ADTRAN INC
Form 10-Q
May 09, 2018

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 March 31, 2018

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.)
901 Explorer Boulevard	35806-2807

Huntsville, Alabama
(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 April 24, 2018, the registrant had 47,914,242 shares of common stock, $0.01 par value per share, outstanding.

Explanatory Note

On April 17, 2018, ADTRAN, Inc. released earnings that did not adequately reflect the adoption of ASU 2016-01. The financial statements included in this Form 10-Q fully reflect the adoption of ASU 2016-01 and the treatment under that standard of net unrecognized investment gain of $3.2 million at January 1,2018. The primary impact of this change was a decrease in investment income of $2.1 million, an increase in tax benefit of $0.4 million and an increase in loss per share of $(0.03) when compared to the original earnings release.

ADTRAN, Inc.

Quarterly Report on Form 10-Q

For the three months ended March 31, 2018

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FORWARD LOOKING STATEMENTS

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 cau 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, 2017 filed on February 23, 2018 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.

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

ADTRAN, INC.

CONSOLIDATED BALANCE SHEETS

(Unaudited)

(In thousands, except per share amounts)

	March 31, 2018	December 31, 2017
ASSETS		
Current Assets		
Cash and cash equivalents	$82,623	$ 86,433
Short-term investments	16,402	16,129
Accounts receivable, less allowance for doubtful accounts of $— at March 31, 2018 and December 31, 2017	80,883	144,150
Other receivables	35,124	26,578
Inventory, net	120,021	122,542
Prepaid expenses and other current assets	9,693	17,282
Total Current Assets	344,746	413,114
Property, plant and equipment, net	83,875	85,079
Deferred tax assets, net	21,427	23,428
Goodwill	3,492	3,492
Other assets	32,635	13,725
Long-term investments	156,472	130,256
Total Assets	$642,647	$ 669,094
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Accounts payable	$50,653	$ 60,632
Unearned revenue	13,948	13,070
Accrued expenses	13,826	13,232
Accrued wages and benefits	15,863	15,948
Income tax payable	8,277	3,936
Total Current Liabilities	102,567	106,818
Non-current unearned revenue	4,154	4,556
Other non-current liabilities	34,590	34,209
Bonds payable	25,600	25,600
Total Liabilities	166,911	171,183
Commitments and contingencies (see Note 15)		
Stockholders' Equity		
Common stock, par value $0.01 per share; 200,000 shares authorized; 79,652 shares issued and 47,914 shares outstanding at March 31, 2018 and 79,652 shares issued and 48,485 shares outstanding at December 31, 2017	797	797

Additional paid-in capital	262,333	260,515
Accumulated other comprehensive loss	(5,803)	(3,295)
Retained earnings	909,611	922,178
Less treasury stock at cost: 31,738 and 31,167 shares at March 31, 2018 and December 31, 2017, respectively	(691,202)	(682,284)
Total Stockholders' Equity	475,736	497,911
Total Liabilities and Stockholders' Equity	$642,647	$ 669,094

See notes to consolidated financial statements

ADTRAN, INC.

CONSOLIDATED STATEMENTS OF INCOME

(Unaudited)

(In thousands, except per share amounts)

	Three Months Ended March 31,	
	2018	2017
Sales		
Products	$105,253	$143,597
Services	15,553	26,682
Total Sales	120,806	170,279
Cost of Sales		
Products	68,612	76,664
Services	12,461	19,906
Total Cost of Sales	81,073	96,570
Gross Profit	39,733	73,709
Selling, general and administrative expenses	33,531	34,789
Research and development expenses	32,849	31,971
Operating Income (Loss)	(26,647)	6,949
Interest and dividend income	866	933
Interest expense	(132)	(141)
Net realized investment gain	(97)	470
Other income (expense), net	(57)	134
Gain on bargain purchase of a business	11,322	—
Income (loss) before provision for income taxes	(14,745)	8,345
(Provision) benefit for income taxes	3,931	(1,694)
Net Income (Loss)	$(10,814)	$6,651
Weighted average shares outstanding – basic	48,232	48,430
Weighted average shares outstanding – diluted	48,292	48,939
Earnings (loss) per common share – basic	$(0.22)	$0.14
Earnings (loss) per common share – diluted	$(0.22)	$0.14
Dividend per share	$0.09	$0.09

See notes to consolidated financial statements

ADTRAN, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(Unaudited)

(In thousands)

	Three Months Ended March 31,	
	2018	2017
Net Income (Loss)	$(10,814)	$6,651
Other Comprehensive Income (Loss), net of tax		
Net unrealized gains (losses) on available-for-sale securities	(3,412)	1,335
Net unrealized gains (losses) on cash flow hedges	—	79
Defined benefit plan adjustments	62	55
Foreign currency translation	842	1,242
Other Comprehensive Income (Loss), net of tax	(2,508)	2,711
Comprehensive Income (Loss), net of tax	$(13,322)	$9,362

See notes to consolidated financial statements

ADTRAN, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(Unaudited)

(In thousands)

	Three Months Ended March 31,	
	2018	2017
Cash flows from operating activities:		
Net income (loss)	$(10,814)	$6,651
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation and amortization	3,614	4,323
Amortization of net premium on available-for-sale investments	42	124
Net realized (gain) loss on long-term investments	97	(470)
Net (gain) loss on disposal of property, plant and equipment	67	(16)
Gain on bargain purchase of a business	(11,322)	—
Stock-based compensation expense	1,819	1,883
Deferred income taxes	(1,877)	(1,947)
Changes in operating assets and liabilities:		
Accounts receivable, net	63,904	7,247
Other receivables	(6,598)	1,884
Inventory	3,368	(7,399)
Prepaid expenses and other assets	10,583	(2,413)
Accounts payable	(10,233)	(1,713)
Accrued expenses and other liabilities	826	(3,166)
Income tax payable	2,753	4,049
Net cash provided by operating activities	46,229	9,037
Cash flows from investing activities:		
Purchases of property, plant and equipment	(1,950)	(3,872)
Proceeds from disposals of property, plant and equipment	—	16
Proceeds from sales and maturities of available-for-sale investments	49,074	24,471
Purchases of available-for-sale investments	(75,960)	(29,517)
Acquisition of business	(7,806)	—
Net cash used in investing activities	(36,642)	(8,902)
Cash flows from financing activities:		
Proceeds from stock option exercises	369	1,377
Purchases of treasury stock	(10,171)	(5,559)
Dividend payments	(4,367)	(4,369)
Net cash used in financing activities	(14,169)	(8,551)
Net decrease in cash and cash equivalents	(4,582)	(8,416)
Effect of exchange rate changes	772	1,079
Cash and cash equivalents, beginning of period	86,433	79,895

Cash and cash equivalents, end of period	$82,623	$72,558
Supplemental disclosure of non-cash investing activities:		
Purchases of property, plant and equipment included in accounts payable	$95	$509

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, 2017 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, 2017, filed on February 23, 2018 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 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 August 2017, the FASB issued Accounting Standards Update No. 2017-12, Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities (ASU 2017-12). ASU 2017-12 expands and refines hedge accounting for both financial and non-financial risk components, aligns the recognition and presentation of the effects of hedging instruments and hedge items in the financial statements, and includes certain targeted improvements to ease the application of current guidance related to the assessment of hedge effectiveness. ASU 2017-12 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018, with early adoption permitted. We are currently evaluating the impact ASU 2017-12 will have on our financial position, results of operations and cash flows.

During 2018, we adopted the following accounting standards, which had no material effect on our financial position, results of operations or cash flows:

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 adopted ASU 2014-09 and the related ASUs on January 1, 2018 using the modified retrospective method, which was applied to all contracts on the date of initial adoption.

The two primary areas of impact of these ASUs were network implementation service revenue performance obligations and contract costs. The output method will be used to measure network implementation services progress. The primary impact will be accelerated revenue recognition for certain performance obligations related to service revenue arrangements that were previously deferred until customer acceptance and capitalization and amortization of incremental costs of obtaining a contract as described below.

In connection with the adoption of the new revenue standard, effective January 1, 2018, we adopted ASC 340-40, Other Assets and Deferred Costs - Contracts with Customers, with respect to capitalization and amortization of incremental costs of obtaining a contract. As a result, certain costs of obtaining a contract will need to be capitalized, including sales commissions, as the guidance requires the capitalization of all incremental costs incurred to obtain a contract with a customer that it would not have incurred if the contract had not been obtained, provided the costs are recoverable. The primary impact was capitalization of certain sales commissions for our extended maintenance and support contracts in excess of one year and amortization of those costs over the period that the related revenue is recognized.

The cumulative effect of the changes made to our Consolidated Balance Sheet on January 1, 2018 for the adoption of ASU 2014-09 and the related ASUs was as follows:

(In thousands)	Balance at December 31, 2017	Adjustments due to ASU 2014-09	Balance at January 1, 2018
Other receivables	$ 26,578	374	$ 26,952

Deferred tax assets, net	$ 23,428	(96	) $ 23,332
Retained earnings	$ 922,178	278	$ 922,456

The impact of the adoption of ASU 2014-09 and the related ASUs on our financial statements was as follows:

	For the three months ended March 31, 2018		
(In thousands)	As Reported	Balances Without Adoption of ASC 606	Effect of Change Higher/(Lower)
Sales			
Products	$105,253	105,439	$ (186)
Services	$15,553	14,700	$ 853
Cost of Sales			
Products	$68,612	68,723	$ (111)
Services	$12,461	11,925	$ 536
Loss before benefit for income taxes	$(14,745)	(14,987)	$ 242
Benefit for income taxes	$3,931	3,998	$ (67)
Net loss	$(10,814)	(10,989)	$ 175

	As of March 31, 2018		
(In thousands)	As Reported	Balances Without Adoption of ASC 606	Effect of Change Higher/(Lower)
Assets			
Other receivables	$35,124	35,060	$ 64
Inventory	$120,021	119,910	$ 111
Equity			
Retained earnings	$909,611	909,436	$ 175

In January 2016, the FASB issued Accounting Standards Update 2016-01, Financial Instruments — Overall: Recognition and Measurement of Financial Assets and Financial Liabilities (ASU 2016-01) which addresses certain aspects of the recognition, measurement, presentation and disclosure of financial instruments. ASU 2016-01 was effective beginning January 1, 2018 and we are now recognizing any changes in the fair value of certain equity investments in net income as prescribed by the new standard rather than in other comprehensive income. We adopted ASU 2016-01 on January 1, 2018 using the modified retrospective method, which resulted in $3.2 million reclassification of net unrealized gains from accumulated other comprehensive income to opening retained earnings.

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. We adopted ASU 2017-07 on January 1, 2018. We retrospectively adopted the presentation of service cost separate from other components of net periodic pension costs. As a result, $0.1 million was reclassified from cost of sales, selling, general

and administrative expenses, and research and development expense to other income (expense), net for the three months ended March 31, 2017.

2. BUSINESS COMBINATIONS

On March 19, 2018, we acquired Sumitomo Electric Lightwave Corp.'s (SEL) North American EPON business and entered into a technology license and OEM supply agreement with Sumitomo Electric Industries, Ltd. (SEI). This acquisition establishes ADTRAN as the North American market leader for EPON solutions for the cable MSO industry and will accelerate the MSO market's adoption of our open, programmable and scalable architectures. 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 Access & Aggregation and Customer Devices categories within the Network Solutions reportable segment.

We recorded a bargain purchase gain of $11.3 million during the first quarter of 2018, net of income taxes, which is subject to customary working capital adjustments between the parties. The bargain purchase gain of $11.3 million represents the difference between the fair value of the net assets acquired over the cash paid. SEI, an OEM supplier based in Japan, is a market leader in EPON. SEI's Broadband Networks Division through its SEL subsidiary operated a North American EPON business including sales, marketing, support, and region-specific engineering development. The North American EPON market is primarily driven by the Tier 1 cable MSO operators and has developed slower than anticipated. Through the transaction, SEI divested its North American EPON assets and established a relationship with ADTRAN. The transfer of these assets to ADTRAN, which included key customer relationships and required assumption by ADTRAN of relatively low incremental expenses, along with the value of the technology license and OEM supply agreement, resulted in the bargain purchase gain. 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 preliminary allocation of the purchase price to the estimated fair value of the assets acquired at the acquisition date is as follows:

(In Thousands)	
Assets	
Other receivables	$104
Inventory	510
Property, plant and equipment	392
Intangible assets	22,100
Total assets acquired	23,106
Liabilities	
Deferred income taxes	(3,978)
Total liabilities assumed	(3,978)
Total net assets	19,128
Gain on bargain purchase of a business, net of tax	(11,322)
Total purchase price	$7,806

The actual revenue and net loss included in our Consolidated Statements of Income for the period March 19, 2018 to March 31, 2018 are as follows:

(In thousands)	March 19 to March 31, 2018
Revenue	$ —
Net loss	$ (77)

The details of the acquired intangible assets are as follows:

In thousands	Value	Life (years)
Customer relationships	$13,400	12.0
Licensed technology	5,900	9.0
Supplier relationship	2,800	2.0
Total	$22,100	

The following unaudited supplemental pro forma information presents the financial results as if the acquisition had occurred on January 1, 2017. 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, 2017, nor is it indicative of any future results. Aside from revising the 2017 and 2018 net income for the effect of the bargain purchase gain, there were no material, non-recurring adjustments to this unaudited pro forma information.

	Three Months Ended March 31,	
(In thousands)	2018	2017
Pro forma revenue	$122,066	$170,692
Pro forma net income	$(22,720)	$17,201
Pro forma earnings per share - basic	$(0.47)	$0.36
Pro forma earnings per share - diluted	$(0.47)	$0.35

For the three months ended March 31, 2018, we incurred acquisition and integration related expenses and amortization of acquired intangibles of $0.2 million related to this acquisition.

3. REVENUE

Revenue is measured based on the consideration we expect to receive in exchange for transferring goods or providing services to a customer and as performance obligations under the terms of the contract are satisfied. Generally, this occurs with the transfer of control of a product or service to the customer. For transactions where there are multiple performance obligations, we account for individual products and services separately if they are distinct (if a product or service is separately identifiable from other items and if a customer can benefit from it on its own or with other resources that are readily available to the customer). The consideration, including any discounts, is allocated between separate products and services based on their stand-alone selling prices using the most likely amount. The stand-alone selling prices are determined based on the prices at which we sell the separate products and services. For items that are not sold separately, we estimate stand-alone selling prices primarily using reasonable internal analysis. Shipping fees are recorded as revenue and the related cost is included in cost of sales. Sales, value added, and other taxes collected concurrent with revenue-producing activities are excluded from revenue. Costs of obtaining a contract are capitalized and amortized over the period that the related revenue is recognized. We have elected to apply the practical expedient related to the incremental costs of obtaining contracts and recognize those costs as expense when incurred if the amortization period of the assets is one year or less. These costs are included in selling, general and administrative expenses. Capitalized costs with an amortization period greater than one year were immaterial.

The following is a description of the principal activities from which we generate our revenue by reportable segment.

Network Solutions Segment

Network Solutions includes hardware products and next-generation virtualized solutions used in service provider or business networks, as well as prior generation products.

Hardware

The majority of the revenue from this segment is from hardware sales and is recognized when control is transferred to our customers, which is generally when we ship the products. Shipping terms are generally FOB shipping point.

Revenue is recorded net of discounts and rebates using the most likely amount. Customers are typically invoiced when control is transferred and revenue is recognized. Our products generally include assurance-based warranties of 90 days to five years for product defects, which are accrued at the time revenue is recognized.

In certain transactions, we are also the lessor in sales-type lease arrangements for network equipment, which have terms of 18 months to five years. These arrangements typically include network equipment, network implementation services and maintenance services. Product revenue for these leases is generally recorded when we transfer control of the product to our customers. Revenue for network implementation and maintenance services is recognized as described below. Customers are typically invoiced and pay in equal installments over the lease term.

Services & Support Segment

To complement our Network Solutions segment, we offer a complete portfolio of maintenance, network implementation, solutions integration and managed services, which include hosted, cloud services and subscription services.

Maintenance

Our maintenance service periods range from one month to five years. Customers are typically invoiced and pay for maintenance services at the beginning of the maintenance period, which is recorded in current or non-current unearned revenue depending on the length of the service period. Maintenance services are provided on an as-needed basis and our customers benefit evenly throughout the contract term. Accordingly, we recognize revenue for maintenance services on a straight-line basis over the maintenance period in services revenue.

Network Implementation

We recognize revenue for network implementation, which primarily consists of engineering, execution and enablement services, when performance obligations are complete at a point in time. If we have recognized revenue, but not billed the customer, the right to consideration is recognized as a contract asset, which is included in other receivables in the Consolidated Balance Sheet. The contract asset is transferred to accounts receivable when the right to consideration to payment becomes unconditional.

As of March 31, 2018, we did not have any remaining performance obligations related to customer contracts that had an original expected duration of one year or more, other than maintenance services, which are satisfied over time.

The following table provides information about receivables, contract assets, and unearned revenue from contracts with customers:

(In thousands)	March 31, 2018	December 31, 2017
Accounts receivable	$ 80,883	$ 144,150
Contract assets	1,442	—
Unearned revenue	13,948	13,070
Non-current unearned revenue	4,154	4,556

During the three months ended March 31, 2018, we recognized $3.5 million of revenue that was included in unearned revenue at the beginning of the period.

The following table disaggregates our revenue by major source:

(In thousands)	Network Solutions	Services & Support	Total
Access & Aggregation	$69,385	$12,295	$81,680
Customer Devices	28,777	1,324	30,101
Traditional & Other Products	7,091	1,934	9,025

Total	$105,253	$15,553	$120,806

4. INCOME TAXES

Our effective tax rate decreased from 20.3% in the three months ended March 31, 2017, to 15.1%, excluding the tax impact of the bargain purchase gain, in the three months ended March 31, 2018. The decrease in the effective tax rate between the two periods is primarily attributable to the impact of the Tax Cuts and Jobs Act, which was signed into law on December 22, 2017.

5. 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 months ended March 31, 2018 and 2017:

	Three Months Ended March 31,	
(In thousands)	2018	2017
Service cost	$308	$297
Interest cost	187	143
Expected return on plan assets	(399)	(299)
Amortization of actuarial losses	64	73
Net periodic pension cost	$160	$214

The components of net periodic pension cost other than the service cost component are included in the line item “Other income (expense), net” in the Consolidated Statements of Income.

6. 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 months ended March 31, 2018 and 2017, which was recognized as follows:

	Three Months Ended March 31,	
(In thousands)	2018	2017
Stock-based compensation expense included in cost of sales	$95	$91
Selling, general and administrative expense	1,035	1,016
Research and development expense	689	776
Stock-based compensation expense included in operating expenses	1,724	1,792
Total stock-based compensation expense	1,819	1,883
Tax benefit for expense associated with non-qualified options, PSUs, RSUs and restricted stock	(384)	(380)
Total stock-based compensation expense, net of tax	$1,435	$1,503

Stock Options

The following table is a summary of our stock options outstanding as of December 31, 2017 and March 31, 2018 and the changes that occurred during the three months ended March 31, 2018:

(In thousands, except per share amounts)	Number of Stock Options	Weighted Avg. Exercise Price	Weighted Avg. Remaining Contractual Life In Years	Aggregate Intrinsic Value
Stock options outstanding, December 31, 2017	5,148	$ 22.65	4.87	$ 6,109
Stock options granted	—	$ —		
Stock options exercised	(24)	$ 15.48		
Stock options forfeited	(27)	$ 16.59		
Stock options expired	(58)	$ 26.87		
Stock options outstanding, March 31, 2018	5,039	$ 22.66	4.50	$ 271
Stock options vested and expected to vest, March 31, 2018	5,039	$ 22.66	4.50	$ 271
Stock options exercisable, March 31, 2018	4,286	$ 23.75	4.00	$ 157

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 March 31, 2018. 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 months ended March 31, 2018 was $33 thousand.

As of March 31, 2018, there was $2.5 million of unrecognized compensation expense related to unvested stock options, which is expected to be recognized over an average remaining recognition period of 1.3 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 months ended March 31, 2018 or 2017.

PSUs, RSUs and restricted stock

The following table is a summary of our PSUs, RSUs and restricted stock outstanding as of December 31, 2017 and the changes that occurred during the three months ended March 31, 2018:

(In thousands, except per share amounts)	Number of Shares	Weighted Avg. Grant Date Fair Value
Unvested PSUs, RSUs and restricted stock outstanding, December 31, 2017	1,292	$ 21.33
PSUs, RSUs and restricted stock granted	8	$ 20.71
PSUs, RSUs and restricted stock vested	(5)	$ 20.00
PSUs, RSUs and restricted stock forfeited	(62)	$ 21.50
Unvested PSUs, RSUs and restricted stock outstanding, March 31, 2018	1,233	$ 21.31

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 March 31, 2018, there was $12.9 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 2.9 years. In addition, there was $10.7 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 months ended March 31, 2018, no compensation expense was recognized related to these performance-based PSU awards.

7. INVESTMENTS

Debt Securities and Other Investments

At March 31, 2018, we held the following debt securities and other investments, recorded at either fair value or cost:

(In thousands)	Amortized Cost	Gross Unrealized Gains	Losses	Carrying Value
Corporate bonds	49,109	43	(333)	48,819
Municipal fixed-rate bonds	2,413	—	(30)	2,383
Asset-backed bonds	13,334	—	(44)	13,290
Mortgage/Agency-backed bonds	8,906	2	(72)	8,836
U.S. government bonds	14,703	10	(204)	14,509
Foreign government bonds	1,228	4	(1)	1,231
Available-for-sale debt securities held at fair value	$ 89,693	$59	$ (684)	$89,068
Restricted investment held at cost				26,700
Other investments held at cost				520
Total carrying value of available-for-sale investments				$116,288

At December 31, 2017, we held the following debt securities and other investments, recorded at either fair value or cost:

(In thousands)	Amortized Cost	Gross Unrealized Gains	Losses	Carrying Value
Corporate bonds	32,654	44	(155)	32,543
Municipal fixed-rate bonds	2,902	2	(22)	2,882
Asset-backed bonds	6,545	1	(20)	6,526
Mortgage/Agency-backed bonds	5,554	1	(46)	5,509
U.S. government bonds	14,477	—	(174)	14,303
Foreign government bonds	725	5	—	730
Available-for-sale debt securities held at fair value	$ 62,857	$ 53	$ (417)	$ 62,493
Restricted investment held at cost				27,800
Other investments held at cost				547
Total carrying value of available-for-sale investments				$ 90,840

As of March 31, 2018, our debt securities had the following contractual maturities:

(In thousands)	Corporate bonds	Municipal fixed-rate bonds	Asset-backed bonds	Mortgage / Agency-backed bonds	U.S. government bonds	Foreign government bonds
Less than one year	$ 11,391	$ 490	$ 4,520	$ —	$ —	$ —
One to two years	18,406	737	$ 2,459	—	6,149	—
Two to three years	10,639	210	2,669	—	2,491	1,231
Three to five years	8,383	946	1,631	2,046	5,869	—
Five to ten years	—	—	—	974	—	—
More than ten years	—	—	2,011	5,816	—	—
Total	$ 48,819	$ 2,383	$ 13,290	$ 8,836	$ 14,509	$ 1,231

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.

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

(In thousands)	Three Months Ended March 31, 2018	2017
Gross realized gains	$—	$—
Gross realized losses	$(73)	$(15)

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 March 31, 2018, we held a $26.7 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 $26.7 million at March 31, 2018 and December 31, 2017. At March 31, 2018 and December 31, 2017, the estimated fair value of the Bond using a level 2 valuation technique was approximately $26.6 million and $26.7 million, respectively, 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.

Marketable Equity Securities

Our marketable equity securities consist of publicly traded stocks or funds measured at fair value.

Prior to January 1, 2018, our marketable equity securities were classified as available-for-sale. Realized gains and losses on marketable equity securities were included in net realized investment gain (loss). Unrealized gains and losses were recognized in accumulated other comprehensive income, net of deferred taxes, on the balance sheet.

On January 1, 2018, we adopted ASU 2016-01, which requires us to measure all equity investments that do not result in consolidation and are not accounted for under the equity method at fair value, with any changes in fair value recognized in net realized investment gain (loss). Upon adoption, we reclassified $3.2 million of net unrealized gains related to marketable equity securities from accumulated other comprehensive income to opening retained earnings.

Realized and unrealized gains and losses for our marketable equity securities for the three months ended March 31, 2018 were as follows:

(In thousands)	Three Months Ended March 31, 2018
Realized gains (losses) on equity securities sold	$ (1)
Unrealized gains (losses) on equity securities held	(23)
Total gain (loss) recognized, net	$ (24)

As of March 31, 2018 and 2017, gross unrealized losses related to individual investments in a continuous loss position for 12 months or longer were not significant.

We have categorized our cash equivalents 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.

	Fair Value Measurements at March 31, 2018 Using			
(In thousands)	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	$6,770	$6,770	$ —	$ —
Asset-backed securities	1,000	—	1,000	—
Cash equivalents	7,770	6,770	1,000	—
Available-for-sale debt securities				
Corporate bonds	48,819	—	48,819	—
Municipal fixed-rate bonds	2,383	—	2,383	—
Asset-backed bonds	13,290	—	13,290	—
Mortgage/Agency-backed bonds	8,836	—	8,836	—
U.S. government bonds	14,509	14,509	—	—
Foreign government bonds	1,231	—	1,231	—
Marketable equity securities				
Marketable equity securities – various industries	36,519	36,519	—	—
Deferred compensation plan assets	20,067	20,067	—	—
Available-for-sale securities	145,654	71,095	74,559	—
Total	$153,424	$77,865	$ 75,559	$ —

	Fair Value Measurements at December 31, 2017 Using			
(In thousands)	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	$5,851	$5,851	$ —	$ —
Commercial Paper	3,999	—	3,999	—
Cash equivalents	9,850	5,851	3,999	—
Available-for-sale debt securities				
Corporate bonds	32,543	—	32,543	—
Municipal fixed-rate bonds	2,882	—	2,882	—
Asset-backed bonds	6,526	—	6,526	—
Mortgage/Agency-backed bonds	5,509	—	5,509	—
U.S. government bonds	14,303	14,303	—	—
Foreign government bonds	730	—	730	—
Marketable equity securities				
Marketable equity securities – various industries	35,662	35,662	—	—
Deferred compensation plan assets	19,883	19,883	—	—
Available-for-sale securities	118,038	69,848	48,190	—
Total	$127,888	$75,699	$ 52,189	$ —

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.

8. 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 at which 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.

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.

As of March 31, 2018, we had no foreign exchange forward contracts.

The change in the fair values of our derivative instruments recorded in the Consolidated Statements of Income during the three months ended March 31, 2018 and 2017 were as follows:

(In thousands)	Income Statement Location	Three Months Ended March 31, 2018	2017
Derivatives Not Designated as Hedging Instruments:			
Foreign exchange contracts	Other income (expense)	$13	$(34)

The change in our derivatives designated as hedging instruments recorded in other comprehensive income (OCI) and reclassified to income, net of tax, during the three months ended March 31, 2018 and 2017 were as follows:

(In thousands)	Amount of Gains (Losses) Recognized in OCI on Derivatives Three Months Ended March 31, 2018	2017	Location of Gains (Losses) Reclassified from AOCI into Income	Amount of Gains (Losses) Reclassified from AOCI into Income Three Months Ended March 31, 2018	2017
Derivatives Designated as Hedging Instruments:					
Foreign exchange contracts	$ —	$ 79	Cost of Sales	$ —	$ —

9. INVENTORY

At March 31, 2018 and December 31, 2017, inventory consisted of the following:

(In thousands)	March 31, 2018	December 31, 2017
Raw materials	$45,772	$ 44,185
Work in process	2,242	1,939
Finished goods	72,007	76,418
Total	$120,021	$ 122,542

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 March 31, 2018 and December 31, 2017, raw materials reserves totaled $15.2 million and $15.0 million, respectively, and finished goods inventory reserves totaled $8.9 million and $8.3 million, respectively.

10. GOODWILL AND INTANGIBLE ASSETS

Goodwill, all of which relates to our acquisition of Bluesocket, Inc., was $3.5 million at March 31, 2018 and December 31, 2017, 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 2017, 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, CommScope’s active fiber access business on September 13, 2016 and Sumitomo Electric Lightwave Corp.’s North American EPON business and technology license and OEM supply agreement with Sumitomo Electric Industries, Ltd. on March 19, 2018.

The following table presents our intangible assets as of March 31, 2018 and December 31, 2017. Fully amortized intangible assets have been removed from prior year balances for comparability.

(In thousands)	March 31, 2018			December 31, 2017		
	Gross Value	Accumulated Amortization	Net Value	Gross Value	Accumulated Amortization	Net Value
Customer relationships	$20,998	$ (4,576)	$ 16,422	$7,474	$ (4,283)	$ 3,191
Licensed technology	5,900	(27)	5,873	—	—	—
Developed technology	5,597	(4,827)	770	5,524	(4,663)	861
Supplier relationship	2,800	(58)	2,742	—	—	—
Intellectual property	930	(886)	44	930	(852)	78
Patent	500	(106)	394	500	(89)	411
Non-compete	200	(137)	63	200	(115)	85
Trade names	100	(77)	23	100	(65)	35
Total	$37,025	$ (10,694)	$ 26,331	$14,728	$ (10,067)	$ 4,661

Amortization expense, all of which relates to business acquisitions, was $0.4 million and $1.1 million for the three months ended March 31, 2018 and 2017, respectively.

As of March 31, 2018, the estimated future amortization expense of our intangible assets is as follows:

(In thousands)	Amount
Remainder of 2018	$2,833
2019	3,559
2020	2,676
2021	2,380
2022	2,366
Thereafter	12,517
Total	$26,331

11. STOCKHOLDERS' EQUITY

A summary of the changes in stockholders' equity for the three months ended March 31, 2018 is as follows:

(In thousands)	Stockholders' Equity
Balance, December 31, 2017	$ 497,911
Net income	(10,814)
Dividend payments	(4,367)
Dividends accrued for unvested restricted stock units	(2)
Net unrealized gains (losses) on available-for-sale securities (net of tax)	(3,412)
Defined benefit plan adjustments (net of tax)	62

Foreign currency translation adjustment	842
Proceeds from stock option exercises	369
Purchase of treasury stock	(10,171)
Adoption of new accounting standards (see note 1)	3,499
Stock-based compensation expense	1,819
Balance, March 31, 2018	$ 475,736

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 three months ended March 31, 2018, we repurchased 0.6 million shares of our common stock at an average price of $16.18 per share. As of March 31, 2018, we have the authority to purchase an additional 2.9 million shares of our common stock under the current plans approved by the Board of Directors.

Stock Option Exercises

We issued 24 thousand shares of treasury stock during the three months ended March 31, 2018 to accommodate employee stock option exercises. The stock options had exercise prices ranging from $15.29 to $18.97. We received proceeds totaling $0.4 million from the exercise of these stock options during the three months ended March 31, 2018.

Dividend Payments

During the three months ended March 31, 2018, we paid cash dividends as follows (in thousands except per share amounts):

Record Date	Payment Date	Per Share Amount	Total Dividend Paid
January 31, 2018	February 14, 2018	$ 0.09	$ 4,367

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 March 31, 2018 and 2017:

	Three Months Ended March 31, 2018			
(In thousands)	Unrealized Gains (Losses) on Available-for-Sale Securities	Defined Benefit Plan Adjustments	Foreign Currency Adjustments	Total
Beginning balance	$2,567	$ (4,286)	$ (1,576)	$(3,295)
Other comprehensive income (loss) before reclassifications	(257)	—	842	585
Amounts reclassified from accumulated other comprehensive income	65	62	—	127

Amounts reclassified to retained earnings [1]	(3,220)	—	—	(3,220)
Net current period other comprehensive income (loss)	(3,412)	62	842	(2,508)
Ending balance	$(845)	$ (4,224)	$ (734)	$(5,803)

[1] With the adoption of ASU 2016-01, the unrealized gains on our equity investments were reclassified to retained earnings. See note 1 for more information.

	Three Months Ended March 31, 2017				
(In thousands)	Unrealized Gains (Losses) on Available-for-Sale Securities	Unrealized Gains (Losses) on Cash Flow Hedges	Defined Benefit Plan Adjustments	Foreign Currency Adjustments	Total
Beginning balance	$404	$ —	$ (5,017)	$ (7,575)	$(12,188)
Other comprehensive income (loss) before reclassifications	1,620	79	—	1,242	2,941
Amounts reclassified from accumulated other comprehensive income	(285)	—	55	—	(230)
Net current period other comprehensive income (loss)	1,335	79	55	1,242	2,711
Ending balance	$1,739	$ 79	$ (4,962)	$ (6,333)	$(9,477)

The following tables present the details of reclassifications out of accumulated other comprehensive income for the three months ended March 31, 2018 and 2017:

(In thousands)	Three Months Ended March 31, 2018 Amount Reclassified from Accumulated Other Comprehensive Income	Affected Line Item in the Statement Where Net Income Is Presented
Details about Accumulated Other Comprehensive Income Components		
Unrealized gains (losses) on available-for-sale securities:		
Net realized gain on sales of securities	$(73)	Net realized investment gain
Defined benefit plan adjustments – actuarial losses	(90)	(1)
Total reclassifications for the period, before tax	(163)	
Tax (expense) benefit	36	
Total reclassifications for the period, net of tax	$(127)	

(1) Included in the computation of net periodic pension cost. See Note 5 of Notes to Consolidated Financial Statements.

(In thousands)	Three Months Ended March 31, 2017 Amount Reclassified from Accumulated Other Comprehensive Income	Affected Line Item in the Statement Where Net Income Is Presented
Details about Accumulated Other Comprehensive Income Components		
Unrealized gains (losses) on available-for-sale securities:		
Net realized gain on sales of securities	$572	Net realized investment gain
Impairment expense	(103)	Net realized investment gain
Defined benefit plan adjustments – actuarial losses	(80)	(1)
Total reclassifications for the period, before tax	389	
Tax (expense) benefit	(159)	
Total reclassifications for the period, net of tax	$230	

(1) Included in the computation of net periodic pension cost. See Note 5 of Notes to Consolidated Financial Statements.

The following table presents the tax effects related to the change in each component of other comprehensive income for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31, 2018			Three Months Ended March 31, 2017		
(In thousands)	Before-Tax Amount	Tax (Expense) Benefit	Net-of-Tax Amount	Before-Tax Amount	Tax (Expense) Benefit	Net-of-Tax Amount
Unrealized gains (losses) on available-for-sale securities	$(347)	$ 90	$ (257)	$2,656	$ (1,036)	$ 1,620
Unrealized gains (losses) on cash flow hedges	—	—	—	79	—	79
Reclassification adjustment for amounts related to available-for-sale investments included in net income	73	(8)	65	(469)	184	(285)
Reclassification adjustment for amounts reclassed to retained earnings related to the adoption of ASU 2016-01	(3,220)	—	(3,220)	—	—	—
Reclassification adjustment for amounts related to defined benefit plan adjustments included in net income	90	(28)	62	80	(25)	55
Foreign currency translation adjustment	842	—	842	1,242	—	1,242
Total Other Comprehensive Income (Loss)	$(2,562)	$ 54	$ (2,508)	$3,588	$ (877)	$ 2,711

12. EARNINGS PER SHARE

A summary of the calculation of basic and diluted earnings per share for the three months ended March 31, 2018 and 2017 is as follows:

(In thousands, except per share amounts)	Three Months Ended March 31, 2018	2017
Numerator		
Net income (loss)	$(10,814)	$6,651
Denominator		
Weighted average number of shares – basic	48,232	48,430
Effect of dilutive securities		
Stock options	24	416
PSUs, RSUs and restricted stock	36	93
Weighted average number of shares – diluted	48,292	48,939
Net income (loss) per share – basic	$(0.22)	$0.14
Net income (loss) per share – diluted	$(0.22)	$0.14

Anti-dilutive options to purchase common stock outstanding were excluded from the above calculations. Anti-dilutive options totaled 4.8 million and 4.0 million for the three months ended March 31, 2018 and 2017, respectively.

13. 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 months ended March 31, 2018 and 2017. We do not produce asset information by reportable segment; therefore, it is not reported.

	Three Months Ended	
	March 31, 2018	March 31, 2017

(In thousands)	Sales	Gross Profit	Sales	Gross Profit
Network Solutions	$105,253	$36,641	$143,597	$66,933
Services & Support	15,553	3,092	26,682	6,776
Total	$120,806	$39,733	$170,279	$73,709

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 months ended March 31, 2018 and 2017.

	Three Months Ended March 31,	
(In thousands)	2018	2017
Access & Aggregation	$81,680	$120,143
Customer Devices	30,101	36,268
Traditional & Other Products	9,025	13,868
Total	$120,806	$170,279

14. 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 $9.7 million at March 31, 2018 and December 31, 2017. 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 months ended March 31, 2018 and 2017 is as follows:

	Three Months Ended March 31,	
(In thousands)	2018	2017
Balance at beginning of period	$9,724	$8,548
Plus: Amounts charged to cost and expenses	1,822	(741)
Less: Deductions	(1,859)	1,181
Balance at end of period	$9,687	$8,988

15. 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 March 31, 2018, of which $7.7 million has been applied to these commitments.

16. SUBSEQUENT EVENTS

On April 17, 2018, 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 May 2, 2018. The payment date will be May 16, 2018. 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.

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.

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.

See Note 13 of Notes to Consolidated Financial Statements in this report for further information regarding these product categories.

Sales were $120.8 million for the three months ended March 31, 2018, compared to $170.3 million for the three months ended March 31, 2017. Our gross margin decreased to 32.9% in the three months ended March 31, 2018 from 43.3% in the three months ended March 31, 2017. Our operating income margin decreased to (22.1)% for the three months ended March 31, 2018, from 4.1% for the three months ended March 31, 2017. Net income (loss) was $(10.8) million for the three months ended March 31, 2018, compared to $6.7 million for the three months ended March 31, 2017. Our effective tax rate, excluding the effect of the bargain purchase gain in 2018, decreased to 15.1% for the three months ended March 31, 2018, from 20.3% for the three months ended March 31, 2017. Earnings (loss) per

share, assuming dilution, were $(0.22) for the three months ended March 31, 2018, compared to $0.14 for the three months ended March 31, 2017.

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.

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, 2017, filed on February 23, 2018 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, 2017, filed on February 23, 2018 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 MONTHS ENDED MARCH 31, 2018 COMPARED TO THREE MONTHS ENDED MARCH 31, 2017

SALES

Our sales decreased 29.1% from $170.3 million in the three months ended March 31, 2017 to $120.8 million in the three months ended March 31, 2018. The decrease in sales for the three months ended March 31, 2018 is primarily attributable to a merger-related review and slowdown in spending at a domestic Tier 1 customer that particularly affected our Access & Aggregation products. Our Access & Aggregation category decreased $38.5 million over the same period last year as the decline in the previously mentioned domestic Tier 1 customer was partially offset by an increase in sales to an international Tier 1 customer. Compared to the same period last year, we also experienced a $6.2 million decrease in sales of our Customer Devices products and a $4.8 million decrease in sales of our Traditional & Other Products.

Network Solutions sales decreased 26.7% from $143.6 million in the three months ended March 31, 2017 to $105.3 million in the three months ended March 31, 2018. The decrease in sales of our Access & Aggregation products for the three months ended March 31, 2018 is primarily attributable to a merger-related review and slowdown in spending at a domestic Tier 1 customer, partially offset by an increase in sales to an international Tier 1 customer as discussed further below. The decrease in sales of our Customer Devices products for the three months ended March 31, 2018 is primarily attributable to decreased sales of fiber CPE products. 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 decreased 41.7% from $26.7 million in the three months ended March 31, 2017 to $15.6 million in the three months ended March 31, 2018. The decrease in sales for the three months ended March 31, 2018 is primarily attributable to a decrease in network installation services for Access & Aggregation products related to the above mentioned merger-related review and slowdown in spending at a domestic Tier 1 customer.

International sales, which are included in the Network Solutions and Services & Support amounts discussed above, increased 15.1% from $51.0 million in the three months ended March 31, 2017 to $58.7 million in the three months ended March 31, 2018. International sales, as a percentage of total sales, increased from 30.0.% for the three months ended March 31, 2017 to 48.6% for the three months ended March 31, 2018. The increase in sales for the three months ended March 31, 2018 is primarily attributable to an increase in sales in EMEA, partially offset by a decrease in sales in APAC. The increase is sales in EMEA is primarily attributable to a network expansion program and a Services award by a large European tier-1 customer.

Our international revenues are largely focused on broadband infrastructure and are impacted by the decisions of our customers as to timing for installation of new technologies, expansion of their networks and/or network upgrades. Our international customers must make these decisions in the regulatory and political environment in which they operate – both nationally and in some instances, regionally – whether of a multi-country region or a more local region within a country. For example, the European Commission launched a Gigabit Society initiative, and before that, the Digital Agenda, which has provided a favorable market environment for the deployment of ultra-broadband and Gigabit network solutions. Although the overall environment and market demand for broadband service deployment in the European Union has improved, some new broadband technologies are still being reviewed for regulatory and standards completion, which may affect the timing of those technologies. In Mexico, regulatory changes have created uncertainty for customers, which have resulted in slowdowns in network buying patterns. The competitive landscape in certain international markets is also impacted by the increased presence of Asian manufacturers that seek to compete aggressively on price. A strengthening U.S. dollar can also negatively impact our revenues in regions such as Latin America, where our products are traditionally priced in U.S. dollars, while in regions where our products are sold in local currency, such as Europe, a stronger U.S. dollar can negatively impact operating income. Consequently, while we expect the global trend towards deployment of more robust broadband speeds and access to continue to create expanded market opportunities for us, the factors described above may result in pressure on revenues and operating income. However, we do not presently foresee a significant negative impact to our financial condition based on our strong liquidity and the generally positive environment described above.

We recognized a positive impact to our revenues in the first half of 2017 due to our being awarded a network expansion program by a large European tier-1 customer. During the first quarter of 2018, this European Tier 1 customer undertook an additional network expansion project. We anticipate that as our Latin American customers resume their network upgrade projects, we may experience further enhancement to our revenues. We have recently announced receipt of a new nationwide award in the APAC region, as well as additional awards based on new ADTRAN technologies in the EMEA region that we believe will likely result in a positive impact to our revenues. However, a resolution of the regulatory changes affecting a major customer in Mexico has been slower than anticipated, and business with our customer in that region has not yet returned to a more normal level. We are continuing to pursue opportunities with new customers in this region.

COST OF SALES

As a percentage of sales, cost of sales increased from 56.7% in the three months ended March 31, 2017 to 67.1% in the three months ended March 31, 2018. The increase in cost of sales as a percentage of sales for the three months ended March 31, 2018 is primarily attributable to a regional revenue shift, customer and product mix, services and support mix, an increase in labor expense due to a restructuring program, an increase in warranty expense due to a settlement in Q1 2017 with a third party supplier for a defective component and purchase discounts received from a contract manufacturer in Q1 2017.

Network Solutions cost of sales, as a percent of that segment’s sales, increased from 53.4% in the three months ended March 31, 2017 to 65.2% in the three months ended March 31, 2018. The increase in cost of sales as a percentage of sales for the three months ended March 31, 2018 is primarily attributable to a regional revenue shift, customer and product mix, an increase in labor expense due to a restructuring program, an increase in warranty expense due to a settlement in Q1 2017 with a third party supplier for a defective component and purchase discounts received from a contract manufacturer in Q1 2017.

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.

Services & Support cost of sales, as a percent of that segment's sales, increased from 74.6% in the three months ended March 31, 2017 to 80.1% in the three months ended March 31, 2018. The increase in cost of sales as a percentage of sales for the three months ended March 31, 2018 is primarily attributable to services and support mix and an increase in labor expense due to a restructuring program.

Our Services business has experienced significant growth since 2015 as competitive pressures to expand broadband access and speeds have strained carriers' ability to respond to customer demand. Our Services & Support revenues are comprised of network planning and implementation, maintenance, support and cloud-based management services, with network planning and implementation being the largest and fastest growing component. Compared to our other services such as maintenance, support and cloud-based management services, our network planning and implementation services typically utilize a higher percentage of internal and subcontracted engineers, professionals and contractors to perform the work for customers. The additional costs incurred to perform these infrastructure and labor intensive services inherently result in lower average gross margins as compared to maintenance and support services.

As our network planning and implementation revenues have grown and are now the largest component of our Services & Support business, our Services & Support segment gross margins have decreased versus those reported when maintenance and support comprised the majority of the business. Further, because the growth in our network planning and implementation services has resulted in our Services & Support revenues comprising a larger percentage of our overall revenues, and because our Services & Support gross margins are below those of the Network Solutions segment, our overall corporate gross margins have declined as that business has continued to grow. Within the Services & Support segment, we do expect variability in gross margins from quarter-to-quarter based on the mix of the services recognized.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Selling, general and administrative expenses decreased 3.6% from $34.8 million in the three months ended March 31, 2017 to $33.5 million in the three months ended March 31, 2018. The decrease in selling, general and administrative expenses for the three months ended March 31, 2018 is primarily attributable to decreases in deferred compensation expense, travel expense, performance-based compensation expense, independent contractor expense, and legal expense, partially offset by an increase in labor expense due to a restructuring program.

As a percentage of sales, selling, general and administrative expenses increased from 20.4% in the three months ended March 31, 2017 to 27.8% in the three months ended March 31, 2018. 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 2.7% from $32.0 million in the three months ended March 31, 2017 to $32.8 million in the three months ended March 31, 2018. The increase in research and development expenses for the three months ended March 31, 2018 is primarily attributable to an increase in labor expense due to a restructuring program, partially offset by a decrease in amortization of intangibles acquired in the third quarter of 2016.

As a percentage of sales, research and development expenses increased from 18.8% in the three months ended March 31, 2017 to 27.2% in the three months ended March 31, 2018. 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 decreased 7.2% from $933 thousand in the three months ended March 31, 2017 to $866 thousand in the three months ended March 31, 2018. The decrease in interest and dividend income for the three months ended March 31, 2018 is primarily attributable to a decrease in investment balances and a decrease in the rate

of return on those 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 March 31, 2017 and 2018, 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 decreased 120.6% from $0.5 million in the three months ended March 31, 2017 to $(0.1) million in the three months ended March 31, 2018. The decrease in net realized investment gains for the three months ended March 31, 2018 is primarily attributable to changes in fair value on equity securities recognized during the period under ASC 2016-01. Prior to January 1, 2018, changes in fair value were recognized in accumulated other comprehensive income, net of deferred taxes, on the balance sheet. See note 1, note 7 and “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, changed 142.5% from $0.1 million of income in the three months ended March 31, 2017 to $0.1 million of expense in the three months ended March 31, 2018. The change in other income (expense), net for the three months ended March 31, 2018 is primarily attributable to increased losses on our foreign exchange contracts.

GAIN ON BARGAIN PURCHASE OF A BUSINESS

Gain on bargain purchase of a business is related to our acquisition of Sumitomo Electric Lightwave Corp.'s North American EPON business and entry into a technology license and supply agreement with Sumitomo Electric Industries, Ltd. on March 19, 2018. See Note 2 of Notes to Consolidated Financial Statements for additional information.

INCOME TAXES

Our effective tax rate decreased from 20.3% in the three months ended March 31, 2017 to 15.1%, excluding the tax impact of the bargain purchase gain, in the three months ended March 31, 2018. The decrease in the effective tax rate between the two periods is primarily attributable to the impact of the Tax Cuts and Jobs Act, which was signed into law on December 22, 2017.

NET INCOME (LOSS)

As a result of the above factors, net income (loss) decreased $17.5 million from $6.7 million in the three months ended March 31, 2017 to $(10.8) million in the three months ended March 31, 2018.

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 March 31, 2018, cash on hand was $82.6 million and short-term investments were $16.4 million, which resulted in available short-term liquidity of $99.0 million, of which $63.7 million was held by our foreign subsidiaries. At December 31, 2017, cash on hand was $86.4 million and short-term investments were $16.1 million, which resulted in available short-term liquidity of $102.6 million, of which $56.8 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 these funds to finance domestic operations. The decrease in short-term liquidity from December 31, 2017 to March 31, 2018 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, decreased 20.9% from $306.3 million as of December 31, 2017 to $242.2 million as of March 31, 2018, and our current ratio, defined as current assets divided

by current liabilities, decreased from 3.87 as of December 31, 2017 to 3.36 as of March 31, 2018 The decrease in our working capital and current ratio is primarily attributable to a decrease in accounts receivable and prepaid expenses and other current assets, partially offset by a decrease in accounts payable and an increase in other receivables. The quick ratio, defined as cash, cash equivalents, short-term investments, and net accounts receivable, divided by current liabilities, decreased from 2.31 as of December 31, 2017 to 1.75 as of March 31, 2018. The decrease in the quick ratio is primarily attributable to a decrease in accounts receivable, partially offset by a decrease in accounts payable.

Accounts receivable decreased 43.9% from $144.2 million at December 31, 2017 to $80.9 million at March 31, 2018. We had no allowance for doubtful accounts at December 31, 2017 or March 31, 2018. Quarterly accounts receivable days sales outstanding (DSO) decreased from 105 days as of December 31, 2017 to 60 days as of March 31, 2018 The decrease in net accounts receivable is due to the collection of customer specific payment terms that became due in the first quarter of 2018 and the timing of sales and collections during the quarter. Additionally, certain international customers can have longer payment terms than U.S. customers.

Other receivables increased 32.2% from $26.6 million at December 31, 2017 to $35.1 million at March 31, 2018. The increase in other receivables is primarily attributable to an increase in tax receivable and the timing of filing returns and collections of VAT receivables in our international subsidiaries, partially offset by the timing of shipments and collections for materials supplied to our contract manufacturers during the quarter.

Quarterly inventory turnover decreased from 3.09 turns as of December 31, 2017 to 2.67 turns at March 31, 2018. Inventory decreased 2.1% from $122.5 million at December 31, 2017 to $120.0 million at March 31, 2018. 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.

Prepaid expense and other current assets decreased 43.9% from $17.3 million at December 31, 2017 to $9.7 million at March 31, 2018. The decrease in prepaid expenses and other current assets is primarily attributable to the recognition of deferred costs related to network installation services that were completed during the quarter.

Accounts payable decreased 16.5% from $60.6 million at December 31, 2017 to $50.7 million at March 31, 2018. 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 $2.0 million and $3.9 million for the three months ended March 31, 2018 and 2017, 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 increased $26.5 million from $146.4 million at December 31, 2017 to $172.9 million at March 31, 2018. This increase reflects 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, partially offset by our cash needs for capital expenditures, purchases of treasury stock, and shareholder dividends.

We invest all available cash not required for immediate use in operations primarily in securities that we believe bear minimal risk of loss. At March 31, 2018 these investments included corporate bonds of $48.8 million, municipal fixed-rate bonds of $2.4 million, asset-backed bonds of $13.3 million, mortgage/agency-backed bonds of $8.8 million, U.S. government bonds of $14.5 million, and foreign government bonds of $1.2 million. At December 31, 2017, these investments included corporate bonds of $32.5 million, municipal fixed-rate bonds of $2.9 million, asset-backed bonds of $6.5 million, mortgage/agency-backed bonds of $5.5 million, U.S. government bonds of $14.3 million, and foreign government bonds of $0.7 million. As of March 31, 2018, 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 1.25 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 increased 20.1% from $130.3 million at December 31, 2017 to $156.5 million at March 31, 2018. Long-term investments at March 31, 2018 and December 31, 2017 included an investment in a certificate of deposit of $26.7 million and $27.8 million, respectively, which serves as collateral for our revenue bond. See “Debt” below for additional information. We have various equity investments included in long-term investments with a fair value of $36.5 million and $35.7 million, at March 31, 2018 and December 31, 2017, respectively.

Long-term investments at March 31, 2018 and December 31, 2017 also included $20.1 million and $19.9 million, respectively, related to our deferred compensation plans, and $0.5 million of other investments carried at cost, consisting of interests in two private equity funds and an investment in a privately held telecommunications equipment manufacturer.

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 three months ended March 31, 2018, we paid dividends totaling $4.4 million.

Debt

We have amounts outstanding under loans made pursuant to an Alabama State Industrial Development Authority revenue bond (the Bond) which totaled $26.7 million at March 31, 2018 and December 31, 2017. At March 31, 2018, the estimated fair value of the Bond was approximately $26.6 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 $26.7 million and $27.8 million at March 31, 2018 and December 31, 2017, respectively, 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, $1.1 million of the Bond has been classified as a current liability in accounts payable in the Consolidated Balance Sheet at March 31, 2018.

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 three months ended March 31, 2018, we repurchased 0.6 million shares of our common stock at an average price of $16.18 per share. As of March 31, 2018, we have the authority to purchase an additional 2.9 million shares of our common stock under the current plans approved by the Board of Directors.

Stock Option Exercises

We issued 24 thousand shares of treasury stock during the three months ended March 31, 2018 to accommodate employee stock option exercises. The stock options had exercise prices ranging from $15.29 to $18.97. We received proceeds totaling $0.4 million from the exercise of these stock options during the three months ended March 31, 2018.

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 three months ended March 31, 2018, 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, 2017 filed on February 23, 2018 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 March 31, 2018, 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 March 31, 2018, $80.4 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 March 31, 2018, approximately $110.3 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 March 31, 2018, we held $51.0 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 March 31, 2018 would reduce annualized interest income on our cash and investments by approximately $0.3 million. In addition, we held $59.2 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 March 31, 2018 would reduce the fair value of our fixed-rate bonds by approximately $0.4 million.

As of March 31, 2017, approximately $169.3 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 March 31, 2017 would have reduced annualized interest income on our cash, money market instruments and variable rate demand notes by approximately $0.4 million. In addition, a hypothetical 50 bps increase in interest rates as of March 31, 2017 would have reduced the fair value of our fixed-rate 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 $0.1 million 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 March 31, 2018, we had no material contracts, other than accounts receivable and accounts payable, denominated in foreign currencies. As of March 31, 2018, we did not have any forward contracts outstanding.

For further information about the fair value of our investments and our derivative and hedging activities as of March 31, 2018, see Notes 7 and 8 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, 2017. There have been no material changes to our risk factors since our Annual Report on Form 10-K for the year ended December 31, 2017.

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 Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
January 1, 2018 – January 31, 2018	—	$ —	—	3,559,068
February 1, 2018 – February 28, 2018	628,413	$ 16.18	628,413	2,930,655
March 1, 2018 – March 31, 2018	—	$ —	—	2,930,655
Total	628,413		628,413	

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: May 9, 2018 /s/ Roger D. Shannon
Roger D. Shannon
Senior Vice President of Finance,
Chief Financial Officer,
Corporate Treasurer and Secretary
(Principal Financial Officer)