

ADTRAN INC  
Form 10-Q  
August 04, 2017

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 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: 000-24612

ADTRAN, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware  
( State or other jurisdiction of  
incorporation or organization)

63-0918200  
(I.R.S. Employer  
Identification No.)

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901 Explorer Boulevard

Huntsville, Alabama 35806-2807  
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (256) 963-8000

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

Accelerated filer

Non-accelerated filer

(Do not check if a small reporting company) Small reporting company

Emerging growth company

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 July 23, 2017, the registrant had 47,799,232 shares of common stock, \$0.01 par value per share, outstanding.

ADTRAN, Inc.

Quarterly Report on Form 10-Q

For the Three and Six Months Ended June 30, 2017

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The Private Securities Litigation Reform Act of 1995 provides a safe harbor for forward-looking statements made by or on behalf of ADTRAN. ADTRAN and its representatives may from time to time make written or oral forward-looking statements, including statements contained in this report, our other filings with the Securities and Exchange Commission (SEC) and other communications with our stockholders. Generally, the words, “believe,” “expect,” “intend,” “estimate,” “anticipate,” “will,” “may,” “could” and similar expressions identify forward-looking statements. We caution you that any forward-looking statements made by us or on our behalf are subject to uncertainties and other factors that could cause such statements to be wrong. A list of factors that could materially affect our business, financial condition or operating results is included under “Factors that Could Affect Our Future Results” in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” contained in Item 2 of Part I of this report. They have also been discussed in Item 1A of Part I in our most recent Annual Report on Form 10-K for the year ended December 31, 2016 filed on February 24, 2017 with the SEC. Though we have attempted to list comprehensively these important

factors, we caution investors that other factors may prove to be important in the future in affecting our operating results. New factors emerge from time to time, and it is not possible for us to predict all of these factors, nor can we assess the impact each factor or a combination of factors may have on our business.

You are further cautioned not to place undue reliance on these forward-looking statements because they speak only of our views as of the date that the statements were made. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

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## PART I. FINANCIAL INFORMATION

## ITEM 1. FINANCIAL STATEMENTS

ADTRAN, INC.

## CONSOLIDATED BALANCE SHEETS

(Unaudited)

(In thousands, except per share amounts)

	June 30, 2017	December 31, 2016
<b>ASSETS</b>		
Current Assets		
Cash and cash equivalents	\$88,798	\$ 79,895
Short-term investments	47,331	43,188
Accounts receivable, less allowance for doubtful accounts of \$— at June 30, 2017 and December 31, 2016	79,891	92,346
Other receivables	14,561	15,137
Income tax receivable, net	—	760
Inventory, net	113,995	105,117
Prepaid expenses and other current assets	23,556	16,459
<b>Total Current Assets</b>	<b>368,132</b>	<b>352,902</b>
Property, plant and equipment, net	84,122	84,469
Deferred tax assets, net	40,296	38,036
Goodwill	3,492	3,492
Other assets	13,305	12,234
Long-term investments	159,634	176,102
<b>Total Assets</b>	<b>\$668,981</b>	<b>\$ 667,235</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current Liabilities		
Accounts payable	\$66,161	\$ 77,342
Unearned revenue	15,449	16,326
Accrued expenses	13,433	12,434
Accrued wages and benefits	16,303	20,433
Income tax payable, net	9,594	—
<b>Total Current Liabilities</b>	<b>120,940</b>	<b>126,535</b>
Non-current unearned revenue	5,351	6,333
Other non-current liabilities	32,527	28,050
Bonds payable	26,800	26,800
<b>Total Liabilities</b>	<b>185,618</b>	<b>187,718</b>
Commitments and contingencies (see Note 14)		
Stockholders' Equity		
Common stock, par value \$0.01 per share; 200,000 shares authorized; 79,652 shares issued and 47,747 shares outstanding at June 30, 2017 and 79,652 shares issued	797	797

and 48,472 shares outstanding at December 31, 2016		
Additional paid-in capital	256,821	252,957
Accumulated other comprehensive loss	(6,816 )	(12,188 )
Retained earnings	931,044	921,942
Less treasury stock at cost: 31,905 and 31,180 shares at June 30, 2017 and		
December 31, 2016, respectively	(698,483)	(683,991 )
Total Stockholders' Equity	483,363	479,517
Total Liabilities and Stockholders' Equity	\$668,981	\$ 667,235

See notes to consolidated financial statements

ADTRAN, INC.

## CONSOLIDATED STATEMENTS OF INCOME

(Unaudited)

(In thousands, except per share amounts)

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2017	2016	2017	2016
Sales				
Products	\$ 155,543	\$ 138,549	\$ 299,140	\$ 262,432
Services	29,130	24,152	55,812	42,473
Total Sales	184,673	162,701	354,952	304,905
Cost of sales				
Products	79,658	67,844	156,317	131,917
Services	20,383	15,902	40,288	28,239
Total Cost of Sales	100,041	83,746	196,605	160,156
Gross Profit	84,632	78,955	158,347	144,749
Selling, general and administrative expenses	34,683	32,866	69,450	63,651
Research and development expenses	33,501	31,277	65,417	60,765
Operating Income	16,448	14,812	23,480	20,333
Interest and dividend income	972	927	1,905	1,782
Interest expense	(137 )	(142 )	(278 )	(287 )
Net realized investment gain	1,390	1,110	1,860	2,838
Other expense, net	(804 )	(251 )	(753 )	(132 )
Income before provision for income taxes	17,869	16,456	26,214	24,534
Provision for income taxes	(5,468 )	(6,228 )	(7,162 )	(9,292 )
Net Income	\$ 12,401	\$ 10,228	\$ 19,052	\$ 15,242
Weighted average shares outstanding – basic	48,036	48,831	48,232	49,026
Weighted average shares outstanding – diluted	48,413	49,048	48,675	49,218
Earnings per common share – basic	\$0.26	\$0.21	\$0.40	\$0.31
Earnings per common share – diluted	\$0.26	\$0.21	\$0.39	\$0.31
Dividend per share	\$0.09	\$0.09	\$0.18	\$0.18

See notes to consolidated financial statements

ADTRAN, INC.

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(Unaudited)

(In thousands)

	Three Months		Six Months Ended	
	Ended June 30, 2017	2016	June 30, 2017	2016
Net Income	\$12,401	\$10,228	\$19,052	\$15,242
Other Comprehensive Income (Loss), net of tax:				
Net unrealized gains (losses) on available-for-sale securities	373	(165 )	1,708	(420 )
Net unrealized losses on cash flow hedges	(417 )	—	(338 )	—
Defined benefit plan adjustments	86	22	141	67
Foreign currency translation	2,619	(601 )	3,861	627
Other Comprehensive Income (Loss), net of tax	2,661	(744 )	5,372	274
Comprehensive Income, net of tax	\$15,062	\$9,484	\$24,424	\$15,516

See notes to consolidated financial statements



ADTRAN, INC.

## CONSOLIDATED STATEMENTS OF CASH FLOWS

(Unaudited)

(In thousands)

	Six Months Ended June 30,	
	2017	2016
Cash flows from operating activities:		
Net income	\$19,052	\$15,242
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	8,377	6,689
Amortization of net premium on available-for-sale investments	238	376
Net realized gain on long-term investments	(1,860 )	(2,838 )
Net (gain) loss on disposal of property, plant and equipment	(11 )	5
Stock-based compensation expense	3,739	3,109
Deferred income taxes	(2,772 )	(354 )
Changes in operating assets and liabilities:		
Accounts receivable, net	13,911	(17,192 )
Other receivables	571	7,876
Inventory	(7,547 )	4,938
Prepaid expenses and other assets	(9,853 )	(4,263 )
Accounts payable	(10,910)	10,354
Accrued expenses and other liabilities	(2,629 )	1,474
Income tax payable/receivable, net	10,273	(4,799 )
Net cash provided by operating activities	20,579	20,617
Cash flows from investing activities:		
Purchases of property, plant and equipment	(7,509 )	(6,679 )
Proceeds from disposals of property, plant and equipment	16	—
Proceeds from sales and maturities of available-for-sale investments	81,891	109,993
Purchases of available-for-sale investments	(65,140)	(112,903)
Net cash provided by (used in) investing activities	9,258	(9,589 )
Cash flows from financing activities:		
Proceeds from stock option exercises	1,722	541
Purchases of treasury stock	(17,311)	(16,579 )
Dividend payments	(8,719 )	(8,860 )
Net cash used in financing activities	(24,308)	(24,898 )
Net increase (decrease) in cash and cash equivalents	5,529	(13,870 )
Effect of exchange rate changes	3,374	234
Cash and cash equivalents, beginning of period	79,895	84,550
Cash and cash equivalents, end of period	\$88,798	\$70,914
Supplemental disclosure of non-cash investing activities:		
Purchases of property, plant and equipment included in accounts payable	\$454	\$554

See notes to consolidated financial statements



ADTRAN, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

(In thousands, except per share amounts)

### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### Basis of Presentation

The accompanying unaudited consolidated financial statements of ADTRAN®, Inc. and its subsidiaries (ADTRAN) have been prepared pursuant to the rules and regulations for reporting on Quarterly Reports on Form 10-Q. Accordingly, certain information and notes required by generally accepted accounting principles for complete financial statements are not included herein. The December 31, 2016 Consolidated Balance Sheet is derived from audited financial statements, but does not include all disclosures required by accounting principles generally accepted in the United States.

In the opinion of management, all adjustments necessary to fairly state these interim statements have been recorded and are of a normal and recurring nature. The results of operations for an interim period are not necessarily indicative of the results for the full year. The interim statements should be read in conjunction with the financial statements and notes thereto included in ADTRAN's Annual Report on Form 10-K for the year ended December 31, 2016, filed on February 24, 2017 with the SEC.

#### Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expense during the reporting period. Our more significant estimates include the obsolete and excess inventory reserves, warranty reserves, customer rebates, determination of the deferred revenue components of multiple element sales agreements, estimated costs to complete obligations associated with deferred revenues, estimated income tax provision and income tax contingencies, the fair value of stock-based compensation, impairment of goodwill, valuation and estimated lives of intangible assets, estimated pension liability, fair value of investments, and the evaluation of other-than-temporary declines in the value of investments. Actual amounts could differ significantly from these estimates.

#### Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers (Topic 606) (ASU 2014-09), which supersedes the revenue recognition requirements in Topic 605, Revenue Recognition, including most industry-specific revenue recognition guidance throughout the Industry Topics of the Codification. The core principle of ASU 2014-09 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for those goods or services. In August 2015, the FASB issued ASU 2015-14, which deferred the effective date of ASU 2014-09 to fiscal years beginning after December 31, 2017, and interim periods within those fiscal years, with early adoption permitted for reporting periods beginning after December 15, 2016. Subsequently, the FASB issued ASUs in 2016 containing implementation guidance related to ASU 2014-09, including: ASU 2016-08, Revenue

from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net), which is intended to improve the operability and understandability of the implementation guidance on principal versus agent considerations; ASU 2016-10, Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing, which is intended to clarify two aspects of Topic 606: identifying performance obligations and the licensing implementation guidance; ASU 2016-12, Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients, which contains certain provisions and practical expedients in response to identified implementation issues; and ASU 2016-20, Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers, which is intended to clarify the Codification or to correct unintended application of guidance. ASU 2014-09 allows for either full retrospective or modified retrospective adoption. We plan to adopt ASU 2014-09 and the related ASUs on January 1, 2018 using the modified retrospective method. We are continuing to evaluate the potential impact of these ASUs, and we believe the most significant potential impact relates to our accounting for software license and installation services revenues. We do not believe there will be a significant impact to product or maintenance revenues.

In February 2016, the FASB issued Accounting Standards Update No. 2016-02, Leases (Topic 842) (ASU 2016-02). ASU 2016-02 requires an entity to recognize lease assets and lease liabilities on the balance sheet and to disclose key information about the entity's leasing arrangements. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. A modified retrospective approach is required. We anticipate the adoption of ASU 2016-02 will have a material impact on our financial position; however, we do not believe adoption will have a material impact on our results of operations. We believe the most significant impact relates to our accounting for operating leases for office space and equipment.

In January 2017, the FASB issued Accounting Standards Update No. 2017-04, Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment (ASU 2017-04). ASU 2017-04 simplifies the measurement of goodwill by eliminating step 2 of the goodwill impairment test. Under ASU 2017-04, entities will be required to compare the fair value of a reporting unit to its carrying amount and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. ASU 2017-04 is effective for annual or interim impairment tests performed in fiscal years beginning after December 15, 2019, with early adoption permitted for annual or interim impairment tests performed on testing dates after January 1, 2017. The amendments should be applied prospectively. We are currently evaluating whether to early adopt ASU 2017-04, but we do not expect it will have a material impact on our financial position, results of operations or cash flows.

In March 2017, the FASB issued Accounting Standards Update No. 2017-07, Compensation – Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost (ASU 2017-07). ASU 2017-07 amends ASC 715, Compensation — Retirement Benefits, to require employers that present a measure of operating income in their statements of earnings to include only the service cost component of net periodic pension cost and net periodic postretirement benefit cost in operating expenses (together with other employee compensation costs). The other components of net benefit cost, including amortization of prior service cost/credit, and settlement and curtailment effects, are to be included in non-operating expenses. ASU 2017-07 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017, with early adoption permitted. We do not expect ASU 2017-07 will have a material impact on our financial position, results of operations or cash flows.

During 2017, we adopted the following accounting standards, which had no material effect on our financial position, results of operations or cash flows:

In July 2015, the FASB issued Accounting Standards Update No. 2015-11, Inventory (Topic 330): Simplifying the Measurement of Inventory (ASU 2015-11). Currently, Topic 330, Inventory, requires an entity to measure inventory at the lower of cost or market. Market could be replacement cost, net realizable value, or net realizable value less an approximately normal profit margin. ASU 2015-11 does not apply to inventory that is measured using last-in, first-out (LIFO) or the retail inventory method. The amendments apply to all other inventory, which includes inventory that is measured using first-in, first-out (FIFO) or average cost. ASU 2015-11 requires an entity to measure in scope inventory at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. ASU 2015-11 is effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period. The amendments should be applied prospectively with earlier application permitted as of the beginning of an interim or annual reporting period. We adopted ASU 2015-11 in the first quarter of 2017, and there was no material impact on our financial position, results of operations or cash flows.

In January 2017, we adopted ASU 2016-09, Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. As a result, beginning in the first quarter of 2017, we began recognizing all excess tax benefits and tax deficiencies as income tax expense or benefit as a discrete event. The treatment of forfeitures has changed as we have elected to discontinue our past practice of estimating forfeitures and now account for forfeitures as they occur. As a result, we recorded an increase in additional paid in capital of \$0.1 million, a charge to beginning retained earnings of \$0.1 million, and an increase in the deferred tax assets related to non-qualified stock options and RSUs of \$10 thousand. In addition, cash flows related to excess tax benefits will no longer be separately classified as a financing activity apart from other income tax cash flows within operating activities. We elected to retrospectively apply the changes in presentation to the statements of cash flows and no longer classify excess tax benefits as a financing activity, which had no effect on our cash flows for the six months ended June 30, 2016. There was no material impact on our financial position, results of operations or cash flows as a result of these changes.



## 2. BUSINESS COMBINATIONS

On September 13, 2016, we acquired key fiber access products, technologies and service relationships from subsidiaries of CommScope, Inc. for \$0.9 million in cash. This acquisition will enhance our solutions for the cable MSO industry and will provide cable operators with the scalable solutions, services and support they require to compete in the multi-gigabit service delivery market. This transaction was accounted for as a business combination. We have included the financial results of this acquisition in our consolidated financial statements since the date of acquisition. These revenues are included in the Network Solutions reportable segment, and in the Access & Aggregation and Customer Devices categories.

We recorded a bargain purchase gain of \$3.5 million during the third quarter of 2016, net of income taxes, subject to customary working capital adjustments between the parties. The bargain purchase gain of \$3.5 million represents the excess fair value of the net assets acquired over the consideration exchanged. We have assessed the recognition and measurement of the assets acquired and liabilities assumed based on historical and forecasted data for future periods and have concluded that our valuation procedures and resulting measures were appropriate.

The allocation of the purchase price to the estimated fair value of the assets acquired and liabilities assumed at the acquisition date, subject to working capital adjustments, is as follows:

(In Thousands)	
<b>Assets</b>	
Inventory	\$3,131
Property, plant and equipment	352
Intangible assets	4,700
<b>Total assets acquired</b>	<b>8,183</b>
<b>Liabilities</b>	
Accounts payable	(1,250)
Warranty payable	(61)
Accrued wages and benefits	(122)
Deferred income taxes	(2,265)
<b>Total liabilities assumed</b>	<b>(3,698)</b>
<b>Total net assets</b>	<b>4,485</b>
<b>Gain on bargain purchase of a business, net of tax</b>	<b>(3,542)</b>
<b>Total purchase price</b>	<b>\$943</b>

The details of the acquired intangible assets are as follows:

In thousands	Value
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		Life (years)
Supply agreement	\$1,400	0.8
Customer relationships	1,200	6.0
Developed technology	800	10.0
License	500	1.3
Patent	500	7.3
Non-compete	200	2.3
Trade name	100	2.0
Total	\$4,700	



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The following unaudited supplemental pro forma information presents the financial results as if the acquisition had occurred on January 1, 2015. This unaudited supplemental pro forma information does not purport to be indicative of what would have occurred had the acquisition been completed on January 1, 2015, nor is it indicative of any future results. Aside from revising the 2015 net income for the effect of the bargain purchase gain, there were no material, non-recurring adjustments to this unaudited pro forma information.

(In thousands)	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2016	2015	2016	2015
Pro forma revenue	\$164,332	\$160,562	\$307,687	\$304,542
Pro forma net income	\$10,022	\$1,983	\$14,907	\$8,405
Pro forma earnings per share - basic	\$0.21	\$0.04	\$0.30	\$0.16
Pro forma earnings per share - diluted	\$0.20	\$0.04	\$0.30	\$0.16

For the three and six months ended June 30, 2017, we incurred acquisition and integration related expenses and amortization of acquired intangibles of \$0.6 million and \$1.4 million, respectively, related to this acquisition.

### 3. INCOME TAXES

Our effective tax rate decreased from 37.9% in the six months ended June 30, 2016 to 27.3% in the six months ended June 30, 2017. The decrease in the effective tax rate between the two periods is primarily attributable to a 6.3% effective rate reduction due to a greater mix of international revenues and a 3.2% effective rate reduction for a provision-to-return adjustment related to the assignment of research and development expenditures to specific company engineering locations.

### 4. PENSION BENEFIT PLAN

We maintain a defined benefit pension plan covering employees in certain foreign countries.

The following table summarizes the components of net periodic pension cost for the three and six months ended June 30, 2017 and 2016

(In thousands)	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2017	2016	2017	2016
Service cost	\$306	\$310	\$603	\$607
Interest cost	147	184	290	360
Expected return on plan assets	(307)	(271)	(606)	(530)
Amortization of actuarial losses	75	45	148	88
Net periodic pension cost	\$221	\$268	\$435	\$525

## 5. STOCK-BASED COMPENSATION

The following table summarizes the stock-based compensation expense related to stock options, performance stock units (PSUs), restricted stock units (RSUs) and restricted stock for the three and six months ended June 30, 2017 and 2016, which was recognized as follows:

(In thousands)	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Stock-based compensation expense included in cost of				
sales	\$93	\$95	\$184	\$194
Selling, general and administrative expense	1,008	788	2,024	1,557
Research and development expense	755	668	1,531	1,358
Stock-based compensation expense included in operating				
expenses	1,763	1,456	3,555	2,915
Total stock-based compensation expense	1,856	1,551	3,739	3,109
Tax benefit for expense associated with non-qualified				
options, PSUs, RSUs and restricted stock	(433 )	(213 )	(813 )	(425 )
Total stock-based compensation expense, net of tax	\$1,423	\$1,338	\$2,926	\$2,684

## Stock Options

The following table is a summary of our stock options outstanding as of December 31, 2016 and June 30, 2017 and the changes that occurred during the six months ended June 30, 2017:

	Number of Stock Options	Weighted Avg. Exercise Price	Weighted Avg.	
			Remaining Contractual Life In Years	Aggregate Intrinsic Value
(In thousands, except per share amounts)				
Stock options outstanding, December 31, 2016	6,338	\$ 22.14	5.63	\$ 16,972
Stock options granted	—	\$ —		
Stock options exercised	(103 )	\$ 16.78		
Stock options forfeited	(32 )	\$ 17.62		
Stock options expired	(55 )	\$ 26.67		
Stock options outstanding, June 30, 2017	6,148	\$ 22.21	5.14	\$ 11,232
Stock options vested and expected to vest, June 30, 2017	6,148	\$ 22.21	5.14	\$ 11,232
Options exercisable, June 30, 2017	4,601	\$ 23.78	4.23	\$ 5,862

The aggregate intrinsic values in the table above represent the total pre-tax intrinsic value (the difference between the closing price of our stock on the last trading day of the quarter and the exercise price, multiplied by the number of in-the-money stock options) that would have been received by the option holders had all option holders exercised their options on June 30, 2017. The aggregate intrinsic value will change based on the fair market value of our stock.

The total pre-tax intrinsic value of options exercised during the three and six months ended June 30, 2017 was \$0.1 million and \$0.5, respectively.

As of June 30, 2017, there was \$5.2 million of unrecognized compensation expense related to unvested stock options, which is expected to be recognized over an average remaining recognition period of 1.8 years.

The fair value of our stock options is estimated using the Black-Scholes model. The determination of the fair value of stock options on the date of grant using the Black-Scholes model is affected by our stock price as well as assumptions regarding a number of complex and subjective variables that may have a significant impact on the fair value estimate.

There were no stock options granted during the three or six months ended June 30, 2017. The weighted-average assumptions and value of options granted during the three and six months ended June 30, 2016 were as follows:

	Three and Six Months Ended June 30, 2016
Expected volatility	34.74 %
Risk-free interest rate	1.33 %
Expected dividend yield	1.91 %

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Expected life (in years) 6.26

Weighted-average estimated value \$ 5.42

PSUs, RSUs and restricted stock

The following table is a summary of our PSUs, RSUs and restricted stock outstanding as of December 31, 2016 and the changes that occurred during the six months ended June 30, 2017:

(In thousands, except per share amounts)	Number of Shares	Weighted Avg. Grant Date Fair Value
Unvested PSUs, RSUs and restricted stock outstanding, December 31, 2016	519	\$ 20.51
PSUs, RSUs and restricted stock granted	520	\$ 22.24
PSUs, RSUs and restricted stock vested	(2 )	\$ 18.29
PSUs, RSUs and restricted stock forfeited	(6 )	\$ 20.00
Unvested PSUs, RSUs and restricted stock outstanding, June 30, 2017	1,031	\$ 21.39

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The fair value of our PSUs with market conditions is calculated using a Monte Carlo Simulation valuation method. The fair value of RSUs and restricted stock is equal to the closing price of our stock on the date of grant. During the first quarter of 2017, the Compensation Committee of the Board of Directors approved a PSU grant of 0.5 million shares that contain performance conditions. The fair value of these performance-based PSU awards was equal to the closing price of our stock on the date of grant.

As of June 30, 2017, there was \$7.9 million of unrecognized compensation expense related to unvested market-based PSUs, RSUs and restricted stock, which is expected to be recognized over an average remaining recognition period of 3.0 years. In addition, there was \$11.5 million of unrecognized compensation expense related to unvested performance-based PSUs, which will be recognized over the requisite service period of three years as achievement of the performance objective becomes probable. For the three and six months ended June 30, 2017, no compensation expense was recognized related to these performance-based PSU awards.

## 6. INVESTMENTS

At June 30, 2017, we held the following securities and investments, recorded at either fair value or cost:

(In thousands)	Amortized Cost	Gross Unrealized		Carrying Value
		Gains	Losses	
Deferred compensation plan assets	\$ 15,662	\$2,389	\$(23 )	\$18,028
Corporate bonds	72,954	132	(107 )	72,979
Municipal fixed-rate bonds	7,596	7	(20 )	7,583
Asset-backed bonds	13,313	11	(16 )	13,308
Mortgage/Agency-backed bonds	9,549	14	(36 )	9,527
U.S. government bonds	21,528	4	(132 )	21,400
Foreign government bonds	2,700	3	(1 )	2,702
Marketable equity securities	31,741	2,153	(929 )	32,965
Available-for-sale securities held at fair value	\$ 175,043	\$4,713	\$(1,264)	\$178,492
Restricted investment held at cost				27,800
Other investments held at cost				673
Total carrying value of available-for-sale investments				\$206,965

At December 31, 2016, we held the following securities and investments, recorded at either fair value or cost:

(In thousands)	Amortized Cost	Gross Unrealized		Carrying Value
		Gains	Losses	
Deferred compensation plan assets	\$ 12,367	\$2,271	\$(42 )	\$14,596
Corporate bonds	66,522	64	(174 )	66,412
Municipal fixed-rate bonds	11,799	12	(37 )	11,774
Asset-backed bonds	10,201	19	(14 )	10,206
Mortgage/Agency-backed bonds	13,080	15	(91 )	13,004
U.S. government bonds	30,022	15	(270 )	29,767

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Foreign government bonds	3,729	2	(1 )	3,730
Variable rate demand notes	11,855	—	—	11,855
Marketable equity securities	30,571	311	(1,503)	29,379
Available-for-sale securities held at fair value	\$ 190,146	\$ 2,709	\$ (2,132)	\$ 190,723
Restricted investment held at cost				27,800
Other investments held at cost				767
Total carrying value of available-for-sale investments				\$ 219,290

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As of June 30, 2017, our corporate bonds, municipal fixed-rate bonds, asset-backed bonds, mortgage/agency-backed bonds, U.S. government bonds and foreign government bonds had the following contractual maturities:

	Corporate bonds	Municipal fixed-rate bonds	Asset- backed bonds	Mortgage / Agency- backed bonds	U.S. government bonds	Foreign government bonds
(In thousands)						
Less than one year	\$ 33,486	\$ 4,101	\$—	\$ —	\$ 8,919	\$ 825
One to two years	16,124	1,536	850	493	—	600
Two to three years	21,421	775	5,185	—	8,367	1,277
Three to five years	1,948	1,171	5,836	415	4,114	—
Five to ten years	—	—	508	1,340	—	—
More than ten years	—	—	929	7,279	—	—
Total	\$ 72,979	\$ 7,583	\$ 13,308	\$ 9,527	\$ 21,400	\$ 2,702

Actual maturities may differ from contractual maturities because some borrowers have the right to call or prepay obligations with or without call or prepayment penalties.

Our investment policy provides limitations for issuer concentration, which limits, at the time of purchase, the concentration in any one issuer to 5% of the market value of our total investment portfolio.

At June 30, 2017, we held a \$27.8 million restricted certificate of deposit, which is carried at cost. This investment serves as a collateral deposit against the principal amount outstanding under loans made to ADTRAN pursuant to an Alabama State Industrial Development Authority revenue bond (the Bond), which totaled \$27.8 million at June 30, 2017 and December 31, 2016. At June 30, 2017, the estimated fair value of the Bond using a level 2 valuation technique was approximately \$28.0 million, based on a debt security with a comparable interest rate and maturity and a Standard and Poor's credit rating of AAA. We have the right to set-off the balance of the Bond with the collateral deposit in order to reduce the balance of the indebtedness. The Bond matures on January 1, 2020, and bears interest at the rate of 2% per annum. In conjunction with this program, we are eligible to receive certain economic incentives from the state of Alabama that reduce the amount of payroll withholdings we are required to remit to the state for those employment positions that qualify under this program. We are required to make payments in the amounts necessary to pay the interest on the amounts currently outstanding. It is our intent to make annual principal payments in addition to the interest amounts that are due.

We review our investment portfolio for potential "other-than-temporary" declines in value on an individual investment basis. We assess, on a quarterly basis, significant declines in value which may be considered other-than-temporary and, if necessary, recognize and record the appropriate charge to write-down the carrying value of such investments. In making this assessment, we take into consideration qualitative and quantitative information, including but not limited to the following: the magnitude and duration of historical declines in market prices, credit rating activity, assessments of liquidity, public filings, and statements made by the issuer. We generally begin our identification of potential other-than-temporary impairments by reviewing any security with a fair value that has declined from its original or adjusted cost basis by 25% or more for six or more consecutive months. We then evaluate the individual security based on the previously identified factors to determine the amount of the write-down, if any. For the three and six months ended June 30, 2017 and 2016, other-than-temporary impairment charges were not significant.

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Realized gains and losses on sales of securities are computed under the specific identification method. The following table presents gross realized gains and losses related to our investments.

(In thousands)	Three Months		Six Months	
	Ended June 30,		Ended June 30,	
	2017	2016	2017	2016
Gross realized gains	\$1,512	\$1,517	\$2,230	\$3,881
Gross realized losses	\$(122 )	\$(407 )	\$(370 )	\$(1,043)

As of June 30, 2017 and 2016, gross unrealized losses related to individual securities in a continuous loss position for 12 months or longer were not significant.



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We have categorized our cash equivalents held in money market funds and our investments held at fair value into a three-level fair value hierarchy based on the priority of the inputs to the valuation technique for the cash equivalents and investments as follows: Level 1 - Values based on unadjusted quoted prices for identical assets or liabilities in an active market; Level 2 - Values based on quoted prices in markets that are not active or model inputs that are observable either directly or indirectly; Level 3 - Values based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement. These inputs include information supplied by investees.

(In thousands)	Fair Value Measurements at June 30, 2017 Using			
	Fair Value	Quoted Prices  in Active  Market for Identical Assets  (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash equivalents				
Money market funds	\$6,487	\$6,487	\$ —	\$ —
Commercial Paper	5,497	—	5,497	—
Cash equivalents	11,984	6,487	5,497	—
Available-for-sale securities				
Deferred compensation plan assets	18,028	18,028	—	—
Available-for-sale debt securities				
Corporate bonds	72,979	—	72,979	—
Municipal fixed-rate bonds	7,583	—	7,583	—
Asset-backed bonds	13,308	—	13,308	—
Mortgage/Agency-backed bonds	9,527	—	9,527	—
U.S. government bonds	21,400	21,400	—	—
Foreign government bonds	2,702	—	2,702	—
Available-for-sale marketable equity securities				
Marketable equity securities – various industries	32,965	32,965	—	—
Available-for-sale securities	178,492	72,393	106,099	—
Total	\$190,476	\$78,880	\$111,596	\$ —

(In thousands)	Fair Value Measurements at December 31, 2016			
	Fair Value	Quoted Prices	Significant Other	Significant Unobservable Inputs

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		in Active Market for Identical Assets (Level 1)	Observable (Level 3) Inputs (Level 2)	
<b>Cash equivalents</b>				
Money market funds	\$6,878	\$6,878	\$ —	\$ —
Commercial Paper	17,222	—	17,222	—
Cash equivalents	24,100	6,878	17,222	—
<b>Available-for-sale securities</b>				
Deferred compensation plan assets	14,596	14,596	—	—
<b>Available-for-sale debt securities</b>				
Corporate bonds	66,412	—	66,412	—
Municipal fixed-rate bonds	11,774	—	11,774	—
Asset-backed bonds	10,206	—	10,206	—
Mortgage/Agency-backed bonds	13,004	—	13,004	—
U.S. government bonds	29,767	29,767	—	—
Foreign government bonds	3,730	—	3,730	—
Variable Rate Demand Notes	11,855	—	11,855	—
<b>Available-for-sale marketable equity securities</b>				
Marketable equity securities – various industries	29,379	29,379	—	—
Available-for-sale securities	190,723	73,742	116,981	—
<b>Total</b>	<b>\$214,823</b>	<b>\$80,620</b>	<b>\$134,203</b>	<b>\$ —</b>

The fair value of our Level 2 securities is calculated using a weighted average market price for each security. Market prices are obtained from a variety of industry standard data providers, security master files from large financial institutions, and other third-party sources. These multiple market prices are used as inputs into a distribution-curve-based algorithm to determine the daily market value of each security.

Our variable rate demand notes have a structure that implies a standard expected market price. The frequent interest rate resets make it reasonable to expect the price to stay at par. These securities are priced at the expected market price.

## 7. DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

We participate in foreign exchange forward contracts in connection with the management of exposure to fluctuations in foreign exchange rates.

### Cash Flow Hedges

Our cash flow hedging activities utilize foreign exchange forward contracts to reduce the risk that movements in exchange rates will adversely affect the net cash flows resulting from the planned purchase of products from foreign suppliers. Purchases of U.S. denominated inventory by our European subsidiary represent our primary exposure. Changes in the fair value of derivatives designated as cash flow hedges are not recognized in current operating results, but are recorded in accumulated other comprehensive income. Amounts related to cash flow hedges are reclassified from accumulated other comprehensive income when the underlying hedged item impacts earnings. This reclassification is recorded in the same line item of the consolidated statements of income as where the effects of the hedged item are recorded, which is cost of sales.

### Undesignated Hedges

We have certain customers and suppliers who are invoiced or pay in a non-functional currency. Changes in the monetary exchange rates may adversely affect our results of operations and financial condition, as outstanding non-functional balances are revalued to the functional currency through profit and loss. When appropriate, we utilize foreign exchange forward contracts to help manage the volatility relating to these valuation exposures. All changes in the fair value of our derivative instruments that do not qualify for or are not designated for hedged accounting transactions are recognized as other income (expense) in the Consolidated Statements of Income.

As of June 30, 2017, we had foreign exchange forward contracts outstanding with notional amounts totaling \$20.0 million (€17.5 million), which hedge a portion of projected inventory purchases expected to be settled in the third and fourth quarters of 2017. We have determined that there was no hedge ineffectiveness for the quarter ended June 30, 2017 related to these contracts.

We do not hold or issue derivative instruments for trading or other speculative purposes. Our derivative instruments are recorded in the Consolidated Balance Sheets at their fair values. Our derivative instruments are not subject to master netting arrangements and are not offset in the Consolidated Balance Sheets.

The fair values of our derivative instruments recorded in the Consolidated Balance Sheet as of June 30, 2017 and December 31, 2016 were as follows:

(In thousands)	Balance Sheet Location	June 30, 2017	December 31, 2016
<b>Derivatives Designated as Hedging Instruments (Level 2):</b>			
Foreign exchange contracts – derivative liabilities	Accounts payable	\$ 610	\$ —
<b>Derivatives Not Designated as Hedging Instruments (Level 2):</b>			
Foreign exchange contracts – derivative assets	Other receivables	—	159
Foreign exchange contracts – derivative liabilities	Accounts payable	352	—
Total derivatives		\$ 962	\$ 159

The change in the fair values of our derivative instruments recorded in the Consolidated Statements of Income during the three and six months ended June 30, 2017 and 2016 were as follows:

(In thousands)	Income Statement Location	Three Months Ended June 30, 2017	Three Months Ended June 30, 2016	Six Months Ended June 30, 2017	Six Months Ended June 30, 2016
<b>Derivatives Not Designated as Hedging Instruments:</b>					
Foreign exchange contracts	Other income (expense)	\$(451)	\$237	\$(485)	\$190

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The change in our derivatives designated as hedging instruments recorded in other comprehensive income (OCI) and reclassified to income during the three and six months ended June 30, 2017 and 2016 were as follows:

(In thousands)	Amount of Gains (Losses) Recognized in OCI on Derivatives Three Months Ended		Location of Gains (Losses) Reclassified from AOCI into Income	Amount of Gains (Losses) Reclassified from AOCI into Income Three Months Ended	
	June 30, 2017	2016		June 30, 2017	2016
<b>Derivatives Designated as Hedging Instruments:</b>					
Foreign exchange contracts	\$ (571 )	\$ —	Cost of Sales	\$ (154 )	\$ —

(In thousands)	Amount of Gains (Losses) Recognized in OCI on Derivatives Six Months Ended		Location of Gains (Losses) Reclassified from AOCI into Income	Amount of Gains (Losses) Reclassified from AOCI into Income Six Months Ended	
	June 30, 2017	2016		June 30, 2017	2016
<b>Derivatives Designated as Hedging Instruments:</b>					
Foreign exchange contracts	\$ (492 )	\$ —	Cost of Sales	\$ (154 )	\$ —

## 8. INVENTORY

At June 30, 2017 and December 31, 2016, inventory consisted of the following:

(In thousands)	June 30, 2017	December 31, 2016
Raw materials	\$42,218	\$ 40,461
Work in process	2,443	4,003
Finished goods	69,334	60,653
Total	\$113,995	\$ 105,117

We establish reserves for estimated excess, obsolete, or unmarketable inventory equal to the difference between the cost of the inventory and the estimated fair value of the inventory based upon assumptions about future demand and

market conditions. At June 30, 2017 and December 31, 2016, raw materials reserves totaled \$15.2 million and \$14.6 million, respectively, and finished goods inventory reserves totaled \$12.7 million and \$10.6 million, respectively.

## 9. GOODWILL AND INTANGIBLE ASSETS

Goodwill, all of which relates to our acquisition of Bluesocket, Inc., was \$3.5 million at June 30, 2017 and December 31, 2016, of which \$3.1 million and \$0.4 million is allocated to our Network Solutions and Services & Support reportable segments, respectively.

We evaluate the carrying value of goodwill during the fourth quarter of each year and between annual evaluations if events occur or circumstances change that would more likely than not reduce the fair value of the reporting unit below its carrying amount. We have elected to first assess the qualitative factors to determine whether it is more likely than not that the fair value of the reporting unit to which the goodwill is assigned is less than its carrying amount as a basis for determining whether it is necessary to perform the two-step impairment test. If we determine that it is more likely than not that its fair value is less than its carrying amount, then the two-step impairment test will be performed. Based on the results of our qualitative assessment in 2016, we concluded that it was not necessary to perform the two-step impairment test. There have been no impairment losses recognized since the acquisition in 2011.

Intangible assets are included in other assets in the accompanying Consolidated Balance Sheets and include intangibles acquired in conjunction with our acquisitions of Bluesocket, Inc. on August 4, 2011, the NSN BBA business on May 4, 2012, and CommScope's active fiber access business on September 13, 2016.

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The following table presents our intangible assets as of June 30, 2017 and December 31, 2016:

(In thousands)	June 30, 2017			December 31, 2016		
	Gross		Net Value	Gross		Net Value
	Value	Accumulated Amortization		Value	Accumulated Amortization	
Customer relationships	\$7,249	\$ (3,765)	\$ 3,484	\$6,899	\$ (3,208)	\$ 3,691
Developed technology	6,650	(5,609)	1,041	6,444	(5,061)	1,383
Intellectual property	2,340	(2,196)	144	2,340	(2,129)	211
Supply agreement	1,400	(1,400)	—	1,400	(544)	856
License	500	(306)	194	500	(113)	387
Patent	500	(54)	446	500	(20)	480
Trade names	370	(310)	60	370	(285)	85
Non-compete	200	(70)	130	200	(26)	174
<b>Total</b>	<b>\$19,209</b>	<b>\$ (13,710)</b>	<b>\$ 5,499</b>	<b>\$18,653</b>	<b>\$ (11,386)</b>	<b>\$ 7,267</b>

Amortization expense, all of which relates to business acquisitions, was \$1.1 million and \$0.4 million for the three months ended June 30, 2017 and 2016 \$1.9 million and \$0.9 million for the six months ended June 30, 2017 and 2016, respectively.

As of June 30, 2017, the estimated future amortization expense of our intangible assets is as follows:

(In thousands)	Amount
Remainder of 2017	\$ 940
2018	1,195
2019	680
2020	644
2021	590
Thereafter	1,450
<b>Total</b>	<b>\$ 5,499</b>

## 10. STOCKHOLDERS' EQUITY

A summary of the changes in stockholders' equity for the six months ended June 30, 2017 is as follows:

(In thousands)	Stockholders' Equity
Balance, December 31, 2016	\$ 479,517
Net income	19,052
Dividend payments	(8,719)
Dividends accrued for unvested restricted stock units	(19)
Net unrealized gains on available-for-sale securities (net of tax)	1,708
Net unrealized losses on cash flow hedges	(338)

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Defined benefit plan adjustments (net of tax)	141
Foreign currency translation adjustment	3,861
Proceeds from stock option exercises	1,722
Purchase of treasury stock	(17,311 )
ASU 2016-09 adoption	10
Stock-based compensation expense	3,739
Balance, June 30, 2017	\$ 483,363

Stock Repurchase Program

Since 1997, our Board of Directors has approved multiple share repurchase programs that have authorized open market repurchase transactions of up to 50.0 million shares of our common stock, which will be implemented through open market or private purchases from time to time as conditions warrant. During the six months ended June 30, 2017, we repurchased 0.9 million shares of our common stock at an average price of \$20.27 per share. As of June 30, 2017, we have the authority to purchase an additional 3.6 million shares of our common stock under the current plans approved by the Board of Directors.



## Stock Option Exercises

We issued 0.1 million shares of treasury stock during the six months ended June 30, 2017 to accommodate employee stock option exercises. The stock options had exercise prices ranging from \$15.29 to \$23.02. We received proceeds totaling \$1.7 million from the exercise of these stock options during the six months ended June 30, 2017.

## Dividend Payments

During the six months ended June 30, 2017, we paid cash dividends as follows (in thousands except per share amounts):

Record Date	Payment Date	Per Share Amount	Total Dividend Paid
February 2, 2017	February 16, 2017	\$ 0.09	\$ 4,369
May 4, 2017	May 18, 2017	\$ 0.09	\$ 4,350

## Other Comprehensive Income

Other comprehensive income consists of unrealized gains (losses) on available-for-sale securities, unrealized gains (losses) on cash flow hedges, reclassification adjustments for amounts included in net income related to impairments of available-for-sale securities, realized gains (losses) on available-for-sale securities, realized gains (losses) on cash flow hedges, and amortization of actuarial gains (losses) related to our defined benefit plan, defined benefit plan adjustments, and foreign currency translation adjustments.

The following tables present the changes in accumulated other comprehensive income, net of tax, by component for the three months ended June 30, 2017 and 2016:

	Three Months Ended June 30, 2017				
	Unrealized				
	Gains				
	(Losses)				
	on				
	Unrealized	Defined	Foreign		
	Available	Benefit	Currency		
	for-Sale	Plan	Adjustments		
	on Cash	Adjustments	Adjustments	Total	
	Flow				
	Securities	Hedges			
(In thousands)					
Beginning balance	\$1,739	\$ 79	\$ (4,962 )	\$ (6,333 )	\$(9,477)
Other comprehensive income (loss) before					
reclassifications	1,222	(571 )	—	2,619	3,270
Amounts reclassified from accumulated other					
comprehensive income	(849 )	154	86	—	(609 )
Net current period other comprehensive income	373	(417 )	86	2,619	2,661

(loss)					
Ending balance	\$2,112	\$ (338 )	\$ (4,876 )	\$ (3,714 )	\$(6,816)

Three Months Ended June 30, 2016  
Unrealized

Gains

(Losses)

on

Available Defined Foreign

for-Sale Benefit Plan Currency

(In thousands)

	Securities	Adjustments	Adjustments	Total
Beginning balance	\$1,677	\$ (3,850 )	\$ (5,778 )	\$(7,951)
Other comprehensive income (loss) before				
reclassifications	481	—	(601 )	(120 )
Amounts reclassified from accumulated other				
comprehensive income	(646 )	22	—	(624 )
Net current period other comprehensive income (loss)	(165 )	22	(601 )	(744 )
Ending balance	\$1,512	\$ (3,828 )	\$ (6,379 )	\$(8,695)

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The following tables present the changes in accumulated other comprehensive income, net of tax, by component for the six months ended June 30, 2017 and 2016:

	Six Months Ended June 30, 2017				
	Unrealized				
	Gains				
	(Losses)				
	on				
	Available	Unrealized	Defined	Foreign	
	for-Sale	(Losses)	Benefit Plan	Currency	
	Flow				
(In thousands)	Securities	Hedges	Adjustments	Adjustments	Total
Beginning balance	\$404	\$ —	\$ (5,017 )	\$ (7,575 )	\$(12,188)
Other comprehensive income (loss) before					
reclassifications	2,842	(492 )	—	3,861	6,211
Amounts reclassified from accumulated other					
comprehensive income	(1,134)	154	141	—	(839 )
Net current period other comprehensive income (loss)	1,708	(338 )	141	3,861	5,372
Ending balance	\$2,112	\$ (338 )	\$ (4,876 )	\$ (3,714 )	\$(6,816 )

	Six Months Ended June 30, 2016				
	Unrealized				
	Gains				
	(Losses)				
	on				
	Available	Defined	Foreign		
	for-Sale	Benefit Plan	Currency		
(In thousands)	Securities	Adjustments	Adjustments	Total	
Beginning balance	\$1,932	\$ (3,895 )	\$ (7,006 )	\$(8,969)	
Other comprehensive income (loss) before					
reclassifications	1,239	—	627	1,866	
Amounts reclassified from accumulated other					
comprehensive income	(1,659)	67	—	(1,592)	

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Net current period other comprehensive income (loss)	(420 )	67	627	274
Ending balance	\$1,512	\$ (3,828 )	\$ (6,379 )	\$ (8,695)

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The following tables present the details of reclassifications out of accumulated other comprehensive income for the three months ended June 30, 2017 and 2016:

(In thousands)	Three Months Ended June 30, 2017	
	Amount	
		Reclassified
		from
		Accumulated
		Other Affected Line Item in the
		Comprehensive Income Statement Where Net
Details about Accumulated Other Comprehensive Income Components	Income	Income Is Presented
Unrealized gains (losses) on available-for-sale securities:		
Net realized gain on sales of securities	\$1,393	Net realized investment gain
Impairment expense	(2 )	Net realized investment gain
Net losses on derivatives designated as hedging instruments	(154 )	Cost of sales
Defined benefit plan adjustments – actuarial losses	(124 )	(1)
Total reclassifications for the period, before tax	1,113	
Tax (expense) benefit	(504 )	
Total reclassifications for the period, net of tax	\$609	

<sup>(1)</sup>Included in the computation of net periodic pension cost. See Note 4 of Notes to Consolidated Financial Statements.

(In thousands)	Three Months Ended June 30, 2016	
	Amount	
		Reclassified
		from
		Accumulated
		Other
		Comprehensive
Details about Accumulated Other Comprehensive Income Components	Income	Income Is Presented
		Statement Where Net

	Income	
Unrealized gains (losses) on available-for-sale securities:		
Net realized gain on sales of securities	\$1,354	Net realized investment gain
Impairment expense	(295 )	Net realized investment gain
Defined benefit plan adjustments – actuarial losses	(33 )	(1)
Total reclassifications for the period, before tax	1,026	
Tax (expense) benefit	(402 )	
Total reclassifications for the period, net of tax	\$624	

<sup>(1)</sup>Included in the computation of net periodic pension cost. See Note 4 of Notes to Consolidated Financial Statements.

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The following tables present the details of reclassifications out of accumulated other comprehensive income for the six months ended June 30, 2017 and 2016:

(In thousands)	Six Months Ended June 30, 2017	
Details about Accumulated Other Comprehensive Income Components	Amount	Affected Line Item in the Statement Where Net Income Is Presented
Unrealized gains (losses) on available-for-sale securities:		
Net realized gain on sales of securities	\$1,965	Net realized investment gain
Impairment expense	(105 )	Net realized investment gain
Net losses on derivatives designated as hedging instruments	(154 )	Cost of sales
Defined benefit plan adjustments – actuarial losses	(204 )	(1)
Total reclassifications for the period, before tax	1,502	
Tax (expense) benefit	(663 )	
Total reclassifications for the period, net of tax	\$839	

<sup>(1)</sup>Included in the computation of net periodic pension cost. See Note 4 of Notes to Consolidated Financial Statements.

(In thousands)	Six Months Ended June 30, 2016	
Details about Accumulated Other Comprehensive Income Components	Amount	Affected Line Item in the Statement Where Net Income Is Presented

	Other	Comprehensive	Income
Unrealized gains (losses) on available-for-sale securities:			
Net realized gain on sales of securities	\$3,115	Net realized investment gain	
Impairment expense	(395 )	Net realized investment gain	
Defined benefit plan adjustments – actuarial losses		(1)	(98 )
Total reclassifications for the period, before tax			2,622
Tax (expense) benefit			(1,030)
Total reclassifications for the period, net of tax			\$ 1,592

<sup>(1)</sup>Included in the computation of net periodic pension cost. See Note 4 of Notes to Consolidated Financial Statements.



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The following table presents the tax effects related to the change in each component of other comprehensive income for the three months ended June 30, 2017 and 2016:

(In thousands)	Three Months Ended June 30, 2017			Three Months Ended June 30, 2016		
	Tax		Net-of-Tax Amount	Tax		Net-of-Tax Amount
	Before-Tax Amount	(Expense) Benefit		Before-Tax Amount	(Expense) Benefit	
Unrealized gains (losses) on available-for-sale securities	\$2,003	\$ (781 )	\$ 1,222	\$789	\$ (308 )	\$ 481
Unrealized gains (losses) on cash flow hedges	(571 )	—	(571 )	—	—	—
Reclassification adjustment for amounts related to available-for-sale investments included in net income	(1,391)	542	(849 )	(1,059)	413	(646 )
Reclassification adjustment for amounts related to cash flow hedges included in net income	154	—	154	—	—	—
Reclassification adjustment for amounts related to defined benefit plan adjustments included in net income	124	(38 )	86	33	(11 )	22
Foreign currency translation adjustment	2,619	—	2,619	(601 )	—	(601 )
Total Other Comprehensive Income (Loss)	\$2,938	\$ (277 )	\$ 2,661	\$ (838 )	\$ 94	\$ (744 )

The following table presents the tax effects related to the change in each component of other comprehensive income for the six months ended June 30, 2017 and 2016:

(In thousands)	Six Months Ended June 30, 2017			Six Months Ended June 30, 2016		
	Tax		Net-of-Tax Amount	Tax		Net-of-Tax Amount
	Before-Tax Amount	(Expense) Benefit		Before-Tax Amount	(Expense) Benefit	
Unrealized gains (losses) on available-for-sale securities	\$4,659	\$ (1,817 )	\$ 2,842	\$2,031	\$ (792 )	\$ 1,239
Unrealized gains (losses) on cash flow hedges	(492 )	—	(492 )	—	—	—

Reclassification adjustment for amounts related to

available-for-sale investments included in net

income	(1,860)	726	(1,134 )	(2,720)	1,061	(1,659 )
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Reclassification adjustment for amounts related to

cash flow hedges included in net income	154	—	154	—	—	—
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Reclassification adjustment for amounts related to

defined benefit plan adjustments included in net

income	204	(63 )	141	98	(31 )	67
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Foreign currency translation adjustment	3,861	—	3,861	627	—	627
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Total Other Comprehensive Income (Loss)	\$6,526	\$ (1,154 )	\$ 5,372	\$36	\$ 238	\$ 274
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## 11. EARNINGS PER SHARE

A summary of the calculation of basic and diluted earnings per share for the three and six months ended June 30, 2017 and 2016 is as follows:

(In thousands, except per share amounts)	Three Months		Six Months Ended	
	Ended June 30, 2017	2016	June 30, 2017	2016
<b>Numerator</b>				
Net income	\$12,401	\$10,228	\$19,052	\$15,242
<b>Denominator</b>				
Weighted average number of shares – basic	48,036	48,831	48,232	49,026
<b>Effect of dilutive securities</b>				
Stock options	279	161	348	138
PSUs, RSUs and restricted stock	98	56	95	54
Weighted average number of shares – diluted	48,413	49,048	48,675	49,218
Net income per share – basic	\$0.26	\$0.21	\$0.40	\$0.31
Net income per share – diluted	\$0.26	\$0.21	\$0.39	\$0.31

Anti-dilutive options to purchase common stock outstanding were excluded from the above calculations. Anti-dilutive options totaled 4.1 million and 5.6 million for the three months ended June 30, 2017 and 2016, respectively, and 4.1 million and 5.8 million for the six months ended June 30, 2017 and 2016, respectively.

## 12. SEGMENT INFORMATION

We operate in two reportable segments: (1) Network Solutions and (2) Services & Support. Network Solutions includes hardware products and next-generation virtualized solutions used in service provider or business networks, as well as prior-generation products. Services & Support includes our suite of ProCloud® managed services, network installation, engineering and maintenance services, and fee-based technical support and equipment repair/replacement plans.

We evaluate the performance of our segments based on gross profit; therefore, selling, general and administrative expenses, research and development expenses, interest and dividend income, interest expense, net realized investment gain/loss, other income/expense and provision for taxes are reported on a company-wide, functional basis only. There are no inter-segment revenues.

The following table presents information about the reported sales and gross profit of our reportable segments for the three and six months ended June 30, 2017 and 2016. We do not produce asset information by reportable segment; therefore, it is not reported.

(In thousands)	Three Months Ended	
	June 30, 2017	June 30, 2016
Sales		

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		Gross Profit		Gross Profit
Network Solutions	\$ 155,543	\$ 75,885	\$ 138,549	\$ 70,705
Services & Support	29,130	8,747	24,152	8,250
Total	\$ 184,673	\$ 84,632	\$ 162,701	\$ 78,955

(In thousands)	Six Months Ended			
	June 30, 2017		June 30, 2016	
	Sales	Gross Profit	Sales	Gross Profit
Network Solutions	\$ 299,140	\$ 142,823	\$ 262,432	\$ 130,515
Services & Support	55,812	15,524	42,473	14,234
Total	\$ 354,952	\$ 158,347	\$ 304,905	\$ 144,749

## Sales by Category

In addition to our reporting segments, we also report revenue for the following three categories – Access & Aggregation, Customer Devices, and Traditional & Other Products.

The table below presents sales information by category for the three and six months ended June 30, 2017 and 2016:

(In thousands)	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2017	2016	2017	2016
Access & Aggregation	\$138,639	\$102,232	\$258,782	\$196,087
Customer Devices	33,833	40,876	70,101	73,229
Traditional & Other Products	12,201	19,593	26,069	35,589
Total	\$184,673	\$162,701	\$354,952	\$304,905

## 13. LIABILITY FOR WARRANTY RETURNS

Our products generally include warranties of 90 days to five years for product defects. We accrue for warranty returns at the time revenue is recognized based on our estimate of the cost to repair or replace the defective products. We engage in extensive product quality programs and processes, including actively monitoring and evaluating the quality of our component suppliers. Our products continue to become more complex in both size and functionality as many of our product offerings migrate from line card applications to total systems. The increasing complexity of our products will cause warranty incidences, when they arise, to be more costly. Our estimates regarding future warranty obligations may change due to product failure rates, material usage, and other rework costs incurred in correcting a product failure. In addition, from time to time, specific warranty accruals may be recorded if unforeseen problems arise. Should our actual experience relative to these factors be worse than our estimates, we will be required to record additional warranty expense. Alternatively, if we provide for more reserves than we require, we will reverse a portion of such provisions in future periods. The liability for warranty obligations totaled \$9.2 million and \$8.5 million at June 30, 2017 and December 31, 2016, respectively. During the three months ended March 31, 2017, we recorded a receivable and a reduction in warranty expense related to a settlement with a third party supplier for a defective component, the impact of which is reflected in the table below. These liabilities are included in accrued expenses in the accompanying Consolidated Balance Sheets.

A summary of warranty expense and write-off activity for the three and six months ended June 30, 2017 and 2016 is as follows:

(In thousands)	Three Months		Six Months	
	Ended		Ended	
	June 30,		June 30,	
	2017	2016	2017	2016
Balance at beginning of period	\$8,988	\$9,042	\$8,548	\$8,739
Plus: Amounts charged to cost and expenses	3,055	1,431	2,314	2,329
Less: Deductions	(2,863)	(1,538)	(1,682)	(2,133)
Balance at end of period	\$9,180	\$8,935	\$9,180	\$8,935

#### 14. COMMITMENTS AND CONTINGENCIES

In the ordinary course of business, we may be subject to various legal proceedings and claims, including employment disputes, patent claims, disputes over contract agreements and other commercial disputes. In some cases, claimants seek damages or other relief, such as royalty payments related to patents, which, if granted, could require significant expenditures. Although the outcome of any claim or litigation can never be certain, it is our opinion that the outcome of all contingencies of which we are currently aware will not materially affect our business, operations, financial condition or cash flows.

We have committed to invest up to an aggregate of \$7.9 million in two private equity funds, and we have contributed \$8.4 million as of June 30, 2017, of which \$7.7 million has been applied to these commitments.

#### 15. SUBSEQUENT EVENTS

On July 18, 2017, we announced that our Board of Directors declared a quarterly cash dividend of \$0.09 per common share to be paid to stockholders of record at the close of business on August 3, 2017. The payment date will be August 17, 2017. The quarterly dividend payment will be approximately \$4.3 million. In July 2003, our Board of Directors elected to begin declaring quarterly dividends on our common stock considering the tax treatment of dividends and adequate levels of Company liquidity.

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

The following discussion should be read in conjunction with the Consolidated Financial Statements and the related notes that appear elsewhere in this document.

### OVERVIEW

ADTRAN, Inc. is a leading global provider of networking and communications equipment. Our solutions enable voice, data, video and Internet communications across a variety of network infrastructures. These solutions are deployed by many of the United States' and the world's largest communications service providers (CSPs), distributed enterprises and small and medium-sized businesses, public and private enterprises, and millions of individual users worldwide.

Our success depends upon our ability to increase unit volume and market share through the introduction of new products and succeeding generations of products having lower selling prices and increased functionality as compared to both the prior generation of a product and to the products of competitors. An important part of our strategy is to reduce the cost of each succeeding product generation and then lower the product's selling price based on the cost savings achieved in order to gain market share and/or improve gross margins. As a part of this strategy, we seek in most instances to be a high-quality, low-cost provider of products in our markets. Our success to date is attributable in large measure to our ability to design our products initially with a view to their subsequent redesign, allowing both increased functionality and reduced manufacturing costs in each succeeding product generation. This strategy enables us to sell succeeding generations of products to existing customers, while increasing our market share by selling these enhanced products to new customers.

We report revenue for the following three categories – Access & Aggregation, Customer Devices, and Traditional & Other Products.

Access & Aggregation solutions are used by CSPs to connect their network infrastructure to their subscribers. This category includes software and hardware-based products and services that aggregate and/or originate access technologies. The portfolio of ADTRAN solutions within this category includes a wide array of modular or fixed physical form factors designed to deliver the best technology and economic fit based on the target subscriber density and environmental conditions.

The Access & Aggregation category includes product and service families such as:

- Total Access® 5000 Series Fiber to the Premises (FTTP) and Fiber to the Node (FTTN) Multi-Service Access Nodes (MSAN)
- iX 5600 Series fiber aggregation and FTTN MSAN
- Fiber to the Distribution Point (FTTdp) G.fast Optical Network Units (ONU)
- GPON, EPON and 10G PON Optical Line Terminals (OLT)
- SDX Fiber Access network elements
- Optical Networking Edge (ONE) aggregation
- iP Digital Subscriber Line Access Multiplexers (DSLAMs)
- Cabinet and Outside-Plant (OSP) enclosures and services
- Network Management and Cloud-based software platforms and applications
- Pluggable optical transceivers (i.e., SFP, SFP+, XFP, QSFP), cables and other miscellaneous materials
- Planning, engineering, program management, maintenance, installation and commissioning services to implement customer network solutions

◆ Other products and services that are generally applicable to Access & Aggregation

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Customer Devices includes our products and services that provide end users access to CSP networks. Our Customer Devices portfolio includes a comprehensive array of service provider and enterprise hardware and software products and services.

The Customer Devices category includes products and services such as:

- Broadband customer premise solutions, including Passive Optical Network (PON) and point-to-point Ethernet Optical Network Terminals (ONTs)
- Radio Frequency over Glass (RFoG) MicroNodes
- Residential and business gateways
  - Wi-Fi access points and associated powering and switching infrastructure
- enterprise Session Border Controllers (eSBC)
- Branch office and access routers
  - Carrier Ethernet services termination devices
- VoIP media gateways
- ProServices pre-sale and post-sale technical support
- Planning, engineering, program management, maintenance, installation and commissioning services to implement the customer devices solutions into consumer, small business and enterprise locations
- Other products and services that are generally applicable to customer devices

Traditional & Other Products generally includes a mix of prior generation technologies' products and services, as well as other products and services that do not fit within the Access & Aggregation or Customer Devices categories.

The Traditional & Other Products category includes products and services such as:

- Time Division Multiplexed (TDM) and Asynchronous Transfer Mode (ATM) based aggregation systems and customer devices
  - HDSL, ADSL and other mature technologies used to deliver business and residential services over the CSP access and customer networks
  - Other products and services that do not fit within the Access & Aggregation and Customer Devices categories
- See Note 12 of Notes to Consolidated Financial Statements in this report for further information regarding these product categories.

Sales were \$184.7 million and \$355.0 million for the three and six months ended June 30, 2017, compared to \$162.7 million and \$304.9 million for the three and six months ended June 30, 2016. Our gross margin decreased to 45.8% and 44.6% for the three and six months ended June 30, 2017, from 48.5% and 47.5% for the three and six months ended June 30, 2016. Our operating income margin decreased to 8.9% and 6.6% for the three and six months ended June 30, 2017, from 9.1% and 6.7% for the three and six months ended June 30, 2016. Net income was \$12.4 million and \$19.1 million for the three and six months ended June 30, 2017, compared to \$10.2 million and \$15.2 million for the three and six months ended June 30, 2016. Our effective tax rate decreased to 30.6% and 27.3% for the three and six months ended June 30, 2017, from 37.8% and 37.9% for the three and six months ended June 30, 2016. Earnings per share, assuming dilution, were \$0.26 and \$0.39 for the three and six months ended June 30, 2017, compared to \$0.21 and \$0.31 for the three and six months ended June 30, 2016.

Our operating results have fluctuated on a quarterly basis in the past, and may vary significantly in future periods due to a number of factors, including customer order activity and backlog. Backlog levels vary because of seasonal trends, the timing of customer projects and other factors that affect customer order lead times. Many of our customers require prompt delivery of products. This requires us to maintain sufficient inventory levels to satisfy anticipated customer demand. If near-term demand for our products declines, or if potential sales in any quarter do not occur as anticipated, our financial results could be adversely affected. Operating expenses are relatively fixed in the short term; therefore, a

shortfall in quarterly revenues could significantly impact our financial results in a given quarter.

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Our operating results may also fluctuate as a result of a number of other factors, including a decline in general economic and market conditions, foreign currency exchange rate movements, increased competition, customer order patterns, changes in product and services mix, timing differences between price decreases and product cost reductions, product warranty returns, expediting costs and announcements of new products by us or our competitors. Additionally, maintaining sufficient inventory levels to assure prompt delivery of our products increases the amount of inventory that may become obsolete and increases the risk that the obsolescence of this inventory may have an adverse effect on our business and operating results. Also, not maintaining sufficient inventory levels to assure prompt delivery of our products may cause us to incur expediting costs to meet customer delivery requirements, which may negatively impact our operating results in a given quarter.

Accordingly, our historical financial performance is not necessarily a meaningful indicator of future results, and, in general, management expects that our financial results may vary from period to period. Factors that could materially affect our business, financial condition or operating results are included in Item 1A of Part I in our most recent Annual Report on Form 10-K for the year ended December 31, 2016, filed on February 24, 2017 with the SEC.

#### CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our critical accounting policies and estimates have not changed significantly from those detailed in our most recent Annual Report on Form 10-K for the year ended December 31, 2016, filed on February 24, 2017 with the SEC.

#### EFFECT OF RECENT ACCOUNTING PRONOUNCEMENTS

See Note 1 of Notes to Consolidated Financial Statements in Item 1 of this Form 10-Q for a full description of recent accounting pronouncements, including the expected dates of adoption and estimated effects on results of operations and financial condition, which is incorporated herein by reference.

#### RESULTS OF OPERATIONS – THREE AND SIX MONTHS ENDED JUNE 30, 2017 COMPARED TO THREE AND SIX MONTHS ENDED JUNE 30, 2016

##### SALES

Our sales increased 13.5% from \$162.7 million in the three months ended June 30, 2016 to \$184.7 million in the three months ended June 30, 2017, and increased 16.4% from \$304.9 million in the six months ended June 30, 2016 to \$355.0 million in the six months ended June 30, 2017. The increase in sales for the three months ended June 30, 2017 is primarily attributable to a \$36.4 million increase in sales of our Access & Aggregation products, partially offset by a \$7.4 million decrease in sales of our Traditional & Other Products and a \$7.0 million decrease in sales of our Customer Devices products. The increase in sales for the six months ended June 30, 2017 is primarily attributable to a \$62.7 million increase in sales of our Access & Aggregation products, partially offset by a \$9.5 million decrease in sales of our Traditional & Other Products and a \$3.1 million decrease in sales of our Customer Devices products.

Network Solutions sales increased 12.3% from \$138.5 million in the three months ended June 30, 2016 to \$155.5 million in the three months ended June 30, 2017, and increased 14.0% from \$262.4 million in the six months ended June 30, 2016 to \$299.1 million in the six months ended June 30, 2017. The increase in sales for the three and six months ended June 30, 2017 is primarily attributable to an increase in sales of Access & Aggregation products, partially offset by a decrease in sales of Customer Devices products and Traditional & Other Products. The increase in sales of our Access & Aggregation products for the three and six months ended June 30, 2017 is primarily attributable to increased VDSL2 vectoring product sales in the U.S. and European carrier markets. The decrease in sales of our Customer Devices products is primarily attributable to decreased EFM NTE product sales, which were primarily impacted by an accelerated Ethernet infrastructure build that occurred in the second quarter of 2016. While we expect

that revenues from Traditional & Other Products will continue to decline over time, these revenues may fluctuate and continue for years because of the time required for our customers to transition to newer technologies.

Services & Support sales increased 20.6% from \$24.2 million in the three months ended June 30, 2016 to \$29.1 million in the three months ended June 30, 2017, and increased 31.4% from \$42.5 million in the six months ended June 30, 2016 to \$55.8 million in the six months ended June 30, 2017. The increase in sales for the three and six months ended June 30, 2017 is primarily attributable to an increase in network installation services for Access & Aggregation products.

International sales, which are included in the Network Solutions and Services & Support amounts discussed above, increased 30.5% from \$29.1 million in the three months ended June 30, 2016 to \$38.0 million in the three months ended June 30, 2017, and increased 62.0% from \$54.9 million in the six months ended June 30, 2016 to \$89.0 million in the six months ended June 30, 2017. International sales, as a percentage of total sales, increased from 17.9% and 18.0% for the three and six months ended June 30, 2016, to 20.6% and 25.1% for the three and six months ended June 30, 2017. Our international revenues are affected to a great extent by the timing of network upgrade projects at our larger European customers and by changes in foreign exchange rates in territories in which we sell our products and services. In first quarter 2017, international network upgrades resumed; whereas, in 2016 our largest European customer focused on completing network upgrade activities in regions outside of our footprint with them.

## COST OF SALES

As a percentage of sales, cost of sales increased from 51.5% in the three months ended June 30, 2016 to 54.2% in the three months ended June 30, 2017, and increased from 52.5% in the six months ended June 30, 2016 to 55.4% in the six months ended June 30, 2017. The increase in cost of sales as a percentage of sales for the three months ended June 30, 2017 is primarily attributable to a regional revenue shift, customer and product mix, services and support mix and an increase in warranty expense. The increase in cost of sales as a percentage of sales for the six months ended June 30, 2017 is primarily attributable to a regional revenue shift, customer and product mix and services and support mix.

Network Solutions cost of sales, as a percent of that segment's sales, increased from 49.0% in the three months ended June 30, 2016 to 51.2% in the three months ended June 30, 2017, and increased from 50.3% in the six months ended June 30, 2016 to 52.3% in the six months ended June 30, 2017. The increase in cost of sales as a percentage of sales for the three months ended June 30, 2017 is primarily attributable to a regional revenue shift, customer and product mix and an increase in warranty expense. The increase in cost of sales as a percentage of sales for the six months ended June 30, 2017 is primarily attributable to a regional revenue shift and customer and product mix.

Services & Support cost of sales, as a percent of that segment's sales, increased from 65.8% in the three months ended June 30, 2016 to 70.0% in the three months ended June 30, 2017, and increased from 66.5% in the six months ended June 30, 2016 to 72.2% in the six months ended June 30, 2017. The increase in cost of sales as a percentage of sales for the three and six months ended June 30, 2017 is primarily attributable to an increase in network installation services during 2017, which have higher costs, as opposed to a greater mix of maintenance and support services, which have lower costs.

An important part of our strategy is to reduce the product cost of each succeeding product generation and then to lower the product's price based on the cost savings achieved. This may cause variations in our gross profit percentage due to timing differences between the recognition of cost reductions and the lowering of product selling prices.

## SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Selling, general and administrative expenses increased 5.5% from \$32.9 million in the three months ended June 30, 2016 to \$34.7 million in the three months ended June 30, 2017, and increased 9.1% from \$63.7 million in the six months ended June 30, 2016 to \$69.5 million in the six months ended June 30, 2017. The increase in selling, general and administrative expenses for the three months ended June 30, 2017 is primarily attributable to increases in deferred compensation expense and ERP implementation expenses. The increase in selling, general and administrative expenses for the six months ended June 30, 2017 is primarily attributable to increases in ERP implementation expenses, deferred compensation expense, travel expense and performance and equity-based compensation expense, partially offset by a decrease in commission expense.

As a percentage of sales, selling, general and administrative expenses decreased from 20.2% in the three months ended June 30, 2016 to 18.8% in the three months ended June 30, 2017, and decreased from 20.9% in the six months ended June 30, 2016 to 19.6% in the six months ended June 30, 2017. Selling, general and administrative expenses as a percentage of sales may fluctuate whenever there is a significant fluctuation in revenues for the periods being compared.

## RESEARCH AND DEVELOPMENT EXPENSES

Research and development expenses increased 7.1% from \$31.3 million in the three months ended June 30, 2016 to \$33.5 million in the three months ended June 30, 2017, and increased 7.7% from \$60.8 million in the six months ended June 30, 2016 to \$65.4 million in the six months ended June 30, 2017. The increase in research and development expenses for the three months ended June 30, 2017 is primarily attributable to an increase in labor and engineering materials related to customer specific projects and amortization of intangibles acquired in the third quarter of 2016. The increase in research and development expenses for the six months ended June 30, 2017 is primarily attributable to an increase in amortization of intangibles acquired in the third quarter of 2016, labor and engineering materials cost related to customer specific projects and contract services.

As a percentage of sales, research and development expenses decreased from 19.2% in the three months ended June 30, 2016 to 18.1% in the three months ended June 30, 2017, and decreased from 19.9% in the six months ended June 30, 2016 to 18.4% in the six months ended June 30, 2017. Research and development expenses as a percentage of sales will fluctuate whenever there are incremental product development activities or a significant fluctuation in revenues for the periods being compared.

We expect to continue to incur research and development expenses in connection with our new and existing products and our expansion into international markets. We continually evaluate new product opportunities and engage in intensive research and product development efforts which provides for new product development, enhancement of existing products and product cost reductions. We may incur significant research and development expenses prior to the receipt of revenues from a major new product group.

## INTEREST AND DIVIDEND INCOME

Interest and dividend income increased 4.9% from \$0.9 million in the three months ended June 30, 2016 to \$1.0 million in the three months ended June 30, 2017, and increased 6.9% from \$1.8 million in the six months ended June 30, 2016 to \$1.9 million in the six months ended June 30, 2017. The increase in interest and dividend income for the three and six months ended June 30, 2017 is primarily attributable to an increase in the rate of return on fixed income investments.

## INTEREST EXPENSE

Interest expense, which is primarily related to our taxable revenue bond, remained constant at \$0.1 million in the three months ended June 30, 2016 and 2017, and \$0.3 million in the six months ended June 30, 2016 and 2017, as we had no substantial change in our fixed-rate borrowing. See “Liquidity and Capital Resources” below for additional information on our revenue bond.

## NET REALIZED INVESTMENT GAIN

Net realized investment gains increased 25.2% from \$1.1 million in the three months ended June 30, 2016 to \$1.4 million in the three months ended June 30, 2017, and decreased 34.5% from \$2.8 million in the six months ended June 30, 2016 to \$1.9 million in the six months ended June 30, 2017. The increase in realized investment gains for the three months ended June 30, 2017 is primarily attributable to increased gains on our deferred compensation plans, partially offset by decreased gains from the sale of equity securities. The decrease in realized investment gains for the six months ended June 30, 2017 is primarily attributable to decreased gains from the sale of equity securities, partially offset by increased gains on our deferred compensation plans. See “Investing Activities” in “Liquidity and Capital Resources” below for additional information.

## OTHER INCOME (EXPENSE), NET

Other income (expense), net, comprised primarily of miscellaneous income, gains and losses on foreign currency transactions, gains and losses on foreign exchange forward contracts, investment account management fees, and scrap raw material sales, increased 220.3% from \$0.3 million of expense in the three months ended June 30, 2016 to \$0.8 million of expense in the three months ended June 30, 2017, and increased 470.5% from \$0.1 million of expense in the six months ended June 30, 2016 to \$0.8 million of expense in the six months ended June 30, 2017. The increase in other expense for the three and six months ended June 30, 2017 is primarily attributable to increased losses on our foreign exchange contracts.

## INCOME TAXES

Our effective tax rate decreased from 37.9% in the six months ended June 30, 2016 to 27.3% in the six months ended June 30, 2017. The decrease in the effective tax rate between the two periods is primarily attributable to a 6.3% effective rate reduction due to a greater mix of international revenues and a 3.2% effective rate reduction for a

provision-to-return adjustment related to the assignment of research and development expenditures to specific company engineering locations.

## NET INCOME

As a result of the above factors, net income increased \$2.2 million from \$10.2 million in the three months ended June 30, 2016 to \$12.4 million in the three months ended June 30, 2017, and increased \$3.8 million from \$15.2 million in the six month ended June 30, 2016 to \$19.1 million in the six months ended June 30, 2017.

As a percentage of sales, net income increased from 6.3% in the three months ended June 30, 2016 to 6.7% in the three months ended June 30, 2017, and increased from 5.0% in the six months ended June 30, 2016 to 5.4% in the six months ended June 30, 2017.

## LIQUIDITY AND CAPITAL RESOURCES

### Liquidity

We intend to finance our operations with cash flow from operations. We have used, and expect to continue to use, the cash generated from operations for working capital, purchases of treasury stock, shareholder dividends, and other general corporate purposes, including (i) product development activities to enhance our existing products and develop new products and (ii) expansion of sales and marketing activities. We believe our cash and cash equivalents, investments and cash generated from operations to be adequate to meet our operating and capital needs for at least the next 12 months.



At June 30, 2017, cash on hand was \$88.8 million and short-term investments were \$47.3 million, which resulted in available short-term liquidity of \$136.1 million, of which \$56.9 million was held by our foreign subsidiaries. At December 31, 2016, cash on hand was \$79.9 million and short-term investments were \$43.2 million, which resulted in available short-term liquidity of \$123.1 million, of which \$42.1 million was held by our foreign subsidiaries. We intend to permanently reinvest these funds outside the U.S. and our current business plans do not indicate a need to repatriate to fund domestic operations. The increase in short-term liquidity from December 31, 2016 to June 30, 2017 is primarily attributable to shifts among available investment option tenures to provide funds for our short-term cash needs.

### Operating Activities

Our working capital, which consists of current assets less current liabilities, increased 9.2% from \$226.4 million as of December 31, 2016 to \$247.2 million as of June 30, 2017, and our current ratio, defined as current assets divided by current liabilities, increased from 2.79 as of December 31, 2016 to 3.04 as of June 30, 2017. The increase in our working capital and current ratio is primarily attributable to an increase in inventory and prepaid expenses and other current assets and a decrease in accounts payable and accrued wages and benefits, partially offset by a decrease in accounts receivable and an increase in income tax payable. The quick ratio, defined as cash, cash equivalents, short-term investments, and net accounts receivable, divided by current liabilities, increased from 1.70 as of December 31, 2016 to 1.79 as of June 30, 2017. The increase in the quick ratio is primarily attributable to a decrease in accounts payable and accrued wages and benefits, partially offset by an increase in income tax payable.

Accounts receivable decreased 13.5% from \$92.3 million at December 31, 2016 to \$79.9 million at June 30, 2017. We had no allowance for doubtful accounts at December 31, 2016 or June 30, 2017. Quarterly accounts receivable days sales outstanding (DSO) decreased from 52 days as of December 31, 2016 to 39 days as of June 30, 2017. The change in net accounts receivable is due to changes in customer mix and the timing of sales and collections during the quarter. Certain international customers can have longer payment terms than U.S. customers. Other receivables decreased from \$15.1 million at December 31, 2016 to \$14.6 million at June 30, 2017. The decrease in other receivables is primarily attributable to the timing of filing returns and collections of VAT receivables in our international subsidiaries. Other receivables will also fluctuate due to the timing of shipments and collections for materials supplied to our contract manufacturers during the quarter.

Quarterly inventory turnover decreased from 3.67 turns as of December 31, 2016 to 3.53 turns at June 30, 2017. Inventory increased 8.4% from December 31, 2016 to June 30, 2017. The increase in inventory at June 30, 2017 is primarily attributable to customer specific projects. We expect inventory levels to fluctuate as we attempt to maintain sufficient inventory in response to services activity and seasonal cycles of our business, ensuring competitive lead times while managing the risk of inventory obsolescence that may occur due to rapidly changing technology and customer demand.

Accounts payable decreased 14.5% from \$77.3 million at December 31, 2016 to \$66.2 million at June 30, 2017. Accounts payable will fluctuate due to variations in the timing of the receipt of supplies, inventory and services and our subsequent payments for these purchases.

### Investing Activities

Capital expenditures totaled approximately \$7.5 million and \$6.7 million for the six months ended June 30, 2017 and 2016, respectively. These expenditures were primarily used to purchase computer hardware, software, manufacturing and test equipment, and building improvements.

Our combined short-term and long-term investments decreased \$12.3 million from \$219.3 million at December 31, 2016 to \$207.0 million at June 30, 2017. This decrease reflects our cash needs for capital expenditures, purchases of treasury stock, and shareholder dividends partially offset by funds available for investment provided by our operating activities and stock option exercises by our employees, as well as net realized and unrealized gains and losses and amortization of net premiums on our combined investments.

We invest all available cash not required for immediate use in operations primarily in securities that we believe bear minimal risk of loss. At June 30, 2017 these investments included corporate bonds of \$73.0 million, municipal fixed-rate bonds of \$7.6 million, asset-backed bonds of \$13.3 million, mortgage/agency-backed bonds of \$9.5 million, U.S. government bonds of \$21.4 million, and foreign government bonds of \$2.7 million. At December 31, 2016, these investments included corporate bonds of \$66.4 million, municipal fixed-rate bonds of \$11.8 million, asset-backed bonds of \$10.2 million, mortgage/agency-backed bonds of \$13.0 million, U.S. government bonds of \$29.8 million, foreign government bonds of \$3.7 million and variable rate demand notes of \$11.9 million. As of June 30, 2017, our corporate bonds, municipal fixed-rate bonds, asset-backed bonds, mortgage/agency-backed bonds, U.S. government bonds, and foreign government bonds were classified as available-for-sale and had a combined duration of 0.9 years with an average Standard & Poor's credit rating of A+. Because our bond portfolio has a high quality rating and contractual maturities of a short duration, we are able to obtain prices for these bonds derived from observable market inputs, or for similar securities traded in an active market, on a daily basis.

Our long-term investments decreased 9.4% from \$176.1 million at December 31, 2016 to \$159.6 million at June 30, 2017. Long-term investments at June 30, 2017 and December 31, 2016 included an investment in a certificate of deposit of \$27.8 million, which serves as collateral for our revenue bond. See “Debt” below for additional information. We have various equity investments included in long-term investments at a cost of \$31.7 million and \$30.6 million, and with a fair value of \$33.0 million and \$29.4 million, at June 30, 2017 and December 31, 2016, respectively.

Long-term investments at June 30, 2017 and December 31, 2016 also included \$18.0 million and \$14.6 million, respectively, related to our deferred compensation plans, and \$0.7 million and \$0.8 million, respectively, of other investments carried at cost, consisting of interests in two private equity funds and an investment in a privately held telecommunications equipment manufacturer.

We review our investment portfolio for potential “other-than-temporary” declines in value on an individual investment basis. We assess, on a quarterly basis, significant declines in value which may be considered other-than-temporary and, if necessary, recognize and record the appropriate charge to write-down the carrying value of such investments. In making this assessment, we take into consideration qualitative and quantitative information, including but not limited to the following: the magnitude and duration of historical declines in market prices, credit rating activity, assessments of liquidity, public filings, and statements made by the issuer. We generally begin our identification of potential other-than-temporary impairments by reviewing any security with a fair value that has declined from its original or adjusted cost basis by 25% or more for six or more consecutive months. We then evaluate the individual security based on the previously identified factors to determine the amount of the write-down, if any. For the three and six months ended June 30, 2017 and 2016, other-than-temporary impairment charges were not significant.

## Financing Activities

### Dividends

In July 2003, our Board of Directors elected to begin declaring quarterly dividends on our common stock considering the tax treatment of dividends and adequate levels of Company liquidity. During the six months ended June 30, 2017, we paid dividends totaling \$8.7 million.

### Debt

We have amounts outstanding under loans made pursuant to an Alabama State Industrial Development Authority revenue bond (the Bond) which totaled \$27.8 million at June 30, 2017 and December 31, 2016. At June 30, 2017, the estimated fair value of the Bond was approximately \$28.0 million, based on a debt security with a comparable interest rate and maturity and a Standard & Poor’s credit rating of AAA. Included in long-term investments are restricted funds in the amount of \$27.8 million at June 30, 2017 and December 31, 2016, which is a collateral deposit against the principal amount of the Bond. We have the right to set-off the balance of the Bond with the collateral deposit in order to reduce the balance of the indebtedness. The Bond matures on January 1, 2020, and bears interest at the rate of 2% per annum. In conjunction with this program, we are eligible to receive certain economic incentives from the state of Alabama that reduce the amount of payroll withholdings we are required to remit to the state for those employment positions that qualify under this program. We are required to make payments in the amounts necessary to pay the interest on the amounts currently outstanding. It is our intent to make annual principal payments in addition to the interest amounts that are due. In connection with this decision, \$1.0 million of the Bond has been classified as a current liability in accounts payable in the Consolidated Balance Sheet at June 30, 2017.

### Stock Repurchase Program

Since 1997, our Board of Directors has approved multiple share repurchase programs that have authorized open market repurchase transactions of up to 50.0 million shares of our common stock, which will be implemented through open market or private purchases from time to time as conditions warrant. During the six months ended June 30, 2017, we repurchased 0.9 million shares of our common stock at an average price of \$20.27 per share. As of June 30, 2017, we have the authority to purchase an additional 3.6 million shares of our common stock under the current plans approved by the Board of Directors.

#### Stock Option Exercises

We issued 0.1 million shares of treasury stock during the six months ended June 30, 2017 to accommodate employee stock option exercises. The stock options had exercise prices ranging from \$15.29 to \$23.02. We received proceeds totaling \$1.7 million from the exercise of these stock options during the six months ended June 30, 2017.

Off-Balance Sheet Arrangements and Contractual Obligations

We do not have off-balance sheet financing arrangements and have not engaged in any related party transactions or arrangements with unconsolidated entities or other persons that are reasonably likely to materially affect liquidity or the availability of or requirements for capital resources. During the six months ended June 30, 2017, there have been no material changes in contractual obligations and commercial commitments from those discussed in our most recent Annual Report on Form 10-K for the year ended December 31, 2016 filed on February 24, 2017 with the SEC.

We have committed to invest up to an aggregate of \$7.9 million in two private equity funds, and we have contributed \$8.4 million as of June 30, 2017, of which \$7.7 million has been applied to these commitments.

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

We are exposed to financial market risks, including changes in interest rates, foreign currency rates and prices of marketable equity and fixed-income securities. The primary objective of the large majority of our investment activities is to preserve principal while at the same time achieving appropriate yields without significantly increasing risk. To achieve this objective, a majority of our marketable securities are investment grade corporate bonds, municipal fixed-rate bonds, asset-backed bonds, mortgage/agency backed bonds, U.S. and foreign government bonds and municipal money market instruments denominated in U.S. dollars. Our investment policy provides limitations for issuer concentration, which limits, at the time of purchase, the concentration in any one issuer to 5% of the market value of our total investment portfolio.

We maintain depository investments with certain financial institutions. Although these depository investments may exceed government insured depository limits, we have evaluated the credit worthiness of these financial institutions, and determined the risk of material financial loss due to exposure of such credit risk to be minimal. As of June 30, 2017, \$85.6 million of our cash and cash equivalents, primarily certain domestic money market funds, commercial paper and foreign depository accounts, were in excess of government provided insured depository limits.

As of June 30, 2017, approximately \$148.2 million of our cash and investments may be directly affected by changes in interest rates. We have performed a hypothetical sensitivity analysis assuming market interest rates increase or decrease by 50 basis points (bps) for an entire year, while all other variables remain constant. At June 30, 2017, we held \$58.5 million of cash and variable-rate investments where a change in interest rates would impact our interest income. A hypothetical 50 bps decline in interest rates as of June 30, 2017 would reduce annualized interest income on our cash and investments by approximately \$0.3 million. In addition, we held \$89.7 million of fixed-rate bonds whose fair values may be directly affected by a change in interest rates. A hypothetical 50 bps increase in interest rates as of June 30, 2017 would reduce the fair value of our fixed-rate bonds by approximately \$0.4 million.

As of June 30, 2016, approximately \$166.1 million of our cash and investments was subject to being directly affected by changes in interest rates. We have performed a hypothetical sensitivity analysis assuming market interest rates increase or decrease by 50 bps for the entire year, while all other variables remain constant. A hypothetical 50 bps decline in interest rates as of June 30, 2016 would have reduced annualized interest income on our cash, money market instruments and variable rate demand notes by approximately \$0.3 million. In addition, a hypothetical 50 bps increase in interest rates as of June 30, 2016 would have reduced the fair value of our municipal fixed-rate bonds and corporate bonds by approximately \$0.5 million.

We are exposed to changes in foreign currency exchange rates to the extent that such changes affect our revenue and gross margin on revenue derived from some international customers, expenses, and assets and liabilities held in non-functional currencies related to our foreign subsidiaries. Our primary exposures to foreign currency exchange rates are with our German subsidiary, whose functional currency is the Euro, our Australian subsidiary, whose functional currency is the Australian dollar, and our Mexican subsidiary, whose functional currency is the United States dollar. We are exposed to changes in foreign currency exchange rates to the extent of our German subsidiary's use of contract manufacturers and raw material suppliers whom we predominately pay in U.S. dollars. We may establish cash flow hedges utilizing foreign exchange forward contracts to reduce the risk that movements in exchange rates will adversely affect the net cash flows resulting from the planned purchase of products from foreign suppliers. As a result, changes in currency exchange rates could cause variations in gross margin in the products that we sell in the EMEA region.

We have certain customers and suppliers who are invoiced or pay in a non-functional currency. Changes in the monetary exchange rates may adversely affect our results of operations and financial condition, as outstanding non-functional balances are revalued to the functional currency through profit and loss. When appropriate, we utilize foreign exchange forward contracts to help manage the volatility relating to these valuation exposures. All changes in the fair value of our derivative instruments that do not qualify for or are not designated for hedged accounting

transactions are recognized as other income (expense) in the Consolidated Statements of Income. We do not hold or issue derivative instruments for trading or other speculative purposes. All non-functional currencies billed would result in a combined hypothetical gain or loss of \$24 thousand if the U.S. dollar weakened or strengthened 10% against the billing currencies. Any gain or loss would be partially mitigated by these derivative instruments.

As of June 30, 2017, we had no material contracts, other than accounts receivable and accounts payable, denominated in foreign currencies. As of June 30, 2017, we had forward contracts outstanding with notional amounts totaling \$20.0 million (€17.5 million).

For further information about the fair value of our available-for-sale investments and our derivative and hedging activities as of June 30, 2017, see Notes 6 and 7 of Notes to Consolidated Financial Statements.

ITEM 4. CONTROLS AND PROCEDURES

(a) Evaluation of disclosure controls and procedures. Our Chief Executive Officer and Chief Financial Officer are responsible for establishing and maintaining "disclosure controls and procedures" (as defined in the Securities Exchange Act of 1934 Rules 13a-15(e) and 15d-15(e)) for ADTRAN. Our Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of our disclosure controls and procedures as of the end of the period covered by this quarterly report, have concluded that our disclosure controls and procedures are effective.

(b) Changes in internal control over financial reporting. There were no changes in our internal control over financial reporting that occurred during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.



## PART II. OTHER INFORMATION

## ITEM 1A. RISK FACTORS

A list of factors that could materially affect our business, financial condition or operating results is described in Part I, Item 1A, “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2016. There have been no material changes to our risk factors since our Annual Report on Form 10-K for the year ended December 31, 2016.

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

The following table sets forth repurchases of our common stock for the months indicated:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of	Maximum Number
			Shares Purchased as Part of Publicly Announced Plans or Programs	of Shares that May Yet Be Purchased Under the Plans or Programs
April 1, 2017 – April 30, 2017	36,371	\$ 19.89	36,371	4,119,245
May 1, 2017 – May 31, 2017	558,476	\$ 19.75	558,476	3,560,769
June 1, 2017 – June 30, 2017	—	\$ —	—	3,560,769
Total	594,847		594,847	

On July 14, 2015, our Board of Directors authorized the repurchase of an additional 5.0 million shares of our common stock (bringing the total shares authorized for repurchase to 50.0 million). This authorization will be implemented through open market or private purchases from time to time as conditions warrant.

ITEM 6. EXHIBITS

Exhibits.

Exhibit No.	Description
31	Rule 13a-14(a)/15d-14(a) Certifications
32	Section 1350 Certifications
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

SIGNATURE

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.

ADTRAN, Inc.

(Registrant)

Date: August 4, 2017 /s/ Roger D. Shannon  
Roger D. Shannon  
Senior Vice President of Finance,  
Chief Financial Officer,  
Corporate Treasurer and Secretary  
(Principal Financial Officer)

EXHIBIT INDEX

Exhibit No.	Description
31	Rule 13a-14(a)/15d-14(a) Certifications
32	Section 1350 Certifications
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document