrasound, Oncura, and Security and Detection and three reportable segments—Medical Imaging, Ultrasound, and Security and Detection. We performed the annual impairment test for our goodwill and other intangible assets with indefinite lives as of December 31, 2016. We first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value and as a basis for determining whether it is necessary to perform the quantitative impairment test. Alternatively, we may elect to bypass the qualitative assessment and proceed to the two-step quantitative impairment test. If we choose to perform a qualitative assessment and determine it is more

likely than not that the carrying value of the net assets is more than the fair value of the related operations, the two-step impairment process is then performed; otherwise, no further testing is required.

Our quantitative impairment assessment considered both the market approach and income approach to calculate the fair value of the reporting unit, with different weights assigned to each. Under the market approach, the fair value of the reporting unit is based on trading multiples of a peer group of companies, which was determined based on an analysis of the selected guideline public companies' business enterprise value ("BEV") plus a control premium, which was determined based on an analysis of control premiums for recent relevant acquisitions. Under the income approach, the fair value of the reporting unit is based on the present value of estimated future cash flows, which are determined, based upon the Company's most recent strategic operating plan and considering market participant assumptions. The income approach is dependent on a number of significant management assumptions including estimates of future revenues, costs and expenses, and a number of significant valuation inputs including discount rates, working capital rates and tax rates. During the second quarter of fiscal year 2017, for our Medical Imaging, Ultrasound, Oncura, and Security and Detection reporting units, we used the two-step quantitative impairment test. For the Security and Detection reporting unit, we performed the market approach and determined that the fair value of our Security and Detection reporting unit was in excess of its carrying value, and concluded that there was no impairment during the annual impairment test of goodwill and other intangible assets with indefinite lives as of December 31, 2016. For our Medical Imaging and Ultrasound reporting units, we used both the market approach and income approach and determined that there was no impairment of goodwill during the annual impairment test of goodwill and other intangible assets with indefinite lives as of December 31, 2016. For our Medical Imaging reporting unit, we determined that the estimated fair value of the Medical Imaging reporting unit substantially exceeds its carrying value. For our Ultrasound reporting unit, we determined that our Ultrasound reporting unit was at risk of failing the first step of the goodwill impairment test in future reporting periods due to forecast revisions and changes in strategy in our ultrasound business. For example, an increase in the discount rate applied to the Ultrasound cash flows of 300 basis points could result in a failure of Step 1 of the impairment test. Also, a decrease in the revenue compound annual growth rate within the Ultrasound cash flow forecast of 200 basis points could result in a failure of Step 1 of the impairment test. Our Ultrasound reporting unit had excess fair value over carrying value of approximately 25% as of our annual test date and held \$55.1 million of allocated goodwill as of December 31, 2016.

During the second quarter of fiscal year 2017, for our Oncura reporting unit, recent changes in our strategy caused us to decrease future forecasted revenues from our prior estimates. As a result, we determined that the associated goodwill was impaired and we recorded an estimated charge of \$9.8 million in the second quarter of fiscal year 2017 during the annual impairment test of goodwill and other intangible assets with indefinite lives as of December 31, 2016. We recorded this amount in the asset impairment charges caption in our accompanying unaudited consolidated statements of operations. The amount of this charge was finalized in the third quarter of fiscal year 2017, as we have completed the second step of the goodwill impairment test, in accordance with ASC Topic 350, *Intangibles—Goodwill and Other*.

During the second quarter of fiscal year 2017, subsequent to the annual impairment test of goodwill and other intangible assets with indefinite lives as of December 31, 2016, we elected early adoption of ASU 2017-04 as of January 01, 2017, "Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment." As a result, we removed Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. Goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill.

During the third quarter of fiscal year 2017, the Company noted impairment indicators related to our Ultrasound reporting unit. Additional delays related to the introduction and commercialization of our general imaging platform sold through our technology partner in general imaging caused the Company to reassess our revenue expectations for the product. This significant change, as well as a further reduction in revenue estimates for our fiscal 2017 impacted our overall revenue growth expectations in Ultrasound in future periods. Management performed an interim impairment test based on both the market approach and income approach and recorded an estimated impairment charge of \$55.1 million. The amount of this charge is subject to finalization in the fourth quarter of fiscal year 2017. As a result, the aggregate amount of goodwill associated with our Ultrasound reporting unit was taken down to zero as of April 30, 2017. In addition, the remaining book value of the intangible assets allocated to our Ultrasound reporting unit was \$9.3 million as of April 30, 2017.

During the third quarter of fiscal year 2017, for our Oncura reporting unit, as a result of decreased forecasted revenue as compared with our prior estimates, which was caused by the further disruption in our sales channel in our vet business, we determined that the remaining goodwill was impaired and recorded a charge of \$6.7 million in the third quarter of fiscal year 2017. We recorded this amount in the asset impairment charges caption in our accompanying unaudited consolidated statements of operations. The aggregate amount of goodwill associated with our Oncura reporting unit was taken to zero as of April 30, 2017. Also as a result of our decreased revenue forecast for Oncura, we recorded an adjustment to the associated contingent consideration liability, which resulted in a gain of \$2.1 million and \$10.2 million for the three and nine months as of April 30, 2017, respectively, recorded within General and Administrative expenses. As of April 30, 2017, the fair value of the contingent consideration obligation associated with the Oncura acquisition was taken to zero.

We compared the fair value of a tradename that has an indefinite life using the relief from royalty approach to its carrying value as of December 31, 2016. The relief from royalty approach utilized an after-tax royalty rate and a discount rate. The after-tax royalty rate was determined based on royalty research and margin analysis, while the discount rate was determined after consideration of market rates of return on debt and equity capital, the weighted average return on invested capital, and the risk associated with achieving forecasted sales for the tradename. We determined that the fair value of the tradename was in excess of its carrying value.

The current economic environment and the uncertainties regarding its impact on our business and our estimates for forecasted revenue and spending levels made for purposes of our goodwill and trade name impairment testing may not be accurate predictions of the future. If our assumptions regarding forecasted revenue or margin growth rates of each reporting unit and trade name are not achieved, we may be required to record an impairment charge for the goodwill and trade name in future periods, whether in connection with our next annual impairment testing in the second quarter of the fiscal year ending July 31, 2018, or prior to that if any such change constitutes a triggering event outside of the quarter from when the annual goodwill and trade name impairment test is performed. Changes in our forecasts, or decreases in the value of our common stock could cause book values of certain operations to exceed their fair values which may result in goodwill impairment charges in future periods. It is not possible at this time to determine if any such future impairment charge would result or, if it does, whether such charge would be material.

6. Fair value measurements

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or the most advantageous market for the asset transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. We use a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value:

- Level 1 – Quoted prices in active markets for identical assets or liabilities.
- Level 2 – Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The following tables provide the assets and liabilities carried at fair value and measured on a recurring basis at April 30, 2017 and July 31, 2016:

(in millions)	Fair Value Measurements at April 30, 2017			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Cash and cash equivalents	\$ 158.6	\$ 158.6	\$ -	\$ -
Plan assets for deferred compensation	6.7	6.7	-	-
Total assets at fair value	\$ 165.3	\$ 165.3	\$ -	\$ -
Liabilities				
Foreign currency forward contracts	0.5	-	0.5	-
Total liabilities at fair value	\$ 0.5	\$ -	\$ 0.5	\$ -

(in millions)	Fair Value Measurements at July 31, 2016			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Cash and cash equivalents	\$ 118.7	\$ 118.7	\$ -	\$ -
Plan assets for deferred compensation	5.9	5.9	-	-
Total assets at fair value	\$ 124.6	\$ 124.6	\$ -	\$ -
Liabilities				
Contingent consideration	\$ 12.2	\$ -	\$ -	\$ 12.2
Foreign currency forward contracts	0.3	-	0.3	-
Total liabilities at fair value	\$ 12.5	\$ -	\$ 0.3	\$ 12.2

Assets held in the deferred compensation plan will be used to pay benefits under our non-qualified deferred compensation plan. The investments primarily consist of mutual funds which are publicly traded on stock exchanges. Accordingly, the fair value of these assets is categorized as Level 1 within the fair value hierarchy.

The fair value of the liabilities arising from our foreign currency forward contracts is determined by valuation models based on market observable inputs, including forward and spot prices for currencies. Accordingly, the fair value of these liabilities is categorized as Level 2 within the fair value hierarchy.

The fair value of our contingent consideration obligation is based on significant unobservable inputs, including management estimates and assumptions, and is measured based on the probability-weighted present value of the payments expected to be made. Accordingly, the fair value of this liability is categorized as Level 3 within the fair value hierarchy.

The fair value of the contingent payments associated with the acquisition of PocketSonic, Inc., or PocketSonic, was calculated utilizing 100% probability for the earn out associated with the Section 510(k) clearance obtained from the Food and Drug Administration, or FDA, on April 9, 2014 and the first commercial shipment as defined in the purchase agreement, in the fiscal year ending July 31, 2016, or fiscal year 2016. Each quarter we revalue the contingent consideration obligations associated with the acquisition of PocketSonic to its then current fair value and record changes in the fair value to the Consolidated Statements of Operations. Changes in contingent consideration result from changes in the assumptions regarding probabilities of the estimated timing of launch, volume sales target, payments and the discount rate used to estimate the fair value of the liability. The assumptions used in estimating fair value require significant judgment. The use of different assumptions and judgments could result in a materially different estimate of fair value. There was no change in the fair value of our contingent consideration obligation during the three and nine months ended April 30, 2017. We paid out the \$2.0 million contingent liability during the third quarter during fiscal year 2017. Please refer to *Note 3. Business combination* in our Annual Report on Form 10-K for fiscal year 2016, as filed with the SEC on September 27, 2016 for more information on the acquisition of PocketSonic.

The fair value of the contingent payment obligation associated with the acquisition of Oncura was valued using a Monte Carlo simulation. The fair value of the contingent payment obligation of Oncura will be revalued each quarter to its then fair value and we will record changes in the fair value as contingent consideration expense within our Consolidated Statement of Operations within general and administrative operating expenses. Changes in contingent consideration expense result from changes in the assumptions regarding probabilities of the estimated future sales volume and gross margin targets and the discount rate used to estimate the fair value of the liability. The assumptions used in estimating the fair value require significant judgment. The use of different assumptions and judgments could result in a different estimate of fair value. There was a \$2.1 million and \$10.2 million decrease in the fair value of our contingent consideration obligation during the three and nine months ended April 30, 2017, due to revisions in our forecasted revenues of the Oncura business, which reduced the amount of contingent consideration we expect to pay. As of April 30, 2017, the fair value of the contingent consideration obligation associated with the Oncura acquisition was \$0.0 million. For more information on the acquisition of Oncura, please refer to *Note 3. Business combination* in our Annual Report on Form 10-K for fiscal year 2016, as filed with the SEC on September 27, 2016.

7. Derivative instruments

Certain of our foreign operations have revenue and expenses transacted in currencies other than the U.S. dollar. In order to mitigate foreign currency exchange risk, we use forward contracts to lock in exchange rates associated with a portion of our forecasted international expenses.

As of April 30, 2017, we have forward contracts outstanding with notional amounts totaling \$11.6 million. These contracts are designated as cash flow hedges, and the unrealized loss of \$0.3 million, net of tax, on these contracts are reported in Accumulated other comprehensive income as of April 30, 2017. Assets and liability derivatives designated as hedging instruments are presented in other assets and other liabilities, respectively, on our Consolidated Balance Sheets. At April 30, 2017 we had a derivative liability of \$0.5 million included in other liabilities on our Consolidated Balance Sheet.

As of July 31, 2016, we have forward contracts outstanding with notional amounts totaling \$18.6 million. These contracts are designated as cash flow hedges, and the unrealized loss of \$0.2 million, net of tax, on these contracts are reported in Accumulated other comprehensive income as of July 31, 2016. At July 31, 2016 we had a derivative liability of \$0.3 million included in other liabilities on our Consolidated Balance Sheet.

Realized gains and (losses) on the cash flow hedges are recognized in income in the period when the payment of expenses is recognized. During the three and nine months ended April 30, 2017 we recorded approximately \$0.2 million and \$0.5 million of realized loss, respectively, included in our Consolidated Statements of Operations. During the three and nine months ended April 30, 2016 we recorded \$0.2 million and \$0.6 million of realized loss, respectively.

8. Common stock repurchases

On May 26, 2016, our board of directors authorized the repurchase of up to \$15.0 million of our common stock. After that authorization, we continued to repurchase stock with \$1 million of unused capacity from the prior \$30 million repurchase program, which was authorized by our board of directors on June 2, 2014. Purchases under the current program will be made from time to time depending on market conditions and other factors. The Company's repurchase programs have no expiration date. The Board's authorization of the share repurchase programs does not obligate the Company to acquire any particular amount of common stock, and the programs may be suspended or discontinued at any time at the Company's discretion.

During the three and nine months ended April 30, 2017, we repurchased and retired 13,578 shares of common stock under the June 2, 2014 repurchase program for \$1.0 million at an average purchase price of \$74.08 per share. The cumulative shares that were repurchased and retired under this program were 380,771 shares of common stock for \$30.0 million at an average purchase price of \$78.76 per share. The June 2, 2014 repurchase program is now complete.

During the three and nine months ended April 30, 2017, we repurchased and retired 8,090 shares of common stock under the May 26, 2016 repurchase program for \$0.6 million at an average purchase price of \$71.46 per share. The cumulative shares that were repurchased and retired under this program were 8,090 shares of common stock for \$0.6 million at an average purchase price of \$71.46 per share.

9. Accumulated other comprehensive income

Components of comprehensive (loss) income include net income and certain transactions that have generally been reported in the Consolidated Statements of Changes in Stockholders' Equity. Other comprehensive (loss) income consists of reported foreign currency translation gains and losses (net of taxes), actuarial gains and losses on pension plan assets (net of taxes), and changes in the unrealized value on foreign currency forward contracts (net of taxes). Deferred taxes are not provided on cumulative translation adjustments where we expect earnings of a foreign subsidiary to be indefinitely reinvested. The income tax effect of currency translation adjustments related to foreign subsidiaries that are not considered indefinitely reinvested is recorded as a component of deferred taxes with an offset to other comprehensive (loss) income.

The following table summarizes components of Accumulated other comprehensive (loss) income for the nine months ended April 30, 2017:

(in millions)	Unrealized Gain on Foreign Currency Forward Contracts	Unrealized Losses on Pension Plan	Currency Translation Adjustment	Accumulated Other Comprehensive Income
Balance as of July 31, 2016	\$ (0.2)	\$ (4.9)	\$ (3.4)	\$ (8.5)
Pre-tax change before reclassification to earnings	-	0.2	(2.3)	(2.1)
Amount reclassified to earnings	(0.2)	-	-	(0.2)
Income tax benefit (provision)	0.1	-	(0.2)	(0.1)
Balance as of April 30, 2017	\$ (0.3)	\$ (4.7)	\$ (5.9)	\$ (10.9)

The ineffective portion of the unrealized losses on foreign currency forward contracts and unrealized gains or losses on currency translation adjustment are included in other expense, net on our Consolidated Statements of Operations.

10. Share-based compensation

The following table presents share-based compensation expense included in our Consolidated Statements of Operations:

(in millions)	Three Months Ended April 30,		Nine Months Ended April 30,	
	2017	2016	2017	2016
Cost of product sales	\$ 0.1	\$ 0.1	\$ 0.3	\$ 0.4
Cost of engineering sales	-	-	0.1	-
Research and product development	0.4	0.6	1.2	1.8
Selling and marketing	0.2	0.4	1.1	1.1
General and administrative	1.5	1.8	3.7	3.8
Total share-based compensation expense before tax	2.2	2.9	6.4	7.1
Income tax effect	(0.7)	(1.0)	(2.0)	(2.2)
Share-based compensation expense included in net income	\$ 1.5	\$ 1.9	\$ 4.4	\$ 4.9

Stock options

We estimate the fair value of stock options using the Black-Scholes valuation model. Key input assumptions used to estimate the fair value of stock options include the exercise price of the award, the expected option term, the expected volatility of our stock over the option's expected term, the risk-free interest rate over the option's expected term, and our expected annual dividend yield. Estimates of fair value are not intended to predict actual future events or the value ultimately realized by persons who receive equity awards.

No stock options were granted during the three and nine months ended April 30, 2017 and April 30, 2016, respectively.

The total intrinsic value of options exercised during the three and nine months ended April 30, 2017 was \$0.0 million and \$2.2 million, respectively.

Restricted stock and restricted stock units

We estimate the fair value of restricted stock units, or RSUs, that vest based on service conditions using the quoted closing price of our common stock on the date of grant. Share-based compensation expense is amortized over each award's vesting period on a straight-line basis for all awards with service and performance conditions that vest at the end of the performance cycle, while the accelerated method applies to other awards with both service and performance conditions.

For our non-GAAP earnings per share, or EPS awards, the compensation cost is amortized over the performance period on a straight-line basis, net of forfeitures, because such awards vest only at the end of the performance period. The compensation cost is based on the number of shares that are deemed probable of vesting at the end of the three-year performance cycle. This probability assessment is done each quarter and changes in estimates can result in significant expense fluctuations due to the cumulative catch-up adjustment. We estimate the fair value of the non-GAAP EPS awards using the quoted closing price of our common stock on the date of grant.

For our relative total shareholder return, or TSR awards, which are based on market performance of our stock as compared to an industry peer group, the compensation cost is amortized over the performance period on a straight-line basis net of forfeitures, because the awards vest only at the end of the measurement period and the probability of actual shares expected to be earned is considered in the grant date valuation. As a result, the expense is not adjusted to reflect the actual shares earned. We estimate the fair value of the TSR awards using the Monte-Carlo simulation model.

We granted 601 and 28,749 TSR awards and 594 and 62,626 non-GAAP EPS awards during the three and nine months ended April 30, 2017, respectively. We granted 0 and 24,821 TSR awards and 0 and 32,444 non-GAAP EPS awards during the three and nine months ended April 30, 2016, respectively. The fair value of our TSR performance-based awards at the date of grant was estimated using the Monte-Carlo simulation model with the following assumptions:

	Three Months Ended April 30,		Nine Months Ended April 30,	
	2017	2016	2017	2016
Stock price (1)	\$ 73.60	\$ -	\$ 89.88	\$ 84.06
Expected volatility (2)	27.00%	0.00%	27.0%	26.4%
Risk-free interest rate (3)	0.85%	0.00%	0.85%	1.04%
Expected annual dividend yield (4)	0.00%	0.00%	0.00%	0.00%
Weighted average grant date fair value of time-based restricted stock awards	\$ 78.22	\$ 74.18	\$ 88.16	\$ 82.66
Weighted average grant date fair value of performance based restricted stock awards	\$ 73.60	\$ -	\$ 86.88	\$ 98.81

- (1) The stock price is the closing price of our common stock on the date of grant.
- (2) The expected volatility for each grant is determined based on the historical volatility for the peer group companies and our common stock over a period equal to the remaining term of the performance period from the date of grant for all awards.
- (3) The risk-free interest rate is determined based on the yield of zero-coupon U.S. Treasury securities for a period that is commensurate with the performance period.
- (4) Dividends are considered reinvested when calculating TSR. The dividend yield is therefore considered to be 0%.

The total fair value of RSUs that vested during the three and nine months ended April 30, 2017 was \$0.9 million and \$4.1 million, respectively.

The total fair value of RSUs that vested during the three and nine months ended April 30, 2016 was \$0.9 million and \$5.3 million, respectively.

As of April 30, 2017, the unrecognized compensation cost, net of estimated forfeitures, related to unvested stock options and restricted stock was \$9.2 million. This cost will be recognized over an estimated weighted average amortization period of 1.2 years and assumes target performance for the non-GAAP EPS awards.

11. Restructuring charges

Fiscal Year 2017 Restructuring Plan

On March 6, 2017, the Company announced a restructuring of its Ultrasound business designed to improve profitability and provide consistent long term growth. The Company intends to focus on its core markets of Urology and Surgery as well as specific areas of the Point of Care market where its products have a competitive advantage. The Company will consolidate the activities currently conducted in Vancouver, British Columbia with its existing operations in Copenhagen, Denmark and Peabody, Massachusetts and plans to exit the Vancouver facility by the end fiscal 2017. The Company intends to re-size its U.S. sales, global marketing as well as general and administration organizations in-line with its objectives. These activities will result in a workforce reduction of approximately 130 employees and is expected to be substantially completed by the end of fiscal 2017.

The Company expects to incur restructuring related charges of up to \$5.0 million in fiscal 2017. We incurred pre-tax charges of \$2.1 and \$2.5 million during the three and nine months ended April 30, 2017.

Fiscal Year 2016 Restructuring Plan

On September 16, 2015, the Company announced our fiscal year 2016 restructuring plan, or 2016 Restructuring Plan. This plan includes the transition of certain manufacturing activities from our Peabody, Massachusetts location to our existing facility in Shanghai, China, and a reduction in force in order to align our research and development investment with expected customer funding. We had pre-tax adjustment of approximately \$0.0 million and \$(0.1) million to restructuring during the three and nine months ended April 30, 2017. We incurred pre-tax charges of \$1.8 million and \$8.3 million during the three and nine months ended April 30, 2016, respectively, primarily relating to severance and personnel related costs for terminated employees. We expect that the 2016 Restructuring Plan will be substantially completed during the fourth quarter of fiscal year 2017.

Current Period Activity

The following table summarizes accrued restructuring activities for the three months ended April 30, 2017:

(in millions)	Employee Severance and Benefits (A)	Other Restructuring Costs (A)	Total
Balance at January 31, 2017	\$ 1.4	\$ -	\$ 1.4
Restructuring charge	2.1	-	2.1
Adjustments	-	-	-
Cash payments	(1.1)	-	(1.1)
Balance at April 30, 2017	\$ 2.4	\$ -	\$ 2.4

- (A) Restructuring charges in fiscal year 2017 includes \$2.1 million with respect to the Fiscal Year 2017 Restructuring Plan. All other activity pertains to the Fiscal Year 2016 Restructuring Plan.

The following table summarizes accrued restructuring activities for the nine months ended April 30, 2017:

(in millions)	Employee Severance and Benefits (A)	Other Restructuring Costs (A)	Total
Balance at July 31, 2016	\$ 5.2	\$ -	\$ 5.2
Restructuring charge	2.5	-	2.5
Adjustments	(0.1)	-	(0.1)
Cash payments	(5.2)	-	(5.2)
Balance at April 30, 2017	\$ 2.4	\$ -	\$ 2.4

- (A) Restructuring charges in fiscal year 2017 includes \$2.4 million with respect to the Fiscal Year 2017 Restructuring Plan. All other activity pertains to the Fiscal Year 2016 Restructuring Plan.

Restructuring and related charges, including actions associated with acquisitions, by segment are as follows:

(in millions)	For Three Months Ended April 30,		For Nine Months Ended April 30,	
	2017	2016	2017	2016
Medical Imaging	\$ 0.2	\$ 1.1	\$ 0.4	\$ 5.1
Ultrasound	1.8	0.4	1.9	1.7
Security and Detection	0.1	0.3	0.1	1.5
Total restructuring and related charges	\$ 2.1	\$ 1.8	\$ 2.4	\$ 8.3

Accrued restructuring charges are classified on the Consolidated Balance Sheets in the Current Liabilities section.

12. Net income per common share

Basic net income per share is computed using the weighted average number of common shares outstanding during the period. Diluted net income per share is computed using the sum of the weighted average number of common shares outstanding during the period and, if dilutive, the weighted average number of potential shares of common stock, including unvested restricted stock and the assumed exercise of stock options using the treasury stock method.

Basic and diluted net income per share are calculated as follows:

(in millions, except per share data and share data in thousands)	Three Months Ended April 30,		Nine Months Ended April 30,	
	2017	2016	2017	2016
Net (loss) income	\$ (59.7)	\$ 5.0	\$ (49.6)	\$ 3.4
Weighted average number of common shares outstanding-basic	12,486	12,392	12,457	12,412
Effect of dilutive securities:	-	-	-	-
Stock options and restricted stock units	-	161	-	211
Weighted average number of common shares outstanding-diluted	12,486	12,553	12,457	12,623
Basic net (loss) income per share	\$ (4.78)	\$ 0.40	\$ (3.98)	\$ 0.27
Diluted net (loss) income per share	\$ (4.78)	\$ 0.40	\$ (3.98)	\$ 0.27
Anti-dilutive shares related to outstanding stock options and unvested restricted stock (A)	242	87	228	5

(A) These shares related to outstanding stock options and unvested restricted stock were not included in our calculations of diluted earnings per share, as the effect of including them would be anti-dilutive.

13. Income taxes

The following table presents the provision for income taxes and our effective tax rate for the three and nine months ended April 30, 2017 and 2016:

(in millions except percentages)	Three Months Ended April 30,		Nine Months Ended April 30,	
	2017	2016	2017	2016
(Benefit)/provision for income taxes	\$ (4.9)	\$ 1.7	\$ (1.9)	\$ 2.9
Effective tax rate	8%	26%	4%	46%

The effective income tax rate on operations is based upon the estimated income for the year, including the goodwill and intangibles impairments discussed elsewhere, the composition of the income in different countries, and adjustments, if any, in the applicable quarterly periods for the potential tax consequences, benefits, resolutions of tax audits or other tax contingencies.

Our effective tax rate for the three months ended April 30, 2017 is lower than the statutory rate of 35% primarily due to operating losses generated in the United States, tax credits in the United States and Canada in spite of operating losses, and non-recurring discrete tax items. Our effective tax rate for the nine months ended April 30, 2017 is lower than the statutory rate of 35% primarily due to losses generated in the US by impairment charges, income generated outside the United States in countries with lower tax rates, tax credits in the United States and Canada, and discrete tax benefits. The tax provision for the three and nine months ended April 30, 2017 includes discrete tax benefits totaling \$0.5 million and \$0.9 million, respectively.

Our effective tax rate for the three and nine months ended April 30, 2016 differs from the statutory rate of 35% primarily due to non-deductible and reserve items related to the BK Medical matter and expiration of statute of limitations for the income tax returns in the United States for fiscal year ended July 31, 2012. Additional impacts to our rate resulted from income generated outside the United States in countries with lower tax rates and from tax Credits in the United States and Canada. The tax provision for the three and nine months ended April 30, 2016 includes discrete tax benefits totaling \$(0.2) million and \$1.1 million, respectively. For more information on the BK Medical matter, please refer to *Note 11. Commitments, guarantees and contingencies* in our Annual Report on Form 10-K for fiscal year 2016, as filed with the SEC on September 27, 2016.

We are subject to U.S. Federal income tax as well as the income tax of multiple state and foreign jurisdictions. As of April 30, 2017, we have concluded all U.S. Federal income tax matters through the year ended July 31, 2012.

We accrue interest and, if applicable, penalties for any uncertain tax positions. This interest and penalty expense is treated as a component of income tax expense. At April 30, 2017 and July 31, 2016, we had approximately \$0.3 million and \$0.4 million accrued for interest and penalties on unrecognized tax benefits.

At April 30, 2017, we had \$6.9 million of unrecognized tax benefits for uncertain tax positions and \$0.3 million of related accrued interest and penalties. We are unable to reasonably estimate the amount and period in which these liabilities might be paid.

We do not provide for U.S. Federal income taxes on undistributed earnings of consolidated foreign subsidiaries, as such earnings are intended to be indefinitely reinvested in those operations. Determination of the potential deferred income tax liability on these undistributed earnings is not practicable because such liability, if any, is dependent on circumstances that exist if and when remittance occurs. The circumstances that would affect the calculations would be the source location and amount of the distribution, the underlying tax rate already paid on the earnings, foreign withholding taxes and the opportunity to use foreign tax credits.

14. Segment information

Our business is strategically aligned into three segments: Medical Imaging, Ultrasound, and Security and Detection. Our business segments are described as follows:

- *Medical Imaging* primarily includes systems and subsystems for CT and MRI medical imaging equipment as well as state-of-the-art, selenium-based detectors for screening of breast cancer and other diagnostic applications in mammography.
- *Ultrasound* includes ultrasound systems and transducers primarily in the urology, surgery, and point-of-care markets.
- *Security and Detection* includes advanced threat detecting CT systems utilizing our expertise in advanced imaging technology, primarily used in the checked baggage screening at airports worldwide.

The tables below present information about our reportable segments:

(in millions)	Three Months Ended April 30,		Nine Months Ended April 30,	
	2017	2016	2017	2016
Product revenue:				
Medical Imaging	\$ 68.2	\$ 71.9	\$ 205.9	\$ 208.7
Ultrasound	34.8	36.8	110.7	115.9
Security and Detection	17.8	17.6	54.8	41.8
Total product revenue	\$ 120.8	\$ 126.3	\$ 371.4	\$ 366.4
Engineering revenue:				
Medical Imaging	\$ 1.3	\$ 0.9	\$ 3.1	\$ 2.6
Ultrasound	-	0.8	0.2	1.7
Security and Detection	0.1	(0.1)	0.1	0.1
Total engineering revenue	\$ 1.4	\$ 1.6	\$ 3.4	\$ 4.4
Net revenue:				
Medical Imaging	\$ 69.5	\$ 72.9	\$ 209.0	\$ 211.3
Ultrasound	34.8	37.6	110.9	117.6
Security and Detection	17.9	17.5	54.9	41.9
Total net revenue	\$ 122.2	\$ 128.0	\$ 374.8	\$ 370.8
Income (loss) from operations:				
Medical Imaging (A)	\$ 12.2	\$ 10.2	\$ 31.3	\$ 28.2
Ultrasound (B)	(79.3)	(5.0)	(89.7)	(19.5)
Security and Detection (C)	2.5	2.4	7.2	2.4
Total (loss) income from operations	(64.6)	7.6	(51.2)	11.1
Total other income (loss), net	0.10	(0.9)	(0.4)	(4.9)
(Loss) income before income taxes	\$ (64.5)	\$ 6.7	\$ (51.6)	\$ 6.2

(in millions)	As of April 30, 2017	As of July 31, 2016
Identifiable total assets by segment:		
Medical Imaging	\$ 182.8	\$ 191.1
Ultrasound	146.8	152.5
Security and Detection	42.6	49.8
Total reportable segment assets	372.2	393.4
Corporate assets (D)	193.1	165.6
Total identifiable assets	\$ 565.3	\$ 559.0

- (A) Includes restructuring charges of \$0.2 million and \$1.1 million for three months ended April 30, 2017 and April 30, 2016, respectively and \$0.4 million and \$5.1 million for nine months ended April 30, 2017 and April 30, 2016.

- (B) Includes restructuring charges of \$1.8 million and \$0.4 million for three months ended April 30, 2017 and April 30, 2016, respectively and \$1.9 million and \$1.7 million for nine months ended April 30, 2017 and April 30, 2016.
Includes contingent consideration charges of \$(2.1) million and \$(10.2) million related to Oncura for three and nine months ended April 30, 2017, respectively. Includes asset impairment charges of \$3.1 million related to Oncura intangible assets for three and nine months ended April 30, 2017. Includes asset impairment charges of \$8.1 million related to PocketSonics intangible assets for three and nine months ended April 30, 2017. Includes goodwill impairment charges of \$6.7 million and \$16.5 million related to Oncura reporting unit for three and nine months ended April 30, 2017. Includes goodwill impairment charges of \$55.1 million related to Ultrasound reporting unit for three and nine months ended April 30, 2017. Includes charges for the BK Medical matter of \$0.0 million and \$10.1 million for three and nine months ended April 30, 2016 .
- (C) Includes restructuring charges of \$0.1 million and \$0.3 million for three months ended April 30, 2017 and April 30, 2016, respectively and \$0.1 million and \$1.5 million for nine months ended April 30, 2017 and April 30, 2016.
Includes asset impairment charges of \$0.0 million and \$0.6 million related to Pathfinder for three and nine months ended April 30, 2017.
- (D) Includes cash and cash equivalents of \$144.9 million and \$97.3 million as of April 30, 2017 and July 31, 2016, respectively.

15. Guarantees, commitments and contingencies

Guarantees and Indemnification Obligations

Our standard OEM and supply agreements entered in the ordinary course of business typically contain an indemnification provision pursuant to which we indemnify, hold harmless, and agree to reimburse the indemnified party for losses suffered or incurred by the indemnified party in connection with any U.S. patent or any copyright or other intellectual property infringement claim by any third party with respect to our products. Such provisions generally survive termination or expiration of the agreements. The potential amount of future payments we could be required to make under these indemnification provisions is, in some instances, unlimited. Our costs to defend lawsuits or settle claims related to these indemnification agreements have been insignificant to date. As a result, we believe that our estimated exposure on these agreements is currently minimal. Accordingly, we have no liabilities recorded for these agreements as of April 30, 2017.

Generally, we warrant that our products will perform in all material respects in accordance with our standard published specifications in effect at the time of delivery of the products to the customer for a period ranging from 12 to 60 months from the date of delivery. We provide for the estimated cost of product and service warranties based on specific warranty claims, claim history, and engineering estimates, where applicable.

The following table presents our product warranty liability as of April 30, 2017:

(in millions)	As of April 30, 2017
Beginning balance	\$ 6.3
Provision	0.8
Settlements made in cash or in kind during the period	(0.9)
Ending balance	\$ 6.2

At April 30, 2017 and July 31, 2016, we had deferred revenue for extended product warranty contracts of \$0.3 million and \$0.2 million, respectively.

Revolving Credit Agreements

On November 23, 2015, we entered into a five-year revolving credit agreement, or Credit Agreement, with the financial institutions identified therein as lenders, which included JPMorgan Chase Bank, N.A., TD Bank, N.A., Wells Fargo Bank, N.A., HSBC Bank, N.A., and People's United Bank, N.A. The Credit Agreement provides \$100.0 million in available credit and expires on November 23, 2020, when all outstanding borrowings must be paid in full. The credit facility does not require amortization of principal and may be reduced before maturity in whole or in part at our option without penalty. Upon entry into the Credit Agreement, we terminated without penalty a \$100.0 million five-year, revolving credit agreement entered into on October 11, 2011 and previously paid in full in accordance with its terms. Borrowings under the Credit Agreement may be used for general corporate purposes, including permitted acquisitions. The amount of available credit can be increased under specified circumstances up to \$200.0 million in aggregate. We are the sole borrower under the Credit Agreement. The obligations under the credit facility are guaranteed as required to be by our material domestic subsidiaries as designated by us from time to time or as required under the Credit Agreement. There are no pledges of the capital stock or assets of our international subsidiaries.

Interest rates on borrowings outstanding under the credit facility range from 1.25% to 1.75% above the LIBOR rate, or, at our option range from 0.00% to 1.00% above a defined base rate, the amount in each case varying based upon our leverage ratio. A quarterly commitment fee ranging from 0.20% to 0.35% per annum is applicable on the undrawn portion of the credit facility, based upon our leverage ratio.

The Credit Agreement limits our and our subsidiaries' ability to, among other things: incur additional indebtedness; incur liens or guarantee obligations; pay dividends or make other distributions; make investments; dispose of assets; and engage in transactions with affiliates except on an arms-length basis. In addition, the Credit Agreement requires us to maintain the following financial ratios:

- A leverage ratio, defined as consolidated funded indebtedness to consolidated trailing four quarters earnings before interest, taxes, depreciation and amortization, or EBITDA, with the adjustments as stipulated in the Credit Agreement, of no greater than 2.75:1.00 (with a temporary step-up in the event of certain acquisitions); and
- An interest coverage ratio, defined as the ratio of consolidated trailing four quarters adjusted EBITDA to consolidated interest charges of no less than 3.00:1.00 at any time.

As of April 30, 2017, our leverage ratio was 0.004:1.00 and our interest coverage ratio was not applicable as we had no attributable interest expense. As of April 30, 2017, we were in full compliance with all financial and operating covenants contained in the Credit Agreement.

Any failure to comply with the financial or operating covenants of the credit facility would prevent us from being able to borrow and would also constitute a default, permitting the lenders to, among other things, accelerate repayment of outstanding borrowings, including all accrued interest and fees, and to terminate the credit facility. A change in control, as defined in the Credit Agreement, would also constitute an event of default, permitting the lenders to accelerate repayment and terminate the Credit Agreement.

In connection with entering into the Credit Agreement, we incurred approximately \$0.5 million of transactions costs, which are being amortized over the five-year life of the credit facility.

As of April 30, 2017 and July 31, 2016, we had approximately \$1.2 million in other revolving credit facilities with banks available for direct borrowings.

We did not have any borrowing outstanding under any of our credit facilities at April 30, 2017 and July 31, 2016, respectively.

Legal Claims

We are subject to litigation, claims, investigations and audits arising from time to time in the ordinary course of our business. Although legal proceedings are inherently unpredictable, we believe that we have valid defenses with respect to those matters currently pending against us and intend to defend ourselves vigorously. The outcome of these matters, individually and in the aggregate, is not expected to have a material impact on our cash flows, results of operations, or financial position. We record losses when estimable and probable in accordance with U.S. GAAP.

On January 3, 2017, the Company's subsidiary Ultrasonix Medical Corporation ("UMC") received a notice of civil claim as a defendant. The lawsuit relates to the lease of a corporate office in Burnaby, British Columbia, of which UMC never took possession. The lawsuit claims that UMC is indebted to the landlord for unpaid and accelerated rent in an amount of approximately CAD 1.0 million, plus costs, plus interest on unpaid rent commencing in April 2014. During the third quarter of fiscal 2017 ended April 30, 2017, the Company filed a response in which it contests both liability and the extent of damages. During the three and nine months ended April 30, 2017, we accrued a \$0.4 million charge in connection with this matter. The Company's reasonable estimate of this liability is a range between \$0.4 million and \$0.7 million, with no amount within that range a better estimate than any other amount; accordingly, \$0.4 million was accrued.

16. Subsequent events

We declared a dividend of \$0.10 per share of common stock on June 1, 2017, which will be paid on June 30, 2017 to stockholders of record on June 16, 2017.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion provides an analysis of our financial condition and results of operations and should be read in conjunction with the unaudited consolidated financial statements and notes thereto included elsewhere in this report. The discussion contains statements, which, to the extent that they are not a recitation of historical facts, constitute "forward-looking statements" pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, including, statements about product development, market and industry trends, strategic initiatives, regulatory approvals, sales, profits, expenses, price trends, research and development expenses and trends, and capital expenditures, we make in this document or in any document incorporated by reference are forward-looking. Without limiting the foregoing, the words "believes," "anticipates," "plans," "expects," "seeks," "estimates," and similar expressions are intended to identify forward looking statements. Such forward-looking statements involve known and unknown risks, uncertainties, and other factors, which may cause our actual results, performance, or achievements to differ materially from the projected results. See *Part I, Item 1A. Risk Factors* of our Annual Report on Form 10-K for fiscal year 2016 as filed with the U.S. Securities and Exchange Commission, or SEC on September 27, 2016 for a discussion of the primary risks and uncertainties known to us.

In addition, any forward-looking statements represent management's views only as of the date of this Quarterly Report on Form 10-Q was filed with the SEC and should not be relied upon as representing management's views as of any subsequent date. While management may elect to update forward-looking statements at some point in the future, it specifically disclaims any obligation to do so, even if its views change, except as required by law.

We report our financial condition and results of operations on a fiscal year basis ending July 31. The nine months ended April 30, 2017 and 2016 represent the third quarters of fiscal years 2017 and 2016, respectively.

Our Management's Discussion and Analysis is presented in six sections as follows:

- Executive Summary
- Results of Operations
- Liquidity and Capital Resources
- Commitments, Contractual Obligations, and Off-Balance Sheet Arrangements
- Recent Accounting Pronouncements
- Critical Accounting Policies

Executive Summary

Introduction

Analogic Corporation designs, manufactures, and commercializes innovative real-time guidance, diagnostic imaging and threat detection technologies to advance the practice of medicine and save lives. We design, manufacture and sell advanced medical imaging, ultrasound and security systems and subsystems to original equipment manufacturers, or OEMs, and end users primarily for the healthcare and airport security markets.

Our business is strategically aligned into three segments: Medical Imaging, Ultrasound, and Security and Detection. Our business segments are described as follows:

- *Medical Imaging* primarily includes systems and subsystems for CT and MRI medical imaging equipment as well as state-of-the-art, selenium-based detectors for screening of breast cancer and other diagnostic applications in mammography.
- *Ultrasound* includes ultrasound systems and transducers primarily used in the urology, surgery, and point-of-care markets.
- *Security and Detection* includes advanced threat detection CT systems utilizing our expertise in advanced medical imaging technology, primarily used in the checked baggage screening at airports worldwide.

Financial Results

The following table summarizes our financial results:

(in millions, except per share amounts and percentages)	Three Months Ended April 30,		Percentage Change	Nine Months Ended April 30,		Percentage Change
	2017	2016		2017	2016	
Total net revenues	\$ 122.2	\$ 128.0	-5%	\$ 374.8	\$ 370.8	1%
Gross profit	\$ 52.2	\$ 54.9	-5%	\$ 161.5	\$ 164.7	-2%
Gross margin	42.7%	42.9%		43.1%	44.4%	
(Loss) income from operations	\$ (64.6)	\$ 7.6	-950%	\$ (51.2)	\$ 11.1	-561%
Operating margin	-52.9%	6.0%		-13.7%	3.0%	
Net (loss) income	\$ (59.7)	\$ 5.0	-1294%	\$ (49.6)	\$ 3.4	-1559%
Diluted net (loss) income per share	\$ (4.78)	\$ 0.40	-1295%	\$ (3.98)	\$ 0.27	-1574%

For a discussion of seasonal aspects of our business please refer to *Part I, Item 1. Business* of our Annual Report on Form 10-K for fiscal year 2016, as filed with the SEC on September 27, 2016.

Results of Operations

Three and nine months ended April 30, 2017 compared to the three and nine months ended April 30, 2016

Net revenue

Product revenue

Product revenue by segment is summarized as follows:

(in millions except percentages)	Three Months Ended April 30,		Percentage Change	Nine Months Ended April 30,		Percentage Change
	2017	2016		2017	2016	
Medical Imaging	\$ 68.2	\$ 71.9	-5%	\$ 205.9	\$ 208.7	-1%
Ultrasound	34.8	36.8	-5%	110.7	115.9	-4%
Security and Detection	17.8	17.6	1%	54.8	41.8	31%
Total product revenue	\$ 120.8	\$ 126.3	-4%	\$ 371.4	\$ 366.4	1%

Medical Imaging

During the three months ended April 30, 2017 compared to the same period in 2016, our Medical Imaging revenue decreased by 5%, primarily due to reductions in MRI and CT revenues.

During the nine months ended April 30, 2017 compared to the same period in 2016, our Medical Imaging revenue decreased by 1%, primarily due to reductions in CT and Digital Mammography revenues being partially offset by increases in MRI revenues.

Ultrasound

During the three months ended April 30, 2017 compared to the same period in 2016, our Ultrasound revenue decreased by 5%, primarily due to a decrease in direct Ultrasound shipments, partially offset by customer demand of legacy OEM probes.

During the nine months ended April 30, 2017 compared to the same period in 2016, our Ultrasound revenue decreased by 4%, primarily due to decreased customer demand of legacy OEM probes and a decrease in direct Ultrasound shipments.

Security and Detection

During the three months ended April 30, 2017 compared to the same period in 2016, our Security and Detection revenue was relatively flat.

During the nine months ended April 30, 2017 compared to the same period in 2016, our Security and Detection revenue increased by 31%, due to increased volume across all product lines.

Engineering revenue

Engineering revenue by segment is summarized as follows:

(in millions except percentages)	Three Months Ended			Percentage Change	Nine Months Ended		
	April 30,		2016		April 30,		2016
	2017	2016			2017	2016	
Medical Imaging	\$ 1.3	\$ 0.9	44%	3.1	\$ 2.6	19%	
Ultrasound	-	\$ 0.8	-100%	0.2	\$ 1.7	-88%	
Security and Detection	0.1	\$ (0.1)	-200%	0.1	\$ 0.1	0%	
Total engineering revenue	\$ 1.4	\$ 1.6	-13%	\$ 3.4	\$ 4.4	-23%	

The change in engineering revenue for the three and the nine months ended April 30, 2017 compared to the same periods in 2016, respectively, was primarily due to timing of work done on customer-funded engineering projects in all three of our reported segments.

Customer-funded engineering projects in each of the segments can vary substantially from period to period in terms of resource requirements, type, size, length of project, and profitability.

Gross margin

Product gross margin

Product gross margin is summarized as follows:

(in millions except percentages)	Three Months Ended			Percentage Change	Nine Months Ended		
	April 30,		2016		April 30,		2016
	2017	2016			2017	2016	
Product gross profit	\$ 52.1	\$ 55.0	-5%	\$ 161.2	\$ 164.0	-2%	
Product gross margin	43.2%	43.5%		43.4%	44.8%		

Product gross margin decreased by 0.3 points and 1.4 points, during the three and nine months ended April 30, 2017 compared to the same periods in 2016, respectively, primarily due to product/segment mix.

Engineering gross margin

Engineering gross margin is summarized as follows:

(in millions except percentages)	Three Months Ended			Percentage Change	Nine Months Ended		
	April 30,		2016		April 30,		2016
	2017	2016			2017	2016	
Engineering gross profit (loss)	\$ 0.04	\$ (0.1)	-140%	\$ 0.3	\$ 0.6	-50%	
Engineering gross margin	2.7%	-6.5%	-142%	7.8%	14.2%	-45%	

The change in the engineering gross margin during the three and nine months ended April 30, 2017 compared to the same periods in 2016, respectively, was due to the mix of engineering projects.

Operating expenses

Operating expenses are summarized as follows:

(in millions except percentages)	Three Months Ended			Percentage Change	Percentage of Net Revenue	
	April 30,		2016		2017	2016
	2017	2016			2017	2016
Research and product development	\$ 14.9	\$ 16.5	-9.7%	12%	13%	
Selling and marketing	16.3	15.8	3.2%	13%	12%	
General and administrative	10.4	13.2	-21.2%	9%	10%	
Restructuring	2.1	1.8	16.7%	2%	1%	
Asset impairment charges	73.1	-	100.0%	60%	0%	
Total operating expenses	\$ 116.8	\$ 47.3	146.9%	96%	36%	

(in millions except percentages)	Nine Months Ended April 30,		Percentage Change	Percentage of Net Revenue	
	2017	2016		2017	2016
Research and product development	\$ 47.0	\$ 50.3	-6.6%	13%	14%
Selling and marketing	51.8	\$ 46.3	11.9%	14%	12%
General and administrative	28.0	\$ 48.7	-42.5%	7%	13%
Restructuring	2.4	\$ 8.3	-71.1%	1%	2%
Asset impairment charges	83.5	-	100.0%	22%	0%
Total operating expenses	\$ 212.7	\$ 153.6	38.5%	57%	41%

Operating expenses for the three months ended April 30, 2017 increased by \$69.5 million, or 146.9%, compared to the same period in 2016. Operating expenses for the nine months ended April 30, 2017 increased by \$59.1 million, or 38.5%, compared to the same period in 2016.

Research and product development expenses decreased by \$1.6 million, or 9.7% and \$3.3 million, or 6.6% during the three and nine months ended April 30, 2017, compared to the same periods in 2016, respectively, due to headcount related savings and lower material related spending.

Selling and marketing expenses increased by \$0.5 million, or 3.2% and \$5.5 million, or 11.9% during the three and nine months ended April 30, 2017 compared to the same periods in 2016, primarily due to higher headcount related spending.

General and administrative expenses decreased by \$2.8 million, or 21.2% during the three months ended April 30, 2017 compared to the same period in 2016, primarily relating to a gain recorded in the third quarter of fiscal 2017 for the decrease in contingent consideration of \$2.1 million related to Oncura, due to revisions in our forecasted revenues of the Oncura business, which reduced the amount of contingent consideration we expect to pay, as well as reductions in headcount related spending. General and administrative expenses decreased by \$20.7 million, or 42.5% during the nine months ended April 30, 2017 compared to the same period in 2016, primarily due to the decrease in contingent consideration of \$10.2 million related to Oncura, and charges for the BK Medical matter of \$10.1 million in 2016. For more information on the BK Medical matter, please refer to *Note 11. Commitments, guarantees and contingencies* in our Annual Report on Form 10-K for fiscal year 2016, as filed with the SEC on September 27, 2016.

Restructuring expenses were \$2.1 million and \$2.4 million during the three and nine months ended April 30, 2017, respectively, primarily due to expenses related to the Fiscal Year 2017 Restructuring Plan. Restructuring expenses were \$1.8 million and \$8.3 million during the three and nine months ended April 30, 2016, respectively, primarily due to expenses in 2016 related to the Fiscal Year 2016 Restructuring Plan. Please refer to *Note 11. Restructuring Charges* for more information on the Fiscal Year 2017 Restructuring Plan and Fiscal Year 2016 Restructuring Plan.

During the three months ended April 30, 2017, management noted impairment indicators related to the Oncura intangible assets which had a carrying value of \$3.1 million. Oncura is part of our Ultrasound operating segment. Management performed an impairment test based on the projected future cash flows. Further disruption in the sales channel of our vet business in the third quarter of fiscal year 2017 resulted in a lower revenues than anticipated for the quarter and a reduced revenue forecast of our Oncura reporting unit, as compared to our prior estimates resulting in the recording of an impairment charge of \$3.1 million, including a write-off of customer relationship of \$2.4 million and a write-off of trade name of \$0.7 million. We recorded these amounts in the asset impairment charges caption in our accompanying unaudited consolidated statements of operations.

During the three months ended April 30, 2017, management noted impairment indicators related to the PocketSonics intangible assets which had a carrying value of \$8.1 million. PocketSonics is part of our Ultrasound operating segment. Management performed an impairment test based on the projected future cash flows and based on a decision during the third quarter of fiscal year 2017 to forgo further investment in the business, the Company recorded an impairment charge of \$8.1 million, consisting of technology of \$8.1 million. We recorded these amounts in the asset impairment charges caption in our accompanying unaudited consolidated statements of operations. For more information on the acquisition of PocketSonics, please refer to *Note 3. Business combination* in our Annual Report on Form 10-K for fiscal year 2016, as filed with the SEC on September 27, 2016.

During the nine months ended April 30, 2017, intangible asset impairment charges were \$11.9 million. Please refer to *Note 5. Intangible assets and goodwill* for more information on asset impairment charges.

We have four reporting units with goodwill—Medical Imaging, Ultrasound, Oncura, and Security and Detection and three reportable segments—Medical Imaging, Ultrasound, and Security and Detection. We review periodically or more frequently if indicators are present or changes in circumstances suggest that impairment may exist for impairment indicators and perform a formal goodwill impairment test in the second quarter of each fiscal year. We performed the annual impairment test for our goodwill and

other intangible assets with indefinite lives as of December 31, 2016. We first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value and as a basis for determining whether it is necessary to perform the quantitative impairment test. Alternatively, we may elect to bypass the qualitative assessment and proceed to the two-step quantitative impairment test. If we choose to perform a qualitative assessment and determine it is more likely than not that the carrying value of the net assets is more than the fair value of the related operations, the two-step impairment process is then performed; otherwise, no further testing is required.

Our quantitative impairment assessment considered both the market approach and income approach to calculate the fair value of the reporting unit, with different weights assigned to each. Under the market approach, the fair value of the reporting unit is based on trading multiples of a peer group of companies, which was determined based on an analysis of the selected guideline public companies' business enterprise value ("BEV") plus a control premium, which was determined based on an analysis of control premiums for recent relevant acquisitions. Under the income approach, the fair value of the reporting unit is based on the present value of estimated future cash flows, which are determined, based upon the Company's most recent strategic operating plan and considering market participant assumptions. The income approach is dependent on a number of significant management assumptions including estimates of future revenues, costs and expenses, and a number of significant valuation inputs including discount rates, working capital rates and tax rates. During the second quarter of fiscal year 2017, for our Medical Imaging, Ultrasound, Oncura, and Security and Detection reporting units, we used the two-step quantitative impairment test. For the Security and Detection reporting unit, we performed the market approach and determined that the fair value of our Security and Detection reporting unit was in excess of its carrying value, and concluded that there was no impairment of goodwill during the annual impairment test for our goodwill and other intangible assets with indefinite lives as of December 31, 2016. For our Medical Imaging and Ultrasound reporting units, we used both the market approach and income approach and determined that there was no impairment of goodwill during the annual impairment test for our goodwill and other intangible assets with indefinite lives as of December 31, 2016. For our Medical Imaging reporting unit, we determined that the estimated fair value of the Medical Imaging reporting unit substantially exceeds its carrying value. For our Ultrasound reporting unit, we determined that our Ultrasound reporting unit was at risk of failing the first step of the goodwill impairment test in future reporting periods due to forecast revisions and changes in strategy in our ultrasound business. For example, an increase in the discount rate applied to the Ultrasound cash flows of 300 basis points would result in a failure of Step 1 of the impairment test. Also, a decrease in the revenue compound annual growth rate within the Ultrasound cash flow forecast of 200 basis points could result in a failure of Step 1 of the impairment test. Our Ultrasound reporting unit had excess fair value over carrying value of approximately 25% as of our annual test date and held \$55.1 million of allocated goodwill as of December 31, 2016.

During the second quarter of fiscal year 2017, for our Oncura reporting unit, recent changes in our strategy caused us to decrease future forecasted revenues as compared with our prior estimates. As a result, we determined that the associated goodwill was impaired and we recorded an estimated charge of \$9.8 million in the second quarter of fiscal year 2017 during the annual impairment test of goodwill and other intangible assets with indefinite lives as of December 31, 2016. We recorded this amount in the asset impairment charges caption in our accompanying unaudited consolidated statements of operations. The amount of this charge was finalized in the third quarter of fiscal year 2017, as we have completed the second step of the goodwill impairment test, in accordance with ASC Topic 350, *Intangibles-Goodwill and Other*.

During the second quarter of fiscal year 2017, subsequent to the annual impairment test of goodwill and other intangible assets with indefinite lives as of December 31, 2016, we elected early adoption of ASU 2017-04 as of January 01, 2017, "Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment." As a result, we removed Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. Goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill.

During the third quarter of fiscal year 2017, the company noted impairment indicators related to our Ultrasound reporting unit. Additional delays related to the introduction and commercialization of our general imaging platform sold through our technology partner in general imaging caused the Company to reassess our revenue expectations for the product. This significant change, as well as a further reduction in revenue estimates for our fiscal 2017 impacted our overall revenue growth expectations in Ultrasound in future periods. Management performed an interim impairment test based on both the market approach and income approach and recorded an estimated impairment charge of \$55.1 million. The amount of this charge is subject to finalization in the fourth quarter of fiscal year 2017. As a result, the aggregate amount of goodwill associated with our Ultrasound reporting unit was taken down to zero as of April 30, 2017. In addition, the remaining book value of the intangible assets allocated to our Ultrasound reporting unit was \$9.3 million as of April 30, 2017.

During the third quarter of fiscal year 2017, for our Oncura reporting unit, as a result of further decreased future forecasted revenue as compared with our prior estimates, caused by the further disruption in our sales channel in our vet business, we determined that the remaining goodwill was impaired and recorded a charge of \$6.7 million in the third quarter of fiscal year 2017. We recorded this amount in the asset impairment charges caption in our accompanying unaudited consolidated statements of operations. As a result, the aggregate amount of goodwill associated with our Oncura reporting unit was taken to zero as of April 30, 2017. In addition, the remaining book value of the intangible assets allocated to our Oncura reporting unit was taken to zero as of April 30, 2017. Also as a

result of our decreased revenue forecast for Oncura, we recorded an adjustment to the associated contingent consideration liability, which resulted in a gain of \$2.1 million and \$10.2 million for the three and nine months as of April 30, 2017, respectively, recorded within General and Administrative expenses. As of April 30, 2017, the fair value of the contingent consideration obligation associated with the Oncura acquisition was taken to zero.

We compared the fair value of a tradename that has an indefinite life using the relief from royalty approach to its carrying value as of December 31, 2016. The relief from royalty approach utilized an after-tax royalty rate and a discount rate. The after-tax royalty rate was determined based on royalty research and margin analysis, while the discount rate was determined after consideration of market rates of return on debt and equity capital, the weighted average return on invested capital, and the risk associated with achieving forecasted sales for the tradename. We determined that the fair value of the tradename was in excess of its carrying value.

The current economic environment and the uncertainties regarding its impact on our business and our estimates for forecasted revenue and spending levels made for purposes of our goodwill and trade name impairment testing may not be accurate predictions of the future. If our assumptions regarding forecasted revenue or margin growth rates of each reporting unit and trade name are not achieved, we may be required to record an impairment charge for the goodwill and trade name in future periods, whether in connection with our next annual impairment testing in the second quarter of the fiscal year ending July 31, 2018, or prior to that if any such change constitutes a triggering event outside of the quarter from when the annual goodwill and trade name impairment test is performed. Changes in our forecasts, or decreases in the value of our common stock could cause book values of certain operations to exceed their fair values which may result in goodwill impairment charges in future periods. It is not possible at this time to determine if any such future impairment charge would result or, if it does, whether such charge would be material.

Other income (expense), net

Other income (expense), net is summarized as follows:

(in millions)	Three Months Ended April 30,		Nine Months Ended April 30,	
	2017	2016	2017	2016
Interest income, net	\$ 0.1	\$ 0.1	\$ 0.3	\$ 0.2
Other, net	-	(1.0)	(0.7)	(5.1)
Total other income (expense), net	\$ 0.1	\$ (0.9)	\$ (0.4)	\$ (4.9)

Other income (expense), net was \$0.1 million and \$(0.4) million during the three and nine months ended April 30, 2017 compared to \$(0.9) million and \$(4.9) million the same periods in 2016, respectively, predominantly due to foreign currency exchange loss and increased expense of \$3.2 million in 2016 related to the BK Medical matter. For more information on the BK Medical matter, please refer to *Note 11. Commitments, guarantees and contingencies* in our Annual Report on Form 10-K for fiscal year 2016, as filed with the SEC on September 27, 2016.

Provision for income taxes

The following table presents the provision for income taxes and our effective tax rate for the three and nine months ended April 30, 2017 and 2016:

(in millions except percentages)	Three Months Ended April 30,		Nine Months Ended April 30,	
	2017	2016	2017	2016
(Benefit) provision for income taxes	\$ (4.9)	\$ 1.7	\$ (1.9)	\$ 2.9
Effective tax rate	8%	26%	4%	46%

The effective income tax rate on operations is based upon the estimated income for the year, including the goodwill and intangibles impairments discussed elsewhere, the composition of the income in different countries, and adjustments, if any, in the applicable quarterly periods for the potential tax consequences, benefits, resolutions of tax audits or other tax contingencies.

Our effective tax rate for the three months ended April 30, 2017 is higher than the statutory rate of 35% primarily due to operating losses generated in the United States, tax credits in the United States and Canada in spite of operating losses, and non-recurring discrete tax items. Our effective tax rate for the nine months ended April 30, 2017 is lower than the statutory rate of 35% primarily due to losses generated in the US by impairment charges, income generated outside the United States in countries with lower tax rates, tax credits in the United States and Canada, and discrete tax benefits. The tax provision for the three and nine months ended April 30, 2017 includes discrete tax benefits totaling \$0.5 million and \$0.9 million, respectively.

Our effective tax rate for the three and nine months ended April 30, 2016 differs from the statutory rate of 35% primarily due to non-deductible and reserve items related to the BK Medical matter and expiration of statute of limitations for the income tax returns in the United States for fiscal year ended July 31, 2012. Additional impacts to our rate resulted from income generated outside the United States in countries with lower tax rates and from tax Credits in the United States and Canada. The tax provision for the three and nine months ended April 30, 2016 includes discrete tax benefits totaling \$(0.2) million and \$1.1 million, respectively. For more information on the BK Medical matter, please refer to *Note 11. Commitments, guarantees and contingencies* in our Annual Report on Form 10-K for fiscal year 2016, as filed with the SEC on September 27, 2016.

We are subject to U.S. Federal income tax as well as the income tax of multiple state and foreign jurisdictions. As of April 30, 2017, we have concluded all U.S. Federal income tax matters through the year ended July 31, 2012.

We accrue interest and, if applicable, penalties for any uncertain tax positions. This interest and penalty expense is treated as a component of income tax expense. At April 30, 2017 and July 31, 2016, we had approximately \$0.3 million and \$0.4 million accrued for interest and penalties on unrecognized tax benefits.

At April 30, 2017, we had \$6.9 million of unrecognized tax benefits for uncertain tax positions and \$0.3 million of related accrued interest and penalties. We are unable to reasonably estimate the amount and period in which these liabilities might be paid.

We do not provide for U.S. Federal income taxes on undistributed earnings of consolidated foreign subsidiaries, as such earnings are intended to be indefinitely reinvested in those operations. Determination of the potential deferred income tax liability on these undistributed earnings is not practicable because such liability, if any, is dependent on circumstances that exist if and when remittance occurs. The circumstances that would affect the calculations would be the source location and amount of the distribution, the underlying tax rate already paid on the earnings, foreign withholding taxes and the opportunity to use foreign tax credits.

Net income and diluted net income per share

Net income and diluted net income per share are summarized as follows:

(in millions except percentages)	Three Months Ended		Nine Months Ended	
	April 30,		April 30,	
	2017	2016	2017	2016
Net (loss) income	\$ (59.7)	\$ 5.0	\$ (49.6)	\$ 3.4
% of net revenue	-49%	4%	-13%	1%
Diluted net (loss) income per share from operations	\$ (4.78)	\$ 0.40	\$ (3.98)	\$ 0.27

The decrease in net income and diluted net income per share for the three months ended April 30, 2017 compared to the same period in 2016, was primarily due to lower revenues, lower gross margin, and higher operating expenses, partially offset by a benefit from income taxes.

The decrease in net income and diluted net income per share for the nine months ended April 30, 2017 compared to the same period in 2016, was primarily due to lower gross margin, higher operating expenses, partially offset by higher revenues and a benefit from income taxes.

Liquidity and Capital Resources

Key liquidity and capital resource information are summarized as follows:

(in millions)	As of	As of	Percentage Change
	April 30, 2017	July 31, 2016	
Cash and cash equivalents (A)	\$ 158.6	\$ 118.7	34%
Working capital	\$ 336.3	\$ 310.3	8%

(A) Includes approximately \$44.9 million and \$45.3 million of cash and cash equivalents held outside the U.S. at April 30, 2017 and July 31, 2016, respectively.

As of April 30, 2017, we had cash and cash equivalents of \$158.6 million, a \$39.9 million increase from July 31, 2016, as we generated \$53.3 million in cash from operations and \$3.1 million from the issuance of stock. This was offset by \$7.7 million paid for additions to property and equipment, \$3.8 million cash payment to shareholders for dividends, \$2.0 million contingent consideration paid for business acquisitions, \$1.6 million repurchase of common stock, and \$1.1 million for the shares surrendered for taxes for vested employee restricted stock grants.

The increase in working capital from July 31, 2016 to April 30, 2017 was primarily attributable to an increase in cash of \$39.9 million, decrease in contingent consideration of \$4.5 million, decrease in accrued restructuring charges of \$2.8 million, increase in prepaid expenses and other current assets of \$1.1 million, partially offset by a decrease in accounts receivable of \$18.9 million and a decrease in inventory of \$1.2 million.

Cash and cash equivalents at April 30, 2017 and July 31, 2016 primarily consisted of demand deposits at highly rated banks and financial institutions. We periodically review our investment portfolio to determine if any investments are impaired due to changes in credit risk or other potential valuation concerns. We believe that our cash equivalents were appropriately valued at April 30, 2017 and July 31, 2016 and we are not aware of any market events that would impact their valuation. This could change in the future should new developments arise in the credit markets.

Cash flows

Sources and uses of cash flows are summarized as follows:

(in millions, except percentages)	Nine Months Ended		Percentage Change
	2017	2016	
Net cash provided by operating activities	\$ 53.3	\$ 34.9	53%
Net cash used in investing activities	(7.7)	(17.6)	-56%
Net cash used in financing activities	(5.2)	(14.1)	-63%
Effect of exchange rate changes on cash	(0.5)	1.1	-145%
Net increase in cash and cash equivalents	\$ 39.9	\$ 4.3	828%

Operating activities

Net cash provided by operating activities during the nine months ended April 30, 2017 primarily reflects our net loss of \$(49.6) million, \$83.5 million related to asset impairment charges, \$19.2 million related to depreciation and amortization, \$18.3 million related to the collection of accounts receivable, and \$6.5 million related to share-based compensation expense. This increase was partially offset by a decrease in fair value of contingent consideration of \$10.2 million, a decrease in benefit from deferred income taxes of \$8.4 million, and a net decrease of \$3.7 million in inventory related to non-cash write down of demo equipment to net realizable value, non-cash provision for excess and obsolescence inventory and a net change in operating inventory.

The cash flows provided by operating activities during the nine months ended April 30, 2016 reflects our net income of \$3.4 million, \$23.5 million related to the collection of accounts receivable, \$17.2 million related to depreciation and amortization, \$11.6 million related to an increase in accrued liabilities, and \$7.1 million related to share-based compensation. This decrease was partially offset by a \$24.2 million increase in inventory due to the timing of shipments and to support growth in fiscal year 2016, and \$3.8 million related to a decrease in accrued income taxes.

Investing activities

Net cash used in investing activities during the nine months ended April 30, 2017 was driven by purchases of property, plant and equipment of \$7.7 million.

The net cash used in investing activities during the nine months ended April 30, 2016 was driven by capital expenditures of \$9.7 million and the acquisition of Oncura for an \$8 million net cash payment.

Financing activities

Net cash used in financing activities during the nine months ended April 30, 2017 primarily reflected \$3.8 million of dividends paid to stockholders, \$1.9 million contingent consideration paid for business acquisitions, \$1.6 million used for repurchase of common stock, and \$1.1 million used for shares surrendered for taxes paid related to vested employee restricted stock, partially offset by proceeds from the issuance of common stock amounting to \$3.1 million associated with share-based compensation and CEO transition related exercise of stock options.

The net cash used in financing activities during the nine months ended April 30, 2016 primarily reflected \$11.8 million used to repurchase common stock, \$3.7 million of dividends paid to stockholders and \$1.8 million used for shares surrendered for taxes paid related to vested employee restricted stock. This was partially offset by proceeds from the issuance of common stock amounting to \$3.4 million associated with stock option exercises.

We believe that our balances of cash and cash equivalents and cash flows expected to be generated by future operating activities will be sufficient to meet our cash requirements for at least the next 12 months.

Commitments, Contractual Obligations, and Off-Balance Sheet Arrangements

Our contractual obligations at April 30, 2017 related to our operating leases, purchase obligations, pension, and contingent consideration affect our liquidity and cash flows in future periods.

Operating Leases – Certain of our subsidiaries lease manufacturing and office space under non-cancelable operating leases. These leases contain renewal options. We lease certain other real property and equipment under operating leases which, in the aggregate, are not significant. At April 30, 2017 and July 31, 2016, total commitments related to our operating leases were \$4.2 million and \$6.5 million, respectively.

Purchase Obligations – We enter into certain long-term agreements with customers, which obligate us to purchase goods or services. At April 30, 2017 and July 31, 2016, total purchase obligations were \$33.9 million and \$23.9 million, respectively.

Pension – Our Canadian subsidiary, Analogic Canada Corporation, formerly known as ANRAD Corporation, sponsors a defined benefit retirement plan called the Analogic Canada Corporation Retirement Plan, or the “Analogic Canada Plan”. The Analogic Canada Plan was frozen to new accruals during fiscal year 2015. The Analogic Canada Plan provides benefits to employees based on a formula recognizing length of service and final average earnings. Please refer to *Note 14. Retirement Plans* in our Annual Report on Form 10-K for the fiscal year ending 2016 for details. The benefit obligation at April 30, 2017 and July 31, 2016 totaled \$4.0 million and \$4.4 million, respectively.

Contingent Consideration – In connection with the acquisition of Oncura, as of April 30, 2017, there was a \$2.1 million and \$10.2 million decrease in the fair value of our contingent consideration obligation during the three and nine months of fiscal 2017, due to revisions in our forecasted revenues of the Oncura business, which reduced the remaining contingent consideration obligation to zero. Please refer to *Note 6. Fair value measurements* for more information.

Financing Arrangements

On November 23, 2015, we entered into a five-year revolving credit agreement, or Credit Agreement, with the financial institutions identified therein as lenders, which included JPMorgan Chase Bank, N.A., TD Bank, N.A., Wells Fargo Bank, N.A., HSBC Bank, N.A., and People’s United Bank, N.A. The Credit Agreement provides \$100.0 million in available credit and expires on November 23, 2020, when all outstanding borrowings must be paid in full. The credit facility does not require amortization of principal and may be reduced before maturity in whole or in part at our option without penalty. We did not have any borrowings outstanding under this Credit Agreement as of April 30, 2017. Please refer to *Note 15. Guarantees, commitments and contingencies* for more information on the Credit Agreement.

As of April 30, 2017, we also have approximately \$1.2 million in other revolving credit facilities with banks available for direct borrowings.

Tax Related Obligations

At April 30, 2017, we had \$6.9 million of unrecognized tax benefits for uncertain tax positions and \$0.3 million of related accrued interest and penalties. We are unable to reasonably estimate the amount and period in which these liabilities might be paid. Please refer to *Note 13. Income taxes* to our consolidated financial statements for additional information regarding matters relating to income taxes, including unrecognized tax benefits.

Legal Claims

We are subject to litigation, claims, investigations and audits arising from time to time in the ordinary course of our business. Although legal proceedings are inherently unpredictable, we believe that we have valid defenses with respect to those matters currently pending against us and intend to defend ourselves vigorously. The outcome of these matters, individually and in the aggregate, is not expected to have a material impact on our cash flows, results of operations, or financial position. We record losses when estimable and probable in accordance with U.S. GAAP.

On January 3, 2017, the Company's subsidiary Ultrasonix Medical Corporation ("UMC") received a notice of civil claim as a defendant. The lawsuit relates to the lease of a corporate office in Burnaby, British Columbia, of which UMC never took possession. The lawsuit claims that UMC is indebted to the landlord for unpaid and accelerated rent in an amount of approximately CAD 1.0 million, plus costs, plus interest on unpaid rent commencing in April 2014. During the third quarter of fiscal 2017 ended April 30, 2017, the Company filed a response in which it contests both liability and the extent of damages. During the three and nine months ended April 30, 2017, we accrued a \$0.4 million charge in connection with this matter. The Company's reasonable estimate of this

liability is a range between \$0.4 million and \$0.7 million, with no amount within that range a better estimate than any other amount; accordingly, \$0.4 million was accrued.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements, as defined under SEC rules, during the periods presented.

Recent Accounting Pronouncements

For a discussion of new accounting standards please refer to *Note 2. Recent accounting pronouncements* to our consolidated financial statements included within this report.

Critical Accounting Policies

The accompanying discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP. Our most critical accounting policies have a significant impact on the preparation of these consolidated financial statements. These policies include estimates and significant judgments that affect the reported amounts of assets, liabilities, revenue, and expenses, and related disclosures of contingent assets and liabilities.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Our market risks and the ways we manage them were summarized in Item 7A. Quantitative and Qualitative Disclosures about Market Risk of our Annual Report on Form 10-K for fiscal year 2016, as filed with the SEC on September 27, 2016. There have been no material changes during the nine months ended April 30, 2017 to our market risks or to our management of such risks.

Item 4. Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures as of April 30, 2017. The term “disclosure controls and procedures”, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized, and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company’s management, including its principal executive officer and principal financial officer, as appropriate, to allow timely decisions to be made regarding required disclosure. It should be noted that any system of controls and procedures, however well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system are met and that management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of April 30, 2017, our principal executive officer and principal financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the three months ended April 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Part II. OTHER INFORMATION

Item 1. Legal Proceedings

For a discussion of legal matters as of April 30, 2017, please refer to *Note 15. Guarantees, commitments and contingencies* to our consolidated financial statements included in this report.

Item 1A. Risk Factors

In addition to the other information set forth in this report, you should carefully consider the factors discussed in Part I, Item 1A. "Risk Factors" in our Annual Report on Form 10-K for fiscal year 2016, as filed with the SEC on September 27, 2016, which could materially affect our business, financial condition, and future operating results. The risks described in our Annual Report on Form 10-K for fiscal year 2016, as filed with the SEC on September 27, 2016, are not the only risks that we face. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition, and operating results. There have been no material changes to the risk factors set forth in our Annual Report on Form 10-K for fiscal year 2016, as filed with the SEC on September 27, 2016.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

The following table contains information about purchases by us of our equity securities during the three months ended April 30, 2017:

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share (1)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1) (2)	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (000's)
2/1/2017-2/28/2017	-	\$ -	89	\$ 16,006
3/1/2017-3/31/2017	7,881	\$ 74.17	8,740	\$ 15,421
4/1/2017-4/30/2017	13,787	\$ 72.47	13,999	\$ 14,422
Total	21,668	\$ 73.08	22,828	\$ 14,422

- (1) During the third quarter of fiscal year 2017 we repurchased 21,668 shares of our common stock in open-market transactions for \$1.6 million at an average purchase price of \$73.08 per share. These shares were purchased in Q3 FY17 pursuant to a repurchase program authorized by our board of directors that was announced on June 2, 2014 to repurchase up to \$30 million of our common stock and an additional program announced on May 26, 2016 to repurchase up to \$15 million of our common stock. These repurchase programs do not have a fixed expiration date, although the June 2, 2014 repurchase program is now complete.
- (2) Includes 1,160 shares, consisting of 89 shares, 859 shares and 212 shares of our common stock surrendered by employees in order to meet tax withholding obligations in connection with the vesting of restricted stock in February, March and April 2017, respectively.

Item 6. Exhibits

The exhibits listed on the Exhibit Index immediately preceding such exhibits, which is incorporated herein by reference, are filed or furnished as part of this Quarterly Report on Form 10-Q.

SIGNATURES

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

ANALOGIC CORPORATION

Date: June 7, 2017

/s/ Fred B. Parks
Fred B. Parks
President and Chief Executive Officer
(Principal Executive Officer)

Date: June 7, 2017

/s/ Mark T. Frost
Mark T. Frost
Senior Vice President, Chief Financial Officer, and Treasurer
(Principal Financial Officer)

EXHIBIT INDEX

Exhibit	Description
*10.1	Severance Agreement between Analogic Corporation and Shalabh Chandra
*10.2	Employment Agreement between Analogic Corporation and Brooks West
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	The following materials from Analogic Corporation's Quarterly Report on Form 10-Q for the quarter ended April 30, 2017 are formatted in XBRL (Extensible Business Reporting Language): (i) Consolidated Balance Sheets as of April 30, 2017 and July 31, 2016, (ii) Consolidated Statements of Operations for the Three and Nine Months Ended April 30, 2017 and 2016, (iii) Consolidated Statements of Comprehensive Income for the Three and Nine Months Ended April 30, 2017 and 2016, (iv) Consolidated Statements of Cash Flows for the Nine Months Ended April 30, 2017 and 2016 and (v) Notes to Consolidated Financial Statements.

* Management contract or compensatory plan or arrangement

April 4 2017

Shalabh Chandra
64 Washington Street
Exeter, New Hampshire 03833

Dear Shalabh:

The purpose of this letter agreement (“*Agreement*”) is to confirm the terms of your separation from Analogic Corporation (“*Analogic*” or the “*Company*”).

The Separation Pay described below is contingent on your agreement to and compliance with the provisions of this Agreement, including your signing of this Agreement, and your written reaffirmation (as described in Section 8 below) of the release of claims at the time your employment terminates.

1. Separation of Employment. The last day of your employment (such date, the “*Separation Date*”) with the Company shall be April 28, 2017.

2. Separation Pay and Benefits. If you do not rescind this Agreement as set forth in Section 8 below, then the Company will provide you with:

- (i) continuation of your current base salary for a period (the “*Separation Period*”) of thirty (30) weeks beginning on the Separation Date (the “*Separation Pay*”), subject to all ordinary payroll taxes and withholdings. The first payment shall be made in the first regularly scheduled payroll following the Separation Date, provided you first have returned all Company property as required by Section 6 below;
- (ii) payment equal to the employer portion of your group health (medical, dental and vision) insurance through COBRA and payment of the employer portion of group life insurance premiums for continuing coverage during the Severance Period. Regardless of whether you execute this Agreement, you are eligible to continue receiving group medical, dental and/or vision insurance pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985 (“COBRA”). If you execute this Agreement, you will automatically be enrolled in COBRA. During the Severance Period, you will receive a package from Benefit Strategies that will contain instructions on how to continue your COBRA coverage after the end of your Severance Period. If you do not execute this Agreement, you will receive a COBRA package notifying you of your right to continue participation in the Company’s group health plans under COBRA. If you are between the ages of 60 and 65 and have completed at least 9.5 years of service, you may, as an alternative to COBRA, continue your group health (medical and dental) plans through the Company at 50% of the total premium until you become eligible for Medicare coverage. If you elect to continue your participation in the Company’s group health

(medical and dental) plans, follow the instructions provided in the appropriate package for completing and returning the necessary forms within the timeframe specified in the package. Your ability to elect to continue health insurance coverage and life insurance coverage shall be determined in accordance with the governing insurance policies. Except as may be otherwise provided in this Agreement, your right to any and all Company benefits will terminate on the Separation Date ;

- (iii) You will receive your bonus under the fiscal year 2017 Annual Incentive Program (“2017 AIP”) according to the terms of the 2017 AIP. Your “Eligible Base Earnings” will be based upon the amount of base salary payments made through Company payroll from the beginning of FY2017 through and including the Separation Date; and
- (iv) The Company will provide you with career transition services through a Company- approved provider. The cost of providing such services shall be borne by the Company and will be available to you within a reasonable period after the Separation Date. If you elect to use these services, you must notify the Company within 90 days after the Separation Date.

The Separation Pay and benefits as set forth in this Section 2 shall be defined in this Agreement as the “ *Separation Pay and Benefits* ”.

3. Acknowledgments. You acknowledge and agree that:

- (i) this Agreement and the Separation Pay and Benefits are neither intended to nor shall constitute a severance plan and shall confer no benefit on anyone other than the Company and you;
- (ii) the Separation Pay and Benefits provided for herein are not otherwise due or owing to you under any employment agreement (oral or written); and
- (iii) except for (a) any vacation time accrued through the Separation Date, which shall be paid by the Company on or about the Separation Date; (b) unpaid regular wages earned through the Separation Date, which shall be paid on or about the Separation Date; (c) any vested monies due to you pursuant to the Company’s 401(k) savings plan; and (d) the equity awards described in Section 4 and benefits under the 2017 AIP described in Section 2(iii), you have been paid and provided all wages, salary, vacation pay, holiday pay, commissions, and any other form of compensation or benefit that may be due to you now or which would have become due in the future in connection with your employment with or separation of employment from the Company.

4. Equity Awards. Any vesting of outstanding equity awards to which you may be entitled will be determined in accordance with the applicable award agreement.

5. Unemployment Insurance. You may seek unemployment benefits as a result of your separation from the Company. Decisions regarding eligibility for and amounts of unemployment benefits are made by the applicable state agency, not by the Company. Please refer

to the unemployment benefits notice attached hereto as **Exhibit A**. The Company agrees that it will not contest any claim for unemployment benefits by you with the appropriate authorities. The Company agrees to provide any and all requested or necessary documents to enable you to seek unemployment benefits, and further agrees that it will not take a position that would interfere with your ability to obtain unemployment benefits as a result of the separation of your employment from the Company. Under no circumstances, however, shall the Company provide false, inaccurate, or misleading information.

6. Confidentiality; Return of Company Property; Non-Solicitation; Non-Disparagement. You hereby covenant and agree to:

- (i) promptly return to the Company, on or before the Separation Date, all property and documents (whether in hard copy or electronic form) of the Company in your custody and possession, including without limitation any Company credit card(s), computer, keys, key cards, and vehicles;
- (ii) maintain the integrity of Company records and documents, including without limitation any records in electronic format, and any records that you developed or helped to develop during your employment with the company. You further represent and warrant that you have not concealed, falsified, deleted, destroyed, or altered any documents, emails, or other Company records, and you represent and warrant that you have not copied any such materials without written approval from authorized personnel of the Company;
- (iii) abide by the terms of your proprietary information and invention agreement attached as **Exhibit B**, as well as any relevant stock awards that refer to non- compete, non-disclosure, non-solicitation, or otherwise, the terms of which are hereby incorporated into this Agreement by reference;
- (iv) abide by any and all common law and/or statutory obligations relating to the protection and non-disclosure of the Company's trade secrets and/or confidential and proprietary documents and information, and you specifically agree that you will not disclose any confidential or proprietary information that you acquired as an employee of the Company to any other person or entity, or use such information in any manner that is detrimental to the interests of the Company;
- (v) keep confidential and not publicize or disclose the existence and terms of this Agreement, other than to (a) an immediate family member, legal counsel, accountant, or financial advisor, provided that any such individual to whom disclosure is made shall be bound by these confidentiality obligations; or (b) a state or federal tax authority or government agency to which disclosure is mandated by applicable state or federal law;
- (vi) for a period of one year after the Separation Date, you will not directly or indirectly:
 - a. either alone or in association with others, solicit, divert or take away, or attempt to divert or take away, the business or patronage of any of the clients, customers, or business partners of the Company (I) which were contacted, solicited, or served by

the Company's ultrasound business or the Company's China business; or (II) with whom you had contact or about whom you had confidential information, in each case during the 12-month period prior to the Separation Date ;

- b. either alone or in association with others (I) solicit, induce or attempt to induce any employee or independent contractor of the Company to terminate his or her employment or other engagement with the Company, or (II) hire, or recruit or attempt to hire, or engage or attempt to engage as an independent contractor, any person who was employed or otherwise engaged by the Company at any time during your employment with the Company; *provided, however* , that this clause (II) shall not apply to the recruitment or hiring or other engagement of any individual whose employment or other engagement with the Company has been terminated for a period of 60 days or longer; and
- c. not make any statements that are disparaging about or adverse to the business interests of the Company or which are intended to harm the reputation of the Company, including, but not limited to, any statements that disparage any product, service, finances, employees, officers, directors, capability or any other aspect of the business of Company. In addition, the Company will instruct its senior leadership team not to disparage you, personally or professionally.

Your breach of this Section 6 will constitute a material breach of this Agreement and, in addition to any other legal or equitable remedy available to the Company, will entitle the Company to stop providing and/or recover any Separation Pay and Benefits. You understand that nothing in this Agreement is designed to interfere with, restrain, or prevent employee communications protected by state or federal law, including as protected by (a) section 7 of the National Labor Relations Act (or court order), regarding wages, hours, or other terms and conditions of employment, (b) SEC Rule 21F-17, or (c) the immunity provided under 18 U.S.C. section 833(a) for confidential disclosures of trade secrets to government officials or lawyers solely for the purpose of reporting or investigating a suspected violation of law or in a sealed filing in court or other proceeding relating to such suspected violation.

7. Cooperation.

- (i) Until the Separation Date, you will not be expected to report to work, but will make yourself available to assist in the transition of your role and responsibilities upon the Company's reasonable request. You will not hold yourself out as an employee or agent of the Company or otherwise contact any of the Company's actual or potential customers, employees, contractors or vendors except as agreed in advance by an authorized officer of the Company.
- (ii) After the Separation Date, you agree to cooperate fully with the Company in the defense or prosecution of any claims or actions now in existence or which may be brought or threatened in the future against or on behalf of the Company or its successor(s), including any claim or action against its and their directors, officers and employees. Your cooperation in connection with such claims or actions shall include, without limitation, your being reasonably available (in a manner that does not unreasonably interfere with any employment obligations you may have) to

Speak or meet with the Company to prepare for any proceeding, to provide truthful affidavits, to assist with any audit, inspection, proceeding or other inquiry, and to act as a witness in connection with any litigation or other legal proceeding affecting the Company. The Company will reimburse you for any reasonable, out-of-pocket expenses that you may incur in providing such assistance, so long as you first obtain written pre-approval from the Vice President of Human Resources.

8. Release of Claims.

- (i) You hereby acknowledge and agree that by signing this Agreement and accepting the Separation Pay and Benefits provided for in this Agreement, you are waiving your right to assert any form of legal claim against the Company and any and all of its divisions, affiliates, and subsidiaries and all related entities, and its and their directors, officers, employees, agents, successors and assigns (the "Releasees") of any kind whatsoever from the beginning of time through and including the Separation Date, except for claims related to the Company's failure to perform its obligations under this Agreement. Your waiver and release is intended to bar any form of legal claim, charge, grievance, complaint, cause of action, or any other form of action (jointly referred to as "*Claims*") against the Releasees seeking any form of relief including, without limitation, equitable relief (whether declaratory, injunctive or otherwise), the recovery of any damages or any other form of monetary recovery whatsoever (including, without limitation, back pay, front pay, compensatory damages, emotional distress damages, punitive damages, attorneys' fees and any other costs) against the Releasees up through and including the Separation Date. You understand that there could be unknown or unanticipated Claims resulting from your employment with the Company and the termination thereof and agree that such Claims are intended to be, and are, included in this waiver and release.
- (ii) Without limiting the foregoing general waiver and release, except for Claims resulting from the failure of the Company to perform its obligations under this Agreement, you specifically waive and release the Releasees from any Claims arising from or related to your employment relationship with the Company or the separation thereof, including without limitation: (a) Claims under any state (including, without limitation, Massachusetts and other state in which you worked on behalf of Analogic) or federal discrimination (including, without limitation, the Massachusetts Fair Employment Practices Act (also known as Chapter 151B), the Age Discrimination in Employment Act, Title VII of the Civil Rights Act of 1964), fair employment practices or other employment related statute, regulation or executive order (as they may have been amended through the date on which you sign this Agreement); (b) Claims under any other state (including, without limitation, Massachusetts and other state in which you worked on behalf of Analogic) or federal employment related statute, regulation or executive order (as they may have been amended through the date on which you sign this Agreement) relating to wages, hours or any other terms and conditions of employment; (c) Claims under any state (including, without limitation, Massachusetts and other state in which you worked on behalf of Analogic) or federal common law theory; and (d) any other Claim arising under other state or federal law.

- (iii) Because you are over 40 years of age, you have specific rights under the Older Workers Benefit Protection Act (“*OWBPA*”), which prohibits discrimination on the basis of age. The release set forth in this Section 8 is intended to release any rights you may have against the Company alleging discrimination on the basis of age. Consistent with the provisions of the *OWBPA*, you have twenty-one (21) days to consider and accept the provisions of this Agreement. In addition, you may rescind your assent to this Agreement if, within seven (7) days after the date you sign this Agreement, you deliver a written notice of rescission. To be effective, such notice of rescission must be postmarked and sent by certified mail, return receipt requested, or delivered within the seven-day period to VP Human Resources.
- (iv) Consistent with federal discrimination laws, nothing in this release shall be deemed to prohibit you from challenging the validity of this release under federal discrimination laws or from filing a charge or complaint of age or other employment related discrimination with the Equal Employment Opportunity Commission (“*EEOC*”), or from participating in any investigation or proceeding conducted by the *EEOC*. Further, nothing in this release or Agreement shall be deemed to limit the Company’s right to seek immediate dismissal of such charge or complaint on the basis that your signing of this Agreement constitutes a full release of any individual rights under federal discrimination laws, or the Company’s right to seek restitution or other legal remedies to the extent permitted by law of the economic benefits provided to you under this Agreement in the event that you successfully challenge the validity of this release and prevail in any claim under federal discrimination laws.
- (v) Notwithstanding anything to the contrary in this Agreement, the release in Section 8 does not cover rights or Claims under the *ADEA* that arise from acts or omissions that occur after the date you sign this Agreement.
- (vi) If your release of Claims pursuant to Section 8 is determined to be unenforceable in whole or part (except for your release of federal age discrimination Claims, which shall not be subject to this sentence), the Company will have the option, in its sole discretion, to either (a) declare the entire Agreement null and void and require you to refund the Separation Pay and Benefits provided for in this Agreement; or (b) enforce the portions of the Agreement found not to be unenforceable. In the event that any other provision of this Agreement is determined to be unenforceable in whole or in part (including your release of federal age discrimination Claims) the remainder of the Agreement shall be enforced in full.
- (vii) Reaffirmation of Release of Claims. On the Separation Date you agree to execute the affirmation attached as ***Exhibit C***. You also acknowledge and agree that the release of claims in Section 8 shall be fully effective in the event that you fail or refuse to execute the affirmation, but that Analogic shall have no obligation to provide you with the Separation Pay and Benefits (that otherwise would be provided under Section 2 of this Agreement) not already provided as of the Separation Date until you execute the affirmation.

9. Miscellaneous.

- (i) Except as expressly provided for herein (e.g., any agreement(s) referenced in Section 6(iii)), this Agreement supersedes any and all prior oral and/or written agreements, including any prior drafts of this Agreement, and sets forth the entire agreement between the Company and you in respect of your separation from the Company.
- (ii) No variations or modifications hereof shall be deemed valid unless reduced to writing and signed by the Company and you.
- (iii) The provisions of this Agreement are severable, and if for any reason any part hereof shall be found to be unenforceable, the remaining provisions shall be enforced in full.
- (iv) This Agreement may be on one or more copies, each of which when signed will be deemed to be an original, and all of which together will constitute one and the same Agreement.
- (v) The validity, interpretation and performance of this Agreement, and any and all other matters relating to your employment and separation of employment from the Company, shall be governed by and construed in accordance with the internal laws of the Commonwealth of Massachusetts, without giving effect to conflict of law principles. Both parties agree that any action, demand, claim or counterclaim relating to (a) your employment and separation of your employment, and/or (b) the terms and provisions of this Agreement or to its breach, shall be commenced in the Commonwealth of Massachusetts in a court of competent jurisdiction.

It is the Company's desire and intent to make certain that you fully understand the provisions and effects of this Agreement. To that end, you have been encouraged and given an opportunity to consult with legal counsel, and you acknowledge having done so. By executing this Agreement, you are acknowledging that (a) you have been afforded sufficient time to understand the provisions and effects of this Agreement and to consult with legal counsel; (b) your agreements and obligations under this Agreement are made voluntarily, knowingly and without duress; and (c) neither the Company nor its agents or representatives have made any representations inconsistent with the provisions of this Agreement.

Unless you rescind your assent as set forth in Section 8 above, this Agreement shall be effective on the eighth day following your signing of this Agreement, at which time it shall become final and binding on all parties.

If the foregoing correctly sets forth our arrangement, please sign, date and return the enclosed copy of this Agreement to VP Human Resources at 8 Centennial Drive, Peabody, MA 01960 within the time frame set forth above.

Very truly yours,

/s/

Douglas Rosenfeld JJ Fry SVP & GC
Vice President, Global Human Resources

Accepted and Agreed To:

/s/

Shalabh Chandra
Dated: April 5, 2017

EXHIBIT A

Unemployment Benefits

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How long does it take to process a new claim?

It takes approximately three to four weeks to process a new claim. If you are determined to be eligible for UI benefits, you will receive payments for the weeks that you are eligible, except for the first week, which is a waiting period required by Massachusetts Law.

How to request your weekly benefit payment:

Beginning on the Sunday after you apply for benefits, you must request your benefit payment (sign or certify your eligibility for UI benefits) weekly. A payment will be made to you for the previous week, after you request the benefit payment and we have determined that you are eligible. To request benefit payment:

1. Go to www.mass.gov/dua, select **UI Online for Claimants**. Then log in to your account using your SSN and password that you created. Select **Request Benefit Payment** and answer the questions.
2. Call the automated TeleCert service at 617-626-6338. Follow the voice prompts and answer the questions using the keypad on your phone. TeleCert is available in English and Spanish.

How to apply for benefits from out of state:

If you worked in Massachusetts and have moved to another state, you may still be eligible for benefits. This type of claim is known as an interstate claim. Interstate claims are subject to Massachusetts Law as if you were still living in the Commonwealth. You can apply for your interstate unemployment claim using UI Online or by calling the TeleClaim Center.



Need help?

If you have any questions concerning your eligibility or need assistance applying for unemployment benefits, please review the frequently asked questions on our website, www.mass.gov/dua or call the TeleClaim Center.

This pamphlet includes important information how to apply for Unemployment Insurance benefits.

This pamphlet includes important information on how to apply for Unemployment Insurance benefits.

Este folleto contiene información importante sobre cómo solicitar los beneficios del Seguro de Desempleo.

Este panfleto contém informações importantes sobre como registrar-se para receber benefícios de subsídio de desemprego.

Данный проспект содержит важную информацию о процессе подачи заявления на получение Страхового пособия по безработице.

Livrè sa gen enfòmasyon enpòtan sou fason pou aplike pou Benefis Asirans Chomaj yo.

Il presente opuscolo contiene importanti informazioni riguardanti la modalità di richiesta per l'indennità di disoccupazione.

Cette brochure comporte d'importants renseignements sur la façon de demander des prestations d'assurance-chômage.

សៀវភៅផ្សព្វផ្សាយនេះមានរួមជាមួយនឹងព័ត៌មានសំខាន់ៗអំពី
របៀបដាក់ពាក្យសុំប្រាក់អត្ថប្រយោជន៍ការងារសម្រាប់អ្នកបាត់
ការងារ។

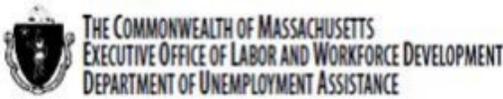
Cuốn sách mỏng này bao gồm thông tin quan trọng về cách nộp đơn xin bảo hiểm thất nghiệp

ແຜ່ນເຈ້ຍນີ້ມີຂໍ້ມູນກ່ຽວກັບວິທີການຂໍເອົາເງິນຕົນປະໂຫຍດປະກັນໄພ
ຫວ່າງການ.

这本小册子包括如何申请失业保险金的重要信息。

이 팜플렛에는 실업 보험 급여의 신청 방법에 대한 중요한 정보가
들어 있습니다.

يحتوي هذا الكتيب على معلومات هامة حول كيفية التقديم للحصول على مبالغ
تأمين البطالة.



Equal Opportunity Employer Program

Auxiliary aids and services are available upon request to individuals with disabilities. For hearing-impaired relay services, call 711

www.mass.gov/dua

Form 0590-A Rev.6-13

To Massachusetts Workers:

How to Apply for Unemployment Insurance Benefits

To Massachusetts Employers:

Under the state's Employment and Training Law, you are required to give a copy of this pamphlet to each of your employees who is separated from work, permanently or temporarily. Please complete the information below:

Analogic Corporation

Employer Name

60075390

DUA Employer Account Number (EAN)

04-2454372

Federal Employer ID Number (optional)

8 Centennial Drive, Peabody, MA01960

Address (to which DUA should mail request for separation and wage information)

What is Unemployment Insurance?

Unemployment Insurance (UI) is a temporary income protection program for workers who have lost their jobs through no fault of their own, but are able to work, available for work, and looking for work. Funding for UI benefits comes from quarterly contributions paid by the state's employers to the Department of Unemployment Assistance (DUA); no deductions are made from employees' pay.

When should you apply for UI benefits?

If you have been separated from work, or your work schedule has been reduced, you should apply for UI benefits during your first week of total or partial unemployment. Your claim will begin on the Sunday of the calendar week in which your claim is filed. This date is known as your effective claim date. Waiting more than a full week to request benefits will delay the beginning of your claim and benefits may not be paid for the week(s) of unemployment that occurred prior to the week of filing.

How to apply for UI benefits:

We are committed to providing you with prompt and courteous service. Our goal is to ensure that you can apply for benefits quickly and efficiently. Simply follow these steps:

Be ready with the following information:

- Social Security Number
- Date of birth (month, day, year)
- Home address, telephone number, and email address (if available)
- Whether you have filed a UI claim in Massachusetts, or in any other state during the past 12 months
- The names and addresses of all employers you have worked for during the past 15 months, and the dates you worked for each employer. If you are reopening a claim, be prepared to provide the same information for any employment you have had since your claim was last active.
- Your Military discharge papers-from DD-214, member 4 (If you were separated from Military service with any branch of U.S. armed forces within the past 18 months)
- If you were employed by the federal government within the past 18 months, the SF-8 and/or SF-50 form given to you by your government employer at the time of your separation
- The reason why you are no longer working or why your hours have been reduced
- Last day of employment
- The names, dates of birth, and Social Security Numbers of any dependent children that you plan to claim as a dependent
- Alien registration number of verification that you were legally eligible to work in the United States, and that you are currently eligible to begin a new job

Select the method that is most convenient for you:

There are two ways you can apply for benefits.



Apply using UI Online:

UI Online is a safe, secure, easy-to-use, self-service system. If you choose to use UI Online, you will complete the information Online and submit your application using a computer with internet access. If you do not have access to a computer, Visit your local library or One-Stop Career Center to use free, publicly-available computers.

To apply using UI Online (5.00 a.m to 10.00 p.m daily):

1. Go to www.mass.gov/dua and select **UI Online for Claimants** .
2. Then select **Apply for Benefits** . When you apply for benefits using UI Online for the first time, you will be asked to enter your Social Security Number (SSN), create a password, and select a security question and answer. It is important for you to remember your password and security question and answer. You will use your SSN and password to access UI Online each week to request your benefit payment. If you forget your password, you can reset it by Clicking **Forgot password** , answering the security question, and selecting a new password.
3. Complete all information requested. You will receive a confirmation message after you submit your application. If your application is interrupted, you can go back and complete it before 10.00 p.m on Saturday of the same week.

Tip : Be sure to provide your telephone number and email address – it will make it easier for us to contact you if there are questions about your application.



Apply by phone using the TeleClaim Center:

To apply for benefits by phone (8:30 a.m. to 4:30 p.m. Monday through Friday):

1. Call the TeleClaim Center toll-free at 877-626-6800; from area codes 351,413,508,774, and 978; or 617-626-6800 from any other area code.
2. Select English or another language.
3. Press 1- to apply for benefits. Enter your SSN and the year you were born. You will then be connected to an agent who will take the information necessary to file your claim.

Note: During peak periods from Monday through Thursday, call scheduling may be implemented providing priority for callers based on the last digit of their Social Security number. This helps ensure that everyone can get through to the TeleClaim Center in a timely manner. Please check the schedule below before calling:

If the last digit of your SSN Is:	Assigned day to call TeleClaim Is:
0,1	Monday
2,3	Tuesday
4,5,6	Wednesday
7,8,9	Thursday
Any Last digit	Friday

How to create or change your Personal Identification Number (PIN) for TeleCert:

When you apply for benefits by telephone for the first time, you will be asked to create your PIN. If you have previously created your PIN and do not remember it, or need to change your PIN, call the PIN Service Line at 617-626-6943. The PIN Service Line is available seven days a week from 5 a.m. to 10 p.m. You will need a touch-tone phone to use the PIN Service Line. Note: Please be aware that smart phones with QWERTY keyboard sometimes do not work when answering the security question. Instead, use a cellular phone or land line.

EXHIBIT B

Proprietary Inventions Agreement

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Proprietary Information and Inventions Agreement

I recognize that ANALOGIC CORPORATION, a publicly held corporation, hereinafter called "the Corporation," is engaged in the manufacture of electronic instrumentation.

I understand that:

(a) As part of my job with the Corporation I am expected to make new contributions and inventions of value to the Corporation; and

(b) My employment creates a relationship of confidence and trust between me and the Corporation with respect to any information of a confidential or secret nature:

- (i) applicable to the business of the Corporation and its subsidiaries (if any), and
- (ii) applicable to the business of any client of the Corporation, which may be made known to me by the Corporation or its subsidiaries (if any) or by any client of the Corporation or learned by me during the period of my employment (all such information being hereinafter called "Proprietary Information").

(c) By way of illustration, but not limitation, Proprietary Information includes trade secrets, processes, formulas, data, know-how, improvements, inventions, techniques and customer lists.

In consideration of my employment or continued employment, as the case may be, and the compensation received from time to time, I hereby agree as follows:

1. At all times, both during my employment and after its termination, I will keep in confidence and trust all such Proprietary Information and I will not use such Proprietary Information other than in the course of my work for the Corporation nor disclose any of such Proprietary Information or anything relating to it without written consent of the Corporation.

2. In the event of the termination of my employment by me or by the Corporation for any reason, I will deliver to the Corporation all documents and data of any nature pertaining to my work and I shall not take with me any documents or data of any description or any reproduction of any description containing or pertaining to any Proprietary Information.

3. I will promptly disclose to the Corporation, or any persons designated by it, all improvements, inventions, formulas, processes, techniques, know-how and data, whether or not patentable, made or conceived or first reduced to practice or learned by me, either alone or jointly with others, during the period of my employment, whether or not in the course of my employment.

Proprietary Information and Inventions Agreement

4. I agree that all said improvements, inventions, formulas, processes, techniques, know-how and data which are related to or useful in the business of the Corporation or its subsidiaries (if any) or of any client of the Corporation, or result from tasks assigned to me by the Corporation (hereinafter collectively called "Inventions"), shall be the sole property of the Corporation and its assigns or of its client, and the Corporation and its assigns or its client shall be the sole owner of all patents and other rights in connection therewith; provided, however, that this sentence shall not apply to improvements, inventions, formulas, processes, techniques, know-how and data which are related to or useful in the business of clients of the Corporation if the same are not related to, or useful in the performance of, contracts between the Corporation and its clients. I further agree as to all such Inventions to assist the Corporation in every proper way (but at Company's expense) to obtain and from time to time enforce patents on said Inventions in any and all countries, and to that end I will execute all documents for use in applying for and obtaining such patents thereon and enforcing same, as Corporation may desire, together with any assignments thereof to Corporation or persons designated by it and I will give testimony, both by deposition and in person in court or before any other tribunal, in any proceeding relating to the granting of a patent application, proceedings relating to the enforcement of a patent, and proceedings relating to the protection of the rights of the Corporation or persons designated by it in Proprietary Information. My obligation to assist the Corporation in obtaining and enforcing patents for such Inventions in any and all countries and in otherwise protecting rights in Proprietary Information as herein provided, shall continue beyond the termination of my employment but the Corporation shall compensate me at a reasonable rate after such termination of time actually spent by me at the Corporation's request on such assistance and shall also reimburse me for all out-of-pocket expenses incurred by me in connection with the performance of such obligation.

5. As a matter of record I attach hereto a complete list of all inventions or improvements which have been made or conceived or first reduced to practice by me alone or jointly with others prior to my employment, which I desire to remove from the operation of this Agreement; and I covenant that such list is complete. If no such list is attached to this Agreement, I represent that I do not have such inventions and improvements at the time of signing this Agreement.

6. I represent that my performance of all the terms of this Agreement and as an employee of the Corporation does not and will not breach any agreement to keep in confidence proprietary information acquired by me in confidence or in trust prior to my employment with the Corporation and I agree not to enter into any agreements either written or oral in conflict herewith.

7. This Agreement shall be effective as of the first day of my employment by the Corporation; namely: Aug 1, 2010

8. This Agreement shall be binding upon me, my heirs, executors, assigns, and administrators and shall inure to the benefit of the Corporation, its successors and assigns.

Name: SHALABH CHANDRA
(print)

Signature: /s/ Shalabh Chandra

Date of Birth: xxxxxx

Date: 6/25/2010

Witness Name: xxxxxx
(print)

Date: 6/25/10

EXHIBIT C

I hereby reaffirm in its entirety the provisions of the Separation Agreement with Analogic Corporation, dated April ____, 2017, signed by me including, without limitation, the release of claims contained in Section 8 of that Separation Agreement.

/s/ Shalabh Chandra

SHALABH CHANDRA

DATE: April 27, 2017

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT (this "Agreement") is made and entered into as of March 1, 2017, by and between Brooks West ("Executive") and Analogic Corporation (the "Company").

WITNESSETH THAT:

WHEREAS, the Company desires to employ Executive in an executive capacity on the terms and conditions, and for the consideration, hereinafter set forth, and Executive desires to be employed by the Company on such terms and conditions and for such consideration.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth below, and for other good and valuable consideration, the receipt of which is hereby acknowledged, Executive and the Company agree as follows:

1. Effective Date. The "Effective Date" shall mean the date of this Agreement as first above written.
2. Commencement and Nature of Employment. Executive's employment (the "Employment Period") will commence effective March 13, 2017 (the "Start Date") and shall end when terminated pursuant to Section 6 of this Agreement. Such employment shall be "at will" which means that it may be terminated by either party at any time and for any reason.
3. Position and Duties.
 - 3.1 During the Employment Period, Executive shall (i) serve as the Senior Vice President and General Manager, Global Ultrasound Business, (ii) report directly to the Chief Executive Officer of the Company, and (iii) perform similar duties as requested or appropriate for affiliates of the Company, including without limitation any subsidiary (the "Affiliated Entities").
 - 3.2 During the Employment Period, Executive shall devote his full business time, energies and talents to serving in the positions described in Section 3.1 and shall perform those duties faithfully and efficiently; provided, however, that it shall not be a violation of this Section 3.2 for Executive to (i) engage in charitable, religious, educational and community activities; (ii) manage his and his family's personal investments and affairs; (iii) participate in professional organizations; and/or (iv) serve on the boards of charitable, religious and educational entities, provided that such activities do not interfere with the performance of Executive's duties to the Company or represent an actual or apparent conflict of interest with Executive's role at the Company.

4. Compensation. During the Employment Period, the Company shall compensate Executive as follows:
- 4.1 Base Salary. Beginning on the Start Date, Executive shall receive an annual base salary (“Annual Base Salary”) of \$315,000, payable in bi-weekly installments or otherwise in accordance with the Company’s then-current payroll practices.
 - 4.2 Annual Incentive Program. Effective as of the Start Date, Executive shall participate in the Company’s Annual Incentive Program for its fiscal 2017 (the “FY17 AIP”) with a target award equal to 60% of the Annual Base Salary earned by Executive in fiscal 2017; provided that (i) Executive’s Annual Base Salary earned in fiscal 2017 shall be calculated as if the Start Date was February 1, 2017; and (ii) payment under the FY17 AIP shall not be less than 50% of target.
 - 4.3 Long-Term Incentive Program. The Company shall, as of Executive’s first day of employment, grant executive an award under the Company’s Long Term Incentive Program for fiscal years 2017-2019 (the “FY17-19 LTIP”) with a target award equal to 125% of Executive’s Annual Base Salary, pro-rated to reflect the actual number of months worked by Executive in fiscal 2017.
 - 4.4 Program Terms. Executive’s participation in the FY17 AIP and the FY17-19 LTIP will be according to valuation methodologies and other terms and conditions as applicable to other similarly situated executives of the Company (the “Other Executives”). The FY17-19 LTIP award shall be subject to (i) the terms and conditions of the Company’s Amended and Restated 2009 Stock Incentive Plan; and (ii) Executive’s acceptance of the Company’s applicable award agreements, which agreements include a non-competition covenant. The number of RSUs awarded pursuant to the FY17-19 LTIP will be determined based on the closing price of the Company’s common stock on Executive’s first day of employment.
 - 4.5 Employee Benefits. During the Employment Period, Executive shall receive four (4) weeks per year of vacation and shall be entitled to participate in such health and other benefit programs (including the Company’s Non-Qualified Deferred Compensation Plan) as are offered to the Other Executives, subject to the eligibility requirements and other terms of such programs.
 - 4.6 Expense Reimbursement. Subject to the requirements of Section 11.5, the Company will reimburse Executive for all reasonable out of pocket expenses incurred by him in the performance of his duties in accordance with the Company’s then-current reimbursement policies.
 - 4.7 Modification of Compensation Programs and Arrangements. Executive’s compensation may be reviewed and adjusted by the Compensation Committee pursuant to its normal review policies. Executive’s participation in the programs referenced in this Agreement, and Executive’s participation in any other compensation, incentive or benefit programs, shall be subject to the terms and

conditions of such programs, as the same may from time to time be amended or terminated by the Company.

5. Relocation. In connection with Executive's employment with the Company, during which he will be expected to work in the Company's Boston area offices unless he is traveling on Company business, Executive shall be required to establish a residence in the Boston area. To assist in the relocation, Executive will be eligible to participate in the Company's relocation program, consisting of (i) guaranteed home buyout program based on current appraised value of Executive's principal residence; (ii) reimbursement for the reasonable cost of selling Executive's current residence and buying a new residence; (iii) two house hunting trips for Executive and his spouse; (iv) temporary housing for up to four months; (v) insuring, packing, storing, loading, shipping and/or trucking and moving all of the goods from Executive's home in Minnesota, to Executive's new home in the Boston area; and (vi) payment of an amount equal to one (1) month's Base Salary for incidental expenses. To the extent applicable, the imputed income for items (i) through (v) above will be grossed up for tax purposes. The total amount of any loss incurred by Analogic in connection with item (i) above, any amounts reimbursed pursuant to items (ii) through (vi) above, and the amount of any tax gross up, will not exceed \$250,000 in the aggregate. If Executive resigns his employment within one (1) year from the Start Date (other than for Good Reason in connection with a Change in Control Event as provided in Section 8), Executive will be required to repay a pro-rated portion all relocation benefits received under the Company's relocation program (including the allocable portion any tax gross up paid with respect to such amount) (the "Relocation Benefits"), calculated as the (i) the Relocation Benefits minus an amount equal to (ii) the Relocation Benefits multiplied by a fraction, the numerator of which is the number of days that Executive was employed in the one (1) year period following the Start Date, and the denominator of which is 365.

6. Termination of Employment.

6.1 Death or Disability. Executive's employment shall terminate automatically upon Executive's death or Disability (as defined below). If the Company determines in good faith that the Disability of Executive has occurred during the Employment Period, it may provide Executive with written notice in accordance with Section 15.6 of this Agreement of its intention to terminate Executive's employment. In such event, Executive's employment with the Company shall terminate effective on the 30th day after receipt of such notice by Executive (the "Disability Effective Date"). "Disability" shall, unless otherwise required under applicable law, mean the inability of Executive to perform the essential functions of Executive's positions with the Company on a full-time basis as a result of incapacity due to mental or physical illness, which inability exists for 12 or more weeks during any rolling 12-month period.

6.2 By the Company. The Company may terminate Executive's employment at any time, with or without Cause; provided, however, that in the event the Company terminates Executive's employment without Cause, the Company shall provide at least thirty (30) days' prior written notice to Executive of such termination (the

“Company’s Notice Period”). During the Company’s Notice Period, Executive shall remain an employee of the Company, receiving his then-applicable Base Salary and benefits as may then be provided under Section 4.5 above, through the Date of Termination (as defined below). For purposes of this Agreement, “Cause” means (a) any intentionally dishonest, illegal, or insubordinate conduct which is materially injurious to the Company or any of its subsidiaries or which results in an improper substantial personal benefit, (b) material breach by Executive of any provision of any employment, nondisclosure, non-competition, or similar agreement or Company policy to which Executive is a party or is bound, , (c) Executive’s material nonperformance or gross dereliction of duty, or (d) Executive’s conviction of or plea of guilty to a felony or any crime involving moral turpitude .

6.3 By Executive. In the event Executive terminates his employment other than in connection with his death or Disability, Executive shall provide at least thirty (30) days’ prior written notice to the Company of such termination; provided, however, that the Company may elect to terminate Executive’s employment at any point during such period, and such termination shall not constitute a termination by the Company (the applicable period, the “Executive’s Notice Period.”) During Executive’s Notice Period, Executive shall remain an employee of the Company, and shall receive his then-applicable Base Salary and benefits as may then be provided under Section 4 above, through the Date of Termination.

6.4 Date of Termination. “Date of Termination” means (i) if Executive’s employment ends other than for death or Disability, Executive’s last day of employment with the Company; and (ii) if Executive’s employment is terminated by reason of death or Disability, the date of Executive’s death or the Disability Effective Date, as the case may be.

7. Obligations of the Company upon Termination .

7.1 Termination for Any Reason or No Reason. In the event of the termination of Executive’s employment hereunder for any reason or for no reason, the Company will pay to Executive (or to his estate) (i) the portion of his Annual Base Salary that has accrued prior to such termination and has not yet been paid, (ii) an amount equal to the value of his accrued unused vacation days, (iii) reimbursement for expenses properly incurred by Executive on behalf of the Company prior to such termination and properly documented in accordance with Section 4.6 above, and (iv) to the extent not theretofore paid or provided, any other amounts or benefits required to be paid or provided or which Executive is eligible to receive under any plan or agreement of or with the Company through the Date of Termination (all such amounts, collectively, the “Accrued Obligations”). The Accrued Obligations will be paid as required by law but in any event promptly after termination or as provided by any applicable plan or agreement.

7.2 Termination by the Company Other Than for Cause, And Other Than by Reason of Executive's Death or Disability, And Other than in Connection with a Change in Control Event. Subject to Executive's execution of a separation and release of claims agreement ("Release Agreement") containing, among other things, a general release of claims against the Company, its Affiliated Entities and each of their officers, directors, employees, agents and attorneys, and Executive's reaffirmation of his continuing obligations under the Proprietary Information and Inventions Agreement and Non-Competition and Non-Solicitation Agreement (referenced below) and any other restrictive covenant agreements between Executive and the Company, in a form provided by the Company at the time of Executive's departure that is the then-current standard form used by the Company for departing executives, and such Release Agreement becoming irrevocable within sixty (60) days following the Date of Termination (the "Severance Conditions"), if Executive's employment is terminated by the Company other than for Cause or by reason of Executive's death or Disability, and other than in connection with a Change in Control Event (as defined below), then in addition to the Accrued Obligations, the Company shall:

7.2.1 Beginning on the sixtieth (60th) day following the Date of Termination pay to Executive a sum equal to the greater of the most recent Annual Base Salary payments (i) he would have received had he remained continuously employed by the Company following the Date of Termination and through the first anniversary of his first day of employment; or (ii) for a period of 6 months (the "Benefits Period"), such payment to be made in approximately equal installments according to the Company's then-current payroll practices (except as otherwise provided below in the case of amounts that are subject to a prior deferral election).

7.2.2 Provide continued coverage under the Company's group medical and dental plans (the "Health Plans"), if and to the extent permitted by such plans and subject to their terms, and also subject to Executive paying his normal proportion of the cost thereof, for a period following the Date of Termination of employment and through Benefits Period, and if the Health Plans do not permit such continued coverage, and if Executive should be eligible for and properly elect health care continuation coverage pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985 ("COBRA"), Executive's COBRA payments, and if applicable for family coverage, for health coverage that is paid by the Company to active and similarly-situated employees who receive the same type of coverage, for the Benefits Period, unless the provision of the foregoing benefits will violate the nondiscrimination benefits of applicable law, in which case the Company payments will not apply. Any obligations under this Section 7.2.2 shall cease at such earlier time as Executive becomes eligible for coverage under another employer's group medical plan, and Executive shall immediately inform the Company in writing of such occurrence.

7.2.3 Pay to Executive a sum equal to his actual incentive award , if any, as calculated according to the Annual Incentive Program for the fiscal year in which Executive’s termination occurs, payable at such time , in such amount (if any), and in the manner provided thereunder .

7.2.4 Provide that the service-based vesting of the RSU Grant shall be deemed satisfied such that Executive will receive the same benefits thereunder as he would have received had he remained employed through each applicable vesting date thereunder, payable at such time and in the manner provided thereunder, based on the level of achievement of applicable performance conditions (if any).

7.3 Death, Disability, by the Company for Cause, or by the Company Other Than For Cause on or After the Second Anniversary of the Start Date . If Executive’s employment is terminated by the Company for Cause, or by reason of Executive’s death or Disability, or by the Company other than for Cause on or after the second anniversary of the Start Date, this Agreement shall terminate without further obligations to Executive or Executive’s legal representatives under this Agreement, other than for payment of the Accrued Obligations.

7.4 Effect of Termination on Other Positions . If, on the Date of Termination, Executive is a member of the Board or the board of directors of any Affiliated Entity, or holds any other office or position with the Company or any Affiliated Entity, Executive shall, unless otherwise requested by the Company, be deemed to have resigned from all such offices and positions as of the Date of Termination. Executive agrees to execute such documents and take such other actions as the Company may request to reflect such resignation.

8. Change of Control .

8.1 If, within twenty four (24) months following a Change in Control Event (the “ CIC Period”), Executive’s employment is terminated by the Company without Cause and not for death or Disability, or if Executive resigns his employment for Good Reason, the Company shall, subject to the Severance Conditions, pay Executive, or pay on Executive’s behalf, (i) if the Date of Termination is prior to the second anniversary of the Start Date, the amounts set forth in Sections 7.1, and 7.2 above.

8.2 Notice of Termination . Following a Change in Control Event, any termination by the Company for Cause or by Executive for Good Reason pursuant to this Agreement shall be communicated by a Notice of Termination (as defined below) to the other party. A “ Notice of Termination ” means a written notice that (i) indicates the specific termination provision in this Agreement relied upon, (ii) to the extent applicable, sets forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of Executive’s employment under the provision so indicated, and (iii) if the date of termination is other than the date of receipt of such notice, specifies the date of termination (which shall be not more than 15 days after the giving of such notice). The failure by Executive or the

Company to set forth in the Notice of Termination any fact or circumstance that contributes to a showing of Good Reason or Cause, as the case may be, shall not waive any right of Executive or the Company or preclude Executive or the Company from asserting such fact or circumstance in enforcing Executive's or the Company's rights.

8.3 Change in Control Event. “ Change in Control Event ” means:

- 8.3.1 consummation of any merger or consolidation in which (i) the Company is a constituent party or (ii) a subsidiary of the Company is a constituent party and the Company issues shares of its capital stock pursuant to such merger or consolidation (except, in the case of both clauses (i) and (ii) above, any such merger or consolidation involving the Company or a subsidiary in which the shares of capital stock of the Company outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation and in approximately the same relative proportions, at least 51% by voting power of the capital stock of (x) the surviving or resulting corporation or (y) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, of the parent corporation of such surviving or resulting corporation);
- 8.3.2 the issuance, sale or transfer, in a single transaction or series of related transactions, of capital stock representing at least 51% of the voting power of the outstanding capital stock of the Company immediately following such transaction;
- 8.3.3 the sale of all or substantially all of the assets of the Company; or
- 8.3.4 a change in the composition of the Board that results in the Continuing Directors (as defined below) no longer constituting a majority of the Board (or, if applicable, the Board of Directors of a successor corporation to the Company), where the term “ Continuing Director ” means at any date a member of the Board (x) who was a member of the Board on the date of the initial adoption of the Plan by the Board or (y) who was nominated or elected subsequent to such date by at least a majority of the directors who were Continuing Directors at the time of such nomination or election or whose election to the Board was recommended or endorsed by at least a majority of the directors who were Continuing Directors at the time of such nomination or election; provided, however, that there shall be excluded from this clause (y) any individual whose initial assumption of office occurred as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents, by or on behalf of a person other than the Board.

- 8.4 “Good Reason” means (i) the assignment to Executive of any responsibilities or duties inconsistent in any respect with Executive’s Position and Duties (as defined below), excluding any action that is remedied by the Company promptly after receipt of written notice given by Executive; (ii) any failure by the Company to provide any of the Ongoing Compensation (as defined below), excluding any failure that is remedied by the Company promptly after receipt of written notice given by Executive; (iii) the Company requiring Executive to be based at any location other than those locations described in the Position and Duties; (iv) any purported termination by the Company of Executive’s employment other than for Cause, death or Disability; or (v) Executive’s ceasing to be the Chief Executive Officer of a public company .
- 8.5 “Position and Duties” means (i) a position (including, without limitation, offices, titles, and reporting requirements), authority, duties, and responsibilities that are at least commensurate in all material respects with the most significant of, and the highest grade or level of, those that were held or exercised by Executive or assigned to Executive at any time during the 120-day period immediately preceding the Change in Control Event, and (ii) services that are performed at the location where Executive was employed immediately preceding the effective date of the Change in Control Event or any other location less than 35 miles from Peabody, Massachusetts.
- 8.6 “Ongoing Compensation” means, in connection with the CIC Period, (i) an annual base salary paid in accordance with the Company’s usual and customary payroll practices, equal to the base salary in effect immediately prior to the Change in Control Event. Executive’s annual base salary shall be reviewed at least annually and shall be adjusted at any time and from time to time as shall be consistent with adjustments in base salary generally awarded in the ordinary course of business to the Other Executives. Executive’s annual base salary shall not be reduced after any such increase, and, after any such increase, the term “annual base salary” shall refer to the annual base salary as so increased; (ii) eligibility for annual and long term bonuses in connection with the Company’s then existing incentive plans; (iii) eligibility (including for Executives’ family, as the case may be) to participate in and receive benefits under, all incentive, savings, retirement and welfare plans, practices, policies, and programs generally applicable to the Other Executives, but in no event shall such plans, practices, policies, and programs provide Executive’s (or Executive’s family) with incentive opportunities, savings opportunities, retirement benefits opportunities or welfare benefits that are, in each case, less favorable, in the aggregate, than the most favorable of the corresponding opportunities that were provided by the Company for Executive under such plans, practices, policies, and programs as were in effect at any time during the 120-day period immediately preceding the Change in Control Event; (iv) prompt reimbursement for all reasonable business expenses incurred by Executive in accordance with the practices, policies and procedures of the Company; and (v) paid vacation in accordance with the most favorable plans, practices, policies and programs of the Company as were in effect for Executive

at any time during the 120-day period immediately preceding the Change in Control Event.

8.7 280G.

8.7.1 Notwithstanding any other provision of this Agreement or any other plan, arrangement or agreement to the contrary, if any of the payments or benefits provided or to be provided by the Company or its affiliates to Executive or for Executive's benefit pursuant to the terms of this Agreement or otherwise ("Covered Payments") constitute parachute payments ("Parachute Payments") within the meaning of Section 280G of the Internal Revenue Code of 1986, as amended (the "Code") and would, but for this Section 8.7 be subject to the excise tax imposed under Section 4999 of the Code (or any successor provision thereto) or any similar tax imposed by state or local law or any interest or penalties with respect to such taxes (collectively, the "Excise Tax"), then prior to making the Covered Payments, a calculation shall be made comparing (A) the Net Benefit (as defined below) to Executive of the Covered Payments after payment of the Excise Tax to (B) the Net Benefit to Executive if the Covered Payments are limited to the extent necessary to avoid being subject to the Excise Tax. Only if the amount calculated under (A) above is less than the amount under (B) above will the Covered Payments be reduced to the minimum extent necessary to ensure that no portion of the Covered Payments is subject to the Excise Tax (that amount, the "Reduced Amount"). "Net Benefit" shall mean the present value of the Covered Payments net of all federal, state, local, foreign income, employment and excise taxes.

8.7.2 If there is a reduction pursuant to this Agreement, the Covered Payment reduction contemplated by the preceding section 8.7.1 shall be implemented by determining the "Parachute Payment Ratio" (as defined below) for each "parachute payment" and then reducing the "parachute payments" in order beginning with the "parachute payment" with the highest Parachute Payment Ratio. For "parachute payments" with the same Parachute Payment Ratio, such "parachute payments" shall be reduced based on the time of payment of such "parachute payments," with amounts having later payment dates being reduced first. For "parachute payments" with the same Parachute Payment Ratio and the same time of payment, such "parachute payments" shall be reduced on a pro rata basis (but not below zero) prior to reducing "parachute payments" with a lower Parachute Payment Ratio. The term "Parachute Payment Ratio" shall mean a fraction the numerator of which is the value of the applicable "parachute payment" that must be taken into account by Executive for purposes of Section 4999(a) of the Code, and the denominator of which is the actual amount to be received by Executive in respect of the applicable "parachute payment". For example, in the case of an equity grant that is treated as contingent on the change in control because the time at which

the payment is made or the payment vests is accelerated, the denominator shall be determined by reference to the fair market value of the equity at the acceleration date, and not in accordance with the methodology for determining the value of accelerated payments set forth in Treasury Regulation Section 1.280G-1Q/A-24(b) or (c).

8.7.3 Any determination required under this Section 8.7, including whether any payments or benefits are parachute payments, shall be made by the Company in its sole discretion. Executive shall provide the Company with such information and documents as the Company may reasonably request in order to make a determination under this Section. The Company's determination shall be final and binding on Executive.

9. No Mitigation. In no event, except as set forth expressly in this or another agreement signed by Executive, shall Executive be obligated to seek other employment or take any other action by way of mitigation of the amounts payable to Executive under any of the provisions of this Agreement and, subject to the aforesaid exception, such amounts shall not be reduced whether or not Executive obtains other employment.
10. Restrictive Covenants/Other Conditions to Employment. As a condition of employment hereunder and the effectiveness of this Agreement, Executive shall, prior to commencing employment:
- 10.1 Execute and deliver to the Company the Proprietary Information and Inventions Agreement and Non-Competition and Non-Solicitation Agreement attached hereto as Exhibits A and B, respectively;
 - 10.2 Make himself available for and cooperate regarding a drug test and background and credit checks, including a consumer report and an investigative consumer report;
 - 10.3 Provide proof satisfactory to the Company of his eligibility to work in the United States, including the proof described in Form I-9; and
 - 10.4 Sign all consents necessary to the accomplishment of the foregoing. Should Executive not satisfy the conditions set forth in this Section 10, or should the drug test or background check yield results unsatisfactory to the Company, Executive shall not commence employment and this Agreement shall be null and void, with no obligations owing to Executive.
11. Payments Subject to Section 409A. Subject to the provisions in this Section 11, any severance payments or benefits under this Agreement shall begin only upon the date of Executive's "separation from service" (determined as set forth below) which occurs on or after the date of termination of employment. The following rules shall apply with respect to distribution of the payments and benefits, if any, to be provided to Executive under this Agreement:

- 11.1 It is intended that each installment of the severance payments and benefits provided under this Agreement shall be treated as a separate “payment” for purposes of Section 409A of the Internal Revenue Code and the guidance issued thereunder (“Section 409A”). Neither Executive nor the Company shall have the right to accelerate or defer the delivery of any such payments or benefits except to the extent specifically permitted or required by Section 409A.
- 11.2 If, as of the date of Executive’s “separation from service” from the Company, Executive is not a “specified employee” (within the meaning of Section 409A), then each installment of the severance payments and benefits shall be made on the dates and terms set forth in this Agreement
- 11.3 If, as of the date of Executive’s “separation from service” from the Company, Executive is a “specified employee” (within the meaning of Section 409A), then:
- 11.3.1 Each installment of the severance payments and benefits due under this Agreement that, in accordance with the dates and terms set forth herein, will in all circumstances, regardless of when the separation from service occurs, be paid within the short-term deferral period (as defined under Section 409A) shall be treated as a short-term deferral within the meaning of Treasury Regulation Section 1.409A-1(b)(4) to the maximum extent permissible under Section 409A and shall be paid at the time and in the matter set forth in this Agreement; and
- 11.3.2 Each installment of the severance payments and benefits due under this Agreement that is not described in Section 11.3.1 above and that would, absent this subsection, be paid within the six-month period following Executive’s “separation from service” from the Company shall not be paid until the date that is six months and one day after such separation from service (or, if earlier, Executive’s death), with any such installments that are required to be delayed being accumulated during the six-month period and paid in a lump sum on the date that is six months and one day following Executive’s separation from service and any subsequent installments, if any, being paid in accordance with the dates and terms set forth herein; provided, however, that the preceding provisions of this sentence shall not apply to any installment of severance payments and benefits if and to the maximum extent that such installment is deemed to be paid under a separation pay plan that does not provide for a deferral of compensation by reason of the application of Treasury Regulation 1.409A-1(b)(9)(iii) (relating to separation pay upon an involuntary separation from service). Any installments that qualify for the exception under Treasury Regulation Section 1.409A-1(b)(9)(iii) must be paid no later than the last day of Executive’s second taxable year following the taxable year in which the separation from service occurs.
- 11.4 The determination of whether and when Executive’s separation from service from the Company has occurred shall be made in a manner consistent with, and based

on the presumptions set forth in, Treasury Regulation Section 1.409A-1(h) . Solely for purposes of this paragraph (d), “Company” shall include all persons with whom the Company would be considered a single employer as determined under Treasury Regulation Section 1.409A-(h)(3).

- 11.5 All reimbursements and in-kind benefits provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A to the extent that such reimbursements or in-kind benefits are subject to Section 409A, including, where applicable, the requirement that (i) any reimbursement is for expenses incurred during Executive’s lifetime (or during a shorter period of time specified in this Agreement), (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of an eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred and (iv) the right to reimbursement is not subject to set off or liquidation or exchange for any other benefit.
- 11.6 The Company may withhold (or cause to be withheld) from any payments made under this Agreement, all federal, state, city or other taxes as shall be required to be withheld pursuant to any law or governmental regulation or ruling.
12. Return of Company Property . Upon termination of employment for any reason, Executive shall promptly return to the Company any keys, credit cards, passes, confidential documents or material, computer equipment, or other property belonging to the Company, and Executive shall also return all writings, files, records, correspondence, notebooks, notes and other documents and things (including any copies thereof) containing confidential information or relating to the business or proposed business of the Company or the Affiliated Entities or containing any trade secrets relating to the Company or the Affiliated Entities. For purposes of the preceding sentence, the term “trade secrets” shall have the meaning ascribed to it under the Uniform Trade Secrets Act. Executive agrees to represent in writing to the Company upon termination of employment that he has complied with the foregoing provisions of this Section.
13. Assistance with Claims . Executive agrees that during and after his employment by the Company he will assist the Company and the Affiliated Entities in the defense of any claims, or potential claims that may be made or are threatened to be made against any of them in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a “Proceeding”), and will assist the Company and the Affiliated Entities in the prosecution of any claims that may be made by the Company or the Affiliated Entities in any Proceeding, to the extent that such claims may relate to Executive’s employment or the period of Executive’s employment by the Company. The Company agrees to reimburse Executive for all of Executive’s reasonable out-of-pocket expenses associated with such assistance, including travel expenses . Any amounts to be paid to Executive pursuant to this Section 13 shall be paid by the Company no later than thirty (30) days of the date on which Executive provides documentation to the Company that such expenses were incurred.

14. Successors. This Agreement is personal to Executive and shall not be assignable by Executive without the prior written consent of the Company. This Agreement and any rights and benefits hereunder shall inure to the benefit of and be enforceable by Executive's legal representatives, heirs or legatees. This Agreement and any rights and benefits hereunder shall inure to the benefit of and be binding upon the Company and its successors and assigns, including any corporation with which or into which the Company may be merged or which may succeed to its assets or business.
15. Miscellaneous.
- 15.1 Entire Agreement/Modification/Choice of Law/Enforceability/Jury Waiver. Both Executive and the Company acknowledge that this Agreement is the entire agreement of the parties, and supersedes any prior or contemporaneous discussions, understandings, or agreements, with respect to the subject matter hereof. This Agreement may be amended only in a written agreement duly executed by the parties hereto. This Agreement shall be deemed to have been made in the Commonwealth of Massachusetts and shall be governed by and construed in accordance with the laws of such Commonwealth, without giving effect to conflict of law principles. Both parties agree that any action, demand, claim or counterclaim relating to the terms and provisions of this Agreement, or to its formation or breach, or to Executive's employment or the termination thereof, shall be commenced only in Massachusetts in a court of competent jurisdiction, and further acknowledge that venue for such actions shall lie exclusively in Massachusetts. Both parties hereby waive and renounce in advance any right to a trial by jury in connection with such legal action.
- 15.2 Withholding. The Company may withhold from any amounts payable under this Agreement such Federal, state, local or foreign taxes as shall be required to be withheld pursuant to any applicable law or regulation.
- 15.3 No Guarantee of any Tax Consequences. The Company makes no guarantee of any tax consequences with respect to any payment hereunder including, without limitation, under Section 409A of the Code.
- 15.4 Severability. The invalidity or unenforceability of any provision of this Agreement will not affect the validity or enforceability of any other provision of this Agreement, and this Agreement will be construed as if such invalid or unenforceable provision were omitted (but only to the extent that such provision cannot be appropriately reformed or modified).
- 15.5 Waiver of Breach. No waiver by any party hereto of a breach of any provision of this Agreement by any other party, or of compliance with any condition or provision of this Agreement to be performed by such other party, will operate or be construed as a waiver of any subsequent breach by such other party of any similar or dissimilar provisions and conditions at the same or any prior or subsequent time.

- 15.6 Notices. Notices and all other communications provided for in this Agreement shall be in writing and shall be delivered personally or sent by registered or certified mail, return receipt requested, postage prepaid, or prepaid overnight courier to the parties at the addresses set forth below (or such other addresses as shall be specified by the parties by like notice):

to the Company:

Analogic Corporation
8 Centennial Drive
Peabody, MA 01960
Attention: President and CEO

with a copy to:

Analogic Corporation
8 Centennial Drive
Peabody, MA 01960
Attention: Senior Vice President and General Counsel

or to Executive:

At the most recent address maintained
by the Company in its personnel records

- 15.7 Each party, by written notice furnished to the other party, may modify the applicable delivery address, except that notice of change of address shall be effective only upon receipt. Such notices, demands, claims and other communications shall be deemed given in the case of delivery by overnight service with guaranteed next day delivery, the next day or the day designated for delivery; or in the case of certified or registered U.S. mail, five days after deposit in the U.S. mail; provided, however, that in no event shall any such communications be deemed to be given later than the date they are actually received.
- 15.8 Survivorship. Upon the expiration or other termination of this Agreement, the respective rights and obligations of the parties hereto shall survive such expiration or other termination to the extent necessary to carry out the intentions of the parties under this Agreement.
- 15.9 Counterparts. This Agreement may be executed in separate facsimile or electronic counterparts, each of which is deemed to be an original and all of which taken together constitute one and the same agreement.
- 15.10 Representations. Executive hereby acknowledges that he understands this Agreement, enters into this Agreement voluntarily, and that his employment under this Agreement will not conflict with any legal duty owed by him to any other party, or with any agreement to which he is a party or by which he is bound,

including, without limitation, any non-competition or non-solicitation provision contained in any such agreement, and that he has disclosed to the Company all such agreements . Executive will not bring to the Company or any Affiliated Entity, use for their benefit or disclose to any of their employees, agents or contractors, or to anyone for their benefit any confidential or proprietary information of any other person, including, without limitation, any prior employer.

IN WITNESS THEREOF, Executive has hereunto set his hand, and the Company has caused this Agreement to be executed in its name and on its behalf, all as of the day and year first above written.

ANALOGIC CORPORATION

Brooks West

/s/ Fred B. Parks

/s/ Brooks West

Fred B. Parks
President and CEO

Exhibit A

Proprietary Information and Inventions Agreement

As a condition of my employment with Analogic Corporation, its subsidiaries, affiliates, successors, or assigns (collectively, “Analogic”), and in consideration of my employment or continued employment, as the case may be, with Analogic and my receipt of compensation now and hereafter paid to me by Analogic, I agree to the following terms and conditions of this Proprietary Information and Inventions Agreement (the “Agreement”):

1. Proprietary Information.

- a. “Analogic Proprietary Information” means all information (whether or not patentable or copyrightable or protectable as trade secret) that is (1) non-public, confidential, and proprietary in nature and (2) owned, possessed, developed, created, or discovered by Analogic including, but not limited to, by or through its officers, agents, employees, advisors, or consultants.
- b. Analogic Proprietary Information includes, but is not limited to, data, know-how, manufacturing methods, formulas, algorithms, computer programs, processes, designs, sketches, photographs, plans, drawings, product concepts, improvements, specifications, samples, reports, laboratory notebooks, vendor names, customer and prospective customer names, distributor names, cost and pricing information, market definitions, business plans, marketing plans, financial plans, customer and prospective customer development information and strategies, business development opportunities, sales methods, inventions, trade secrets, ideas, research and development activities and plans, and employee and personnel information, including compensation, skill, and areas of expertise.
- c. I understand that the above list is not exhaustive, and that Analogic Proprietary Information also includes other information that is marked or otherwise identified as confidential or proprietary, or that would otherwise appear to a reasonable person to be confidential or proprietary in the context and circumstances in which the information is known or used.

2. Access to Proprietary Information. I understand and acknowledge that, during the course of my employment, I will have access to and learn about Analogic Proprietary Information. I further understand and acknowledge that Analogic’s ability to reserve its proprietary information for the exclusive knowledge and use of my position at Analogic is of great competitive importance and commercial value to Analogic, and my improper use or disclosure of the Analogic Proprietary Information might cause Analogic to incur financial costs, loss of business advantage, liability under confidentiality agreements with third-parties, civil damages, or criminal penalties.

3. Confidentiality. I agree, both during and after my employment with Analogic, to keep Analogic Proprietary Information secret. I agree not to directly or indirectly disclose, record, or in any way make use of Analogic Proprietary Information except as required in the

performance of my duties and responsibilities as an employee of Analogic and under conditions that protect the Analogic Proprietary Information consistent with the terms of this Agreement. I also agree not to remove or otherwise transmit Analogic Proprietary Information from Analogic's premises or possession without the consent of an authorized Analogic representative. Further, I agree to keep secret any third party information, including, but not limited to, information received by Analogic from customers, prospective customers, and suppliers, to which I am given access that is covered by a confidentiality agreement between Analogic and the third party, and I will adhere to the terms of the agreement between Analogic and the third party.

4. Rights in Proprietary Information. All Analogic Proprietary Information, as well as all patents, patent rights, copyrights, copyrightable works, trade secret rights, trademark rights, and other rights (including, without limitation, intellectual property rights) anywhere in the world related to Analogic Proprietary Information, is, and shall be, the sole and exclusive property of Analogic.

5. Return of Proprietary Information. I agree to deliver all tangible Analogic Proprietary Information in my possession, including all copies or computer records thereof, along with any other Analogic property, to Analogic on or before my last day of employment with Analogic. I further agree thereafter not to make any written record of such Proprietary Information nor to make use of such Proprietary Information.

6. Term. I understand and acknowledge that my obligations under this Agreement with regard to any particular Analogic Proprietary Information shall commence immediately upon my first having access to such Analogic Proprietary Information (whether before or after I begin employment by Analogic) and shall continue during and after my employment by Analogic until such time as such Analogic Proprietary Information has become public knowledge other than as a result of my breach of this Agreement or breach by those acting in concert with me or on my behalf.

7. Work for Hire. I acknowledge that, by reason of being employed by Analogic at the relevant times, to the extent permitted by law, all writings, works of authorship, technology, inventions, discoveries, ideas, and other work product of any nature whatsoever (collectively referred to as Work Product) consisting of copyrightable subject matter is "work made for hire" as defined in the Copyright Act of 1976 (17 U.S.C. § 101), and such copyrights are therefore owned by Analogic. Nothing contained in this Agreement shall be construed to reduce or limit Analogic's rights, title or interest in any Work Product or Inventions so as to be less in any respect than I would have had in the absence of this Agreement.

8. Employee Inventions.

- a. I agree that all Employee Inventions are and shall be the sole and exclusive property of Analogic, which shall own all right, title, and interest in and to all Analogic Inventions to the fullest extent under applicable law.
- b. "Inventions" means all inventions, including, but not limited to, new discoveries, concepts, inventions, and developments, as well as improvements, modifications, enhancements, and derivative works, and all know-how, processes, techniques,

formulas, ideas, circuits, designs, copyrightable works (to the extent not “work for hire” treated under Section 7), trademarks, and trade secrets.

- c. “Employee Inventions” means Inventions that: (1) result from any work performed directly or indirectly by me for Analogic; (2) result, at least in part, from my use of Analogic’s time, equipment, supplies, facilities, trade secret information, or resources generally; or (3) relate, at the time of conception or reduction to practice of the Invention, to Analogic’s business, project, or products or to the manufacture or use thereof or the actual or demonstrably anticipated research or development of Analogic.

9. Employee Inventions: Disclosure and Assignment.

- a. I agree both during and after my employment with Analogic, to disclose promptly and in writing all Employee Inventions that I, solely or jointly with others, make, author, discover, develop, conceive, and/or reduce to practice at any time during the term of my employment by Analogic. I will make this disclosure to my immediate supervisor or any other individual designated by Analogic.
- b. I hereby assign and agree to assign to Analogic or its designee, without further consideration, my entire right and interest in and to all Employee Inventions, including all rights to obtain, register, and enforce patents, copyrights, mask work rights, and other intellectual property protection for such Analogic Inventions, as works made for hire.
- c. I hereby assign and agree to assign to Analogic all Inventions I conceive of or reduce to practice within one year following the end of my employment with Analogic (whether voluntary or otherwise), if the Invention is based on Analogic Proprietary Information obtained by me during my employment with Analogic. Any patent application anywhere in the world that is filed within the six month period following the end of my employment with Analogic shall be presumed to be based on Analogic’s Proprietary information obtained by me during my employment with Analogic.

10. Other Rights. To the extent any copyrights are assigned under this Agreement, I hereby irrevocably waive, to the extent permitted by applicable law, any and all claims I may now or hereafter have in any jurisdiction to all rights of paternity, integrity, disclosure and withdrawal and any other rights that may be known as "moral rights" with respect to all Inventions and Work Product therein.

11. No License. I understand and acknowledge that this Agreement does not, and shall not be construed to, grant me any license or right of any nature with respect to any Employee Inventions, work product, or Analogic Proprietary Information.

12. Cooperation. I agree to execute all documents reasonably necessary to perfect such intellectual property rights or to assign those rights to Analogic or its designee. I further agree to assist Analogic (at Analogic’s expense), during the term of my employment and as

reasonably necessary thereafter, in obtaining, protecting, and/or enforcing patents, copyrights, or other forms of Inventions and Analogic Proprietary Information. I hereby irrevocably designate and appoint Analogic as my agent and attorney-in-fact to act for and in my behalf to execute and file any document and to do all other lawfully permitted acts to further the purposes of the foregoing with the same legal force and effect as if executed by me.

13. Disclosure of Prior Inventions. As a matter of record I attach hereto a complete list of all inventions or improvements which have been made or conceived or first reduced to practice by me alone or jointly with others which I desire to remove from the operation of this Agreement, and I covenant that such list is complete. If no such list is attached to this Agreement, I represent that I do not have such inventions and improvements at the time of signing this Agreement.

14. No Contrary Agreements. I represent that my performance of all the terms of this Agreement and as an employee of Analogic does not and will not breach any agreement to keep in confidence proprietary information acquired by me in confidence or in trust outside my employment with Analogic and I agree not to enter into any agreements either written or oral in conflict with this Agreement.

15. Non-Solicitation. I acknowledge that the Corporation has expended and continues to expend significant time and expense in recruiting and training its employees and that the loss of employees and any resulting Analogic Proprietary Information would cause significant and irreparable harm to the Corporation. Therefore, I agree not to directly or indirectly solicit, hire, recruit, attempt to hire or recruit, or induce the termination of employment of any employee of the Corporation for a period of 12 months starting on the last day of my employment with the Corporation.

16. Statutory Protections. I understand that nothing in this Agreement is designed to interfere with, restrain, or prevent employee communications protected by state or federal law, including as protected by (a) section 7 of the National Labor Relations Act (or court order), regarding wages, hours, or other terms and conditions of employment, (b) FINRA Rule 21F-17, or (c) the immunity provided under 18 U.S.C. section 1833(a) for confidential disclosures of trade secrets to government officials or lawyers solely for the purpose of reporting or investigating a suspected violation of law or in a sealed filing in court or other proceeding relating to such suspected violation.

17. Irreparable Harm. I acknowledge that the Analogic Proprietary Information (and Analogic's ability to reserve it for the exclusive knowledge and use of the company) is of great competitive importance and commercial value to Analogic. I further acknowledge that improper use or disclosure of Analogic Proprietary Information would cause irreparable harm to Analogic for which remedies at law would not be adequate. In the event of my breach of this Agreement or any threatened breach, I hereby agree that Analogic shall be entitled to seek, in addition to other available remedies, a temporary or permanent injunction or other equitable relief against such breach or threatened breach from any court of competent jurisdiction. Analogic will not be required to post any bond or other security, to show any actual damages, or to show that monetary damages would not afford an adequate remedy. The aforementioned equitable relief

shall be in addition to, not in lieu of, legal remedies, monetary damages, or other available forms of relief.

18. Miscellaneous.

- a. Nothing in this Agreement will in any way terminate, supersede, undermine, or otherwise modify the at-will status of the employment relationship between me and Analogic, pursuant to which either the Corporation or I may terminate the employment relationship at any time, with or without cause and with or without notice.
- b. This Agreement shall be governed by and construed under the laws of the jurisdiction in which I work. The failure of Analogic to enforce its rights under this Agreement at any time shall not be construed as a waiver of such rights. In the event that any one or more of the provisions, or portions thereof, contained or referenced in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable, such circumstances shall not affect any other provision hereof and this Agreement shall continue in full force and effect and be construed as if such provision, to the extent that it is invalid, illegal or unenforceable, had never been contained herein. I consent to the jurisdiction of the Massachusetts courts in connection with any dispute or action that arises out of this Agreement.
- c. Analogic may assign its rights hereunder in connection with a transfer of all or any part of its business operations or otherwise to any affiliate, subsidiary, parent, or successor of Analogic of all or part of the business; however, any corporate parents, subsidiaries, or affiliates of Analogic, which are benefited by this Agreement, may enforce this Agreement without need for any assignment of this Agreement.
- d. This Agreement shall be binding upon me, my heirs, executors, assigns, and administrators and shall inure to the benefit of Analogic, its successors and assigns.
- e. This Agreement constitutes the entire agreement between me and Analogic related to the subject matter herein. Notwithstanding the foregoing, this Agreement does not purport to set forth all of the terms and conditions of my employment, and, as an employee of Analogic, I have obligations to Analogic which are not described in this Agreement. However, the terms of this Agreement govern over any such terms that are inconsistent with this Agreement, and supersede the terms of any similar form that I may have previously signed.

Signature: /s/ Brooks West

Print Name: Brooks West

Date: 3/1/17

Exhibit B

NON-COMPETITION AND NON-SOLICITATION AGREEMENT

This Non-Competition and Non-Solicitation Agreement (the “Agreement”) is made between Analogic Corporation (the “Company”), and Brooks West (“Executive”).

In consideration of the employment of Executive by the Company, Executive and the Company agree as follows:

1. Non-Competition and Non-Solicitation. While Executive is employed by the Company and for a period of one year after the cessation of such employment for any reason, Executive will not directly or indirectly:

(a) Engage or assist others in engaging in any business or enterprise (whether as owner, partner, officer, director, employee, consultant, investor, lender or otherwise, except as the holder of not more than 1% of the outstanding stock of a publicly-held company) that (i) is competitive with the business of the Company or any of its subsidiaries, including but not limited to any business or enterprise that develops, manufactures, markets, licenses, sells or provides any product or service that competes with any product or service developed, manufactured, marketed, licensed, sold or provided, or planned to be developed, manufactured, marketed, licensed, sold or provided, by the Company or any of its subsidiaries while Executive was employed by the Company, and (ii) conducts business in any territory in which the Company or any of its subsidiaries conducts business, or plans to conduct business, at the time Executive ceases to be employed by the Company; or

(b) Either alone or in association with others, solicit, divert or take away, or attempt to divert or take away, the business or patronage of any of the clients, customers, or business partners of the Company or any of its subsidiaries which were contacted, solicited, or served by the Company or any of its subsidiaries during the 12-month period prior to the cessation of Executive’s employment with the Company; or

(c) Either alone or in association with others (i) solicit, induce or attempt to induce, any employee or independent contractor of the Company or any of its subsidiaries to terminate his or her employment or other engagement with the Company or any of its subsidiaries, or (ii) hire, or recruit or attempt to hire, or engage or attempt to engage as an independent contractor, any person who was employed or otherwise engaged by the Company or any of its subsidiaries at any time during the term of Executive’s employment with the Company; provided, that this clause (ii) shall not apply to the recruitment or hiring or other engagement of any individual whose employment or other engagement with the Company or any of its subsidiaries has been terminated for a period of six months or longer, or, in the case of an independent contractor, if engaging such independent contractor would not interfere with such independent contractor’s provision of services to the Company or any of its subsidiaries.

(d) Extension. If Executive violates the provisions of any of the preceding paragraphs of this Section 1, Executive shall continue to be bound by the restrictions set forth in such paragraph until a period of one year has expired without any violation of such provisions.

2. Miscellaneous.

(a) Equitable Remedies. Executive acknowledges that the restrictions contained in this Agreement are necessary for the protection of the business and goodwill of the Company and its subsidiaries and are considered by Executive to be reasonable for such purpose. Executive agrees that any breach or threatened breach of this Agreement is likely to cause the Company and its subsidiaries substantial and irrevocable damage which is difficult to measure. Therefore, in the event of any such breach or threatened breach, Executive agrees that the Company, in addition to such other remedies which may be available, shall have the right to obtain an injunction from a court restraining such a breach or threatened breach without posting a bond and the right to specific performance of the provisions of this Agreement and Executive hereby waives the adequacy of a remedy at law as a defense to such relief.

(b) Obligations to Third Parties. Executive acknowledges and represents that this Agreement and Executive's employment with the Company will not violate any continuing obligation Executive has to any former employer or other third party.

(c) Disclosure of this Agreement. Executive hereby authorizes the Company to notify others, including but not limited to customers of the Company and any of its subsidiaries and any of Executive's future employers or prospective business associates, of the terms and existence of this Agreement and Executive's continuing obligations hereunder.

(d) Not Employment Contract. Executive acknowledges that this Agreement does not constitute a contract of employment, does not imply that the Company will continue his employment for any period of time and does not change the at-will nature of his employment.

(e) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of both parties and their respective successors and assigns, including any corporation with which, or into which, the Company may be merged or which may succeed to the Company's assets or business, provided, however, that the obligations of Executive are personal and shall not be assigned by him. Executive expressly consents to be bound by the provisions of this Agreement for the benefit of the Company or any subsidiary or affiliate thereof to whose employ Executive may be transferred without the necessity that this Agreement be re-signed at the time of such transfer.

(f) Interpretation. If any restriction set forth in Section 1 is found by any court of competent jurisdiction to be unenforceable because it extends for too long a period of time or over too great a range of activities or in too broad a geographic area, it shall be interpreted to extend only over the maximum period of time, range of activities or geographic area as to which it may be enforceable.

(g) Severability. In case any provision of this Agreement shall be invalid, illegal or otherwise unenforceable, the validity, legality and enforceability of the remaining provisions shall in no way be affected or impaired thereby.

(h) Waivers. No delay or omission by the Company in exercising any right under this Agreement will operate as a waiver of that or any other right. A waiver or consent given by the Company on any one occasion is effective only in that instance and will not be construed as a bar to or waiver of any right on any other occasion.

(i) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Massachusetts (without reference to the conflicts of laws provisions thereof). Any action, suit, or other legal proceeding which is commenced to resolve any matter arising under or relating to any provision of this Agreement shall be commenced only in a court of the Commonwealth of Massachusetts (or, if appropriate, a federal court located within Massachusetts), and the Company and Executive each consents to the jurisdiction of such a court. THE COMPANY AND EXECUTIVE EACH HEREBY IRREVOCABLY WAIVES ANY RIGHT TO A TRIAL BY JURY IN ANY ACTION, SUIT OR OTHER LEGAL PROCEEDING ARISING UNDER OR RELATING TO ANY PROVISION OF THIS AGREEMENT.

(j) Entire Agreement; Amendment. This Agreement supersedes all prior agreements, written or oral, between Executive and the Company relating to the subject matter of this Agreement. This Agreement may not be modified, changed or discharged in whole or in part, except by an agreement in writing signed by Executive and the Company. Executive agrees that any change or changes in his duties, salary or compensation after the signing of this Agreement shall not affect the validity or scope of this Agreement.

(k) Captions. The captions of the sections of this Agreement are for convenience of reference only and in no way define, limit or affect the scope or substance of any section of this Agreement.

EXECUTIVE ACKNOWLEDGES THAT HE HAS CAREFULLY READ THIS AGREEMENT AND UNDERSTANDS AND AGREES TO ALL OF THE PROVISIONS IN THIS AGREEMENT.

ANALOGIC CORPORATION

Date: 3/6/17

By: /s/ Fred B. Parks

Date: 3/1/17

/s/ Brooks West
Brooks West

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO RULE 13a-14(a)/RULE 15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED**

I, Fred B. Parks, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Analogic Corporation;
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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) 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
 - d) 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: June 7, 2017

/s/ Fred B. Parks

Fred B. Parks
President and Chief Executive Officer
(Principal Executive Officer)

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO RULE 13a-14(a)/RULE 15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED**

I, Mark T. Frost, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Analogic Corporation;
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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) 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
 - d) 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: June 7, 2017

/s/ Mark T. Frost

Mark T. Frost
Senior Vice President, Chief Financial Officer, and
Treasurer
(Principal Financial Officer)

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER 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 on Form 10-Q of Analogic Corporation (the "Company") for the quarter ended April 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Fred B. Parks, President and Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that, to the best of his knowledge:

- (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: June 7, 2017

/s/ Fred B. Parks

Fred B. Parks
President and Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER 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 on Form 10-Q of Analogic Corporation (the "Company") for the quarter ended April 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Mark T. Frost, Senior Vice President, Chief Financial Officer, and Treasurer, of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that, to the best of his knowledge:

- (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: June 7, 2017

/s/ Mark T. Frost

Mark T. Frost
Senior Vice President, Chief Financial Officer, and Treasurer
(Principal Financial Officer)