UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM 10-Q

For the quarterly period ended September 30, 2023 OR TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE AC 1934	T OF
	CT OF
For the transition period from to	
Commission File Number: 001-41446	
ADTRAN Holdings, Inc. (Exact Name of Registrant as Specified in its Charter)	
Delaware 87-2164282 (State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)	
901 Explorer Boulevard Huntsville, Alabama 35806-2807 (Address of principal executive offices) (Zip Code)	
Registrant's telephone number, including area code: (256) 963-8000 Securities registered pursuant to Section 12(b) of the Act:	
Trading	
Title of each class Symbol(s) Name of each exchange on which registered Common Stock, Par Value \$0.01 per share ADTN The NASDAQ Global Select Market	
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 Exc 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 to such filing requirements for the past 90 days. Yes \boxtimes No \square	_
Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursus Rule 405 of Regulation S-T (\S 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required submit such files). Yes \boxtimes No \square	
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller report company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," "emerging growth company" in Rule 12b-2 of the Exchange Act.	
Large accelerated filer Accelerated filer	
Non-accelerated filer Smaller reporting compan	у 🗆
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 company new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box	plying
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 November 3, 2023, the registrant had 78,698,999 shares of common stock, \$0.01 par value per share, outstanding.	

ADTRAN Holdings, Inc.

Quarterly Report on Form 10-Q For the Three and Nine Months Ended September 30, 2023

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GLOSSARY OF SELECTED TERMS

Below are certain acronyms, concepts and defined terms commonly used in our industry and in this Quarterly Report on Form 10-Q, along with their meanings:

Acronym/Concept/	
Defined Term	Meaning
СРЕ	Customer-Premises Equipment
DPLTA	Domination and Profit and Loss Transfer Agreement
DSO	Days Sales Outstanding
E.U.	European Union
EURIBOR	Euro Interbank Offered Rate
IPCEI ME/CT	Important Project of Common European Interest - Microelectronics and Communication Technologies
MSO	Multiple System Operator
ODM	Original Design Manufacturing
RNCI	Redeemable Non-Controlling Interest
SaaS	Software as a Service
SEC	Securities and Exchange Commission
Service Provider	Entity that provides voice, data or video services to consumers and businesses
SI	Person or company that specializes in bringing together component subsystems into a whole and ensuring that those subsystems function together
SLA	Service Level Agreement
SMB	Small and Mid-Sized Business
SOFR	Secured Overnight Financing Rate
U.S.	United States of America
VAR	Value-Added Reseller

GENERAL

Unless the context otherwise indicates or requires, references in this Quarterly Report on Form 10-Q to "ADTRAN," the "Company," "we," "us" and "our" refer to ADTRAN, Inc. and its consolidated subsidiaries prior to the merger of Acorn MergeCo, Inc., a subsidiary of ADTRAN Holdings, Inc., with and into ADTRAN, Inc., on July 8, 2022, after which ADTRAN, Inc. became a whollyowned direct subsidiary of ADTRAN Holdings, Inc. (the "Merger"), and to ADTRAN Holdings, Inc. and its consolidated subsidiaries following the Merger. Furthermore, unless the context otherwise indicates or requires, references in this Quarterly Report on Form 10-Q to "Adtran Networks" refer to Adtran Networks SE (formerly ADVA Optical Networking SE).

CAUTIONARY NOTE REGARDING 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 SEC and other communications with our stockholders. Any statement that does not directly relate to a historical or current fact is a forward-looking statement. Generally, the words "believe", "expect", "intend", "estimate", "anticipate", "would", "will", "may", "might", "could", "should", "can", "future", "assume", "plan", "seek", "predict", "potential", "objective", "expect", "target", "project", "outlook", "forecast" and similar expressions identify forward-looking statements. We caution you that any forward-looking statements made by us or on our behalf are subject to uncertainties and other factors that could affect the accuracy of such statements. Forward-looking statements are based on management's current expectations, as well as certain assumptions and estimates made by, and information available to, management at the time the statements are made. Those statements are based on general assumptions and are subject to various risks, and because they also relate to the future, they are likewise subject to inherent uncertainties and other factors that may cause actual results to differ materially from the views, beliefs and projections expressed in such statements. The following are some of the risks that could affect our financial performance or could cause actual results to differ materially from those expressed or implied in our forward-looking statements:

Risks related to the Business Combination and DPLTA

- We may fail to realize the anticipated strategic and financial benefits sought from the Business Combination.
- We have incurred and expect to continue to incur significant costs in connection with the Business Combination and postclosing integration and restructuring efforts.
- We incurred a substantial amount of indebtedness in connection with the Business Combination and DPLTA. Our failure
 to meet our debt service obligations could have a material adverse effect on our business, financial condition and results of
 operations.
- We have experienced operational challenges as a result of the Business Combination and may also experience negative synergies and loss of customers.
- The terms of the DPLTA may have a material adverse effect on our financial results and condition.
- We are exposed to additional litigation risk and uncertainty with respect to the remaining minority shareholders of Adtran Networks, which litigation may require us to pay a higher purchase price for additional Adtran Networks shares than the amount provided for under the DPLTA.
- We may be unable to successfully retain and motivate our personnel, including personnel at Adtran Networks.
- Negative publicity related to integration measures may adversely affect us.

Risks related to our financial results and Company success

- We have experienced significant fluctuations in revenue and such fluctuations may continue. Fluctuations in revenue can cause our operating results in a given reporting period to be higher or lower than expected.
- The lengthy sales and approval process required by Service Providers for new products has resulted in fluctuations in our revenue and may result in future revenue fluctuations.
- We depend heavily on sales to certain customers; the loss of any of these customers or a significant project would significantly reduce our revenue and net income.
- Our exposure to the credit risks of our customers and distributors may make it difficult to collect accounts receivable and could adversely affect our operating results, financial condition and cash flows.
- We expect gross margins to continue to vary over time, and our levels of product and services gross margins may not be sustainable.
- Our dependence on a limited number of suppliers for certain raw materials, key components and ODM products, combined with supply shortages, has prevented and may continue to prevent us from delivering our products on a timely basis, which

has had and may continue to have a material adverse effect on operating results and could have a material adverse effect on customer relations.

- We compete in markets that have become increasingly competitive, which may result in reduced gross profit margins and market share.
- Our estimates regarding future warranty obligations may change due to product failure rates, installation and shipment volumes, field service repair obligations and other rework costs incurred in correcting product failures. If our estimates change, our liability for warranty obligations may increase or decrease, impacting future cost of revenue.
- Managing our inventory is complex and has included and may continue to include write downs of excess or obsolete inventory.
- The continuing growth of our international operations has and may continue to expose us to additional risks, increase our
 costs and adversely affect our operating results, financial condition and cash flows.
- Our success depends on attracting and retaining key personnel.
- If we fail to manage our exposure to worldwide financial and securities markets successfully, our operating results and financial statements could be materially impacted.
- The terms of our and Adtran Networks' credit agreements restrict our current and future operations, particularly our ability to respond to changes or to take certain actions.
- We are exposed to adverse currency exchange rate fluctuations in jurisdictions where we transact in local currency, which
 could harm our financial results and cash flows.
- We require a significant amount of cash to service our indebtedness, our payment obligations to Adtran Networks shareholders under the DPLTA, and other obligations.
- We have recognized impairment charges related to goodwill and other intangible assets in the past and may be required to
 do so in the future.
- We may be unable to successfully and effectively manage and integrate acquisitions, divestitures and other significant transactions, which could harm our operating results, business and prospects.

Risks related to our control environment

- Breaches of our information systems and cyberattacks could compromise our intellectual property and cause significant damage to our business and reputation.
- We previously had to restate our previously issued consolidated financial statements and, as part of that process, we identified a material weakness in our internal control over financial reporting commencing September 30, 2022 and continuing as of the date hereof. If we are unable to develop and maintain effective internal control over financial reporting, we may not be able to accurately report our financial results in a timely manner, which may adversely affect investor confidence in us and may adversely affect our business, financial condition and results of operations.
- We may face litigation and other risks as a result of the restatement of our previously issued consolidated financial statements and material weakness in our internal control over financial reporting.

Risks related to the telecommunications industry

- We must continue to update and improve our products and develop new products to compete and to keep pace with improvements in communications technology.
- Our failure or the failure of our contract manufacturers to comply with applicable environmental regulations could adversely impact our results of operations.
- If our products do not interoperate with our customers' networks, installations may be delayed or canceled, which could harm our business.
- We engage in research and development activities to develop new, innovative solutions and to improve the application of
 developed technologies, and as a consequence may miss certain market opportunities enjoyed by larger companies with
 substantially greater research and development efforts and which may focus on more leading-edge development.
- Our strategy of outsourcing a portion of our manufacturing requirements to subcontractors located in various international regions may result in us not meeting our cost, quality or performance standards.

- Our failure to maintain rights to intellectual property used in our business could adversely affect the development, functionality and commercial value of our products.
- Software under license from third parties for use in certain of our products may not continue to be available to us on commercially reasonable terms.
- Our use of open source software could impose limitations on our ability to commercialize our products.
- We may incur liabilities or become subject to litigation that would have a material effect on our business.
- If we are unable to successfully develop and maintain relationships with SIs, Service Providers and enterprise VARs, our revenue may be negatively affected.

Risks related to the Company's stock price

- Our operating results historically have fluctuated and are likely to continue to fluctuate in future periods. Such fluctuations
 can adversely affect our stock price.
- The price of our common stock has been volatile and may continue to fluctuate significantly.

Risks related to the regulatory environments in which we do business

- We are subject to complex and evolving U.S. and foreign laws, regulations and standards governing the conduct of our business. Violations of these laws and regulations may harm our business, subject us to penalties and to other adverse consequences.
- Changes in trade policy in the U.S. and other countries, including the imposition of additional tariffs and the resulting consequences, may adversely impact our gross profits, gross margins, results of operations and financial condition.
- New or revised tax regulations, changes in our effective tax rate, recognition of a valuation allowance or assessments arising from tax audits may have an adverse impact on our results.
- Central banks' monetary policy actions and instability in the financial services sector could increase our costs of borrowing money and negatively impact our financial condition and future operations.
- Rising inflation could negatively impact our revenues and profitability if increases in the prices of our products and services or a decrease in customer spending result in lower sales.
- Expectations relating to environmental, social and governance considerations expose the Company to potential liabilities, increased costs, reputational harm, and other adverse effects on the Company's business.
- Further downgrades of the U.S. credit rating, impending automatic spending cuts or a government shutdown could negatively impact our liquidity, financial condition and earnings.

The foregoing list of risks is not exclusive. For a more detailed description of the risk factors associated with our business, see Part I, Item 1A of Amendment No. 1 to the Company's Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC August 14, 2023, as well as the risk factors set forth in Part II, Item 1A of this Quarterly Report on Form 10-Q. 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 Holdings, Inc. CONDENSED CONSOLIDATED BALANCE SHEETS (Unaudited)

(In thousands, except per share amounts)

	Sej	ptember 30, 2023	Do	ecember 31, 2022
ASSETS				
Current Assets				
Cash and cash equivalents	\$	116,092	\$	108,644
Short-term investments (includes \$0 and \$340 of available-for-sale securities as of September 30, 2023 and December 31, 2022, respectively, reported at fair value)		_		340
Accounts receivable, less allowance for credit losses of \$15 and \$49 as of September 30, 2023 and December 31, 2022, respectively		229,333		279,435
Other receivables		24,337		32,831
Inventory, net		373,971		427,531
Prepaid expenses and other current assets		35,826		33,577
Total Current Assets		779,559		882,358
Property, plant and equipment, net		118,623		110,699
Deferred tax assets		90,260		67,839
Goodwill		339,083		381,724
Intangibles, net		328,695		401,211
Other non-current assets		60,770		66,998
Long-term investments (includes \$0 and \$8,913 of available-for-sale securities as of September 30, 2023 and December 31, 2022, respectively, reported at fair value)		25,179		32,665
Total Assets	\$	1,742,169	\$	1,943,494
LIABILITIES, REDEEMABLE NON-CONTROLLING INTEREST AND EQUITY				
Current Liabilities				
Accounts payable	\$	148,913	\$	237,699
Revolving credit agreements outstanding	-	10,580	*	35,936
Notes payable				24,598
Unearned revenue		49,832		41,193
Accrued expenses and other liabilities		29,708		35,235
Accrued wages and benefits		35,957		44,882
Income tax payable, net		10,302		9,032
Total Current Liabilities	-	285,292		428,575
Non-current revolving credit agreement outstanding		200,000		60,000
Deferred tax liabilities		37,977		61,629
Non-current unearned revenue		23,501		19,239
Pension liability		10,732		10,624
Deferred compensation liability		26,833		26,668
Non-current lease obligations		23,612		22,807
Other non-current liabilities		17,408		10.339
Total Liabilities				- ,
Commitments and contingencies (see Note 20)		625,355		639,881
Redeemable Non-Controlling Interest		421 021		
Equity		431,921		-
Common stock, par value \$0.01 per share; 200,000 shares authorized; 78,688 shares issued and 78,391 outstanding as of September 30, 2023 and 78,088 shares issued and 77,889 shares outstanding as of December 31, 2022		787		781
Additional paid-in capital		770,565		895,834
Accumulated other comprehensive income		32,800		46,713
Retained (deficit) earnings		(113,289)		55,338
Treasury stock at cost: 297 and 198 shares as of September 30, 2023 and December 31, 2022, respectively		(5,970)		(4,125)
Non-controlling interest				309,072
Total Equity		684,893		1,303,613
Total Liabilities, Redeemable Non-Controlling Interest and Equity				

ADTRAN Holdings, Inc. CONDENSED CONSOLIDATED STATEMENTS OF LOSS (Unaudited)

(In thousands, except per share amounts)

2023		2022		2023		2022
	\$	304,940	\$		\$	599,306
43,767		35,769		129,637		67,959
272,331		340,709		923,621		667,265
160,244		222,606		596,334		413,180
21,043		_		21,043		_
16,807		15,076		51,646		34,236
198,094		237,682		669,023		447,416
74,237		103,027		254,598		219,849
62,907		74,880		196,887		130,646
62,752		59,196		203,493		112,187
_		16,969		_		16,969
37,874		_		37,874		_
(89,296)		(48,018)		(183,656)		(39,953)
521		347		1,183		768
(4,507)		(1,303)		(11,858)		(1,427)
(1,443)		(2,691)		1,071		(10,752)
2,523		2,494		4,714		2,949
(92,202)		(49,171)		(188,546)		(48,415)
16,553		4,312		36,229		4,572
(75,649)	\$	(44,859)	\$	(152,317)	\$	(43,843)
(2,914)		(2,925)		(11,784)		(2,925)
(72,735)	\$	(41,934)	\$	(140,533)	\$	(40,918)
	-					
78,389		73,036		78,378		57,175
						57,175
,		,		,		,
(0.93)	\$	(0.57)	\$	(1.79)	\$	(0.72)
(0.93)	\$	(0.57)	\$	(1.79)	\$	(0.72)
	\$\text{Septem}\$ 2023 228,564 43,767 272,331 160,244 21,043 16,807 198,094 74,237 62,907 62,752 37,874 (89,296) 521 (4,507) (1,443) 2,523 (92,202) 16,553 (75,649) (2,914) (72,735) 78,389 78,389 (0.93)	September 36 2023 228,564 \$ 43,767 272,331 \$ 160,244 21,043 16,807 \$ 198,094 74,237 62,907 62,752 \$ — 37,874 (89,296) 521 (4,507) (1,443) 2,523 (92,202) 16,553 (75,649) \$ (2,914) (72,735) \$ 78,389 78,389 78,389 78,389 (0.93) \$	228,564 \$ 304,940 43,767 35,769 272,331 340,709 160,244 222,606 21,043 — 16,807 15,076 198,094 237,682 74,237 103,027 62,907 74,880 62,752 59,196 — 16,969 37,874 — (89,296) (48,018) 521 347 (4,507) (1,303) (1,443) (2,691) 2,523 2,494 (92,202) (49,171) 16,553 4,312 (75,649) \$ (44,859) (2,914) (2,925) (72,735) \$ (41,934) 78,389 73,036 78,389 73,036 (0.93) \$ (0.57)	September 30, 2023 2022 228,564 \$ 304,940 \$ 43,767 35,769 35,769 272,331 340,709 160,244 222,606 21,043 — 16,807 15,076 198,094 237,682 74,237 103,027 62,907 74,880 62,752 59,196 — 16,969 37,874 — (89,296) (48,018) 521 347 (4,507) (1,303) (1,443) (2,691) 2,523 2,494 (92,202) (49,171) 16,553 4,312 (75,649) (44,859) (2,914) (2,925) (72,735) (41,934) 78,389 73,036 78,389 73,036 (0.93) (0.57)	September 30, Septem 2023 2023 2022 2023 228,564 \$ 304,940 \$ 793,984 43,767 35,769 129,637 272,331 340,709 923,621 160,244 222,606 596,334 21,043 — 21,043 16,807 15,076 51,646 198,094 237,682 669,023 74,237 103,027 254,598 62,907 74,880 196,887 62,752 59,196 203,493 — 16,969 — 37,874 — 37,874 (89,296) (48,018) (183,656) 521 347 1,183 (4,507) (1,303) (11,858) (1,443) (2,691) 1,071 2,523 2,494 4,714 (92,202) (49,171) (188,546) 16,553 4,312 36,229 (75,649) (44,859) (152,317) <td< td=""><td>September 30, 2023 September 30, 2023 228,564 \$ 304,940 \$ 793,984 \$ 43,767 272,331 340,709 923,621 160,244 222,606 596,334 21,043 — 21,043 16,807 15,076 51,646 198,094 237,682 669,023 74,237 103,027 254,598 62,907 74,880 196,887 62,752 59,196 203,493 — 16,969 — 37,874 — 37,874 (89,296) (48,018) (183,656) 521 347 1,183 (4,507) (1,303) (11,858) (1,443) (2,691) 1,071 2,523 2,494 4,714 (92,202) (49,171) (188,546) 16,553 4,312 36,229 (75,649) \$ (44,859) \$ (152,317) \$ (2,914) (2,925) (11,784) (72,735) \$ (41,934) \$ (140,533) \$ <</td></td<>	September 30, 2023 September 30, 2023 228,564 \$ 304,940 \$ 793,984 \$ 43,767 272,331 340,709 923,621 160,244 222,606 596,334 21,043 — 21,043 16,807 15,076 51,646 198,094 237,682 669,023 74,237 103,027 254,598 62,907 74,880 196,887 62,752 59,196 203,493 — 16,969 — 37,874 — 37,874 (89,296) (48,018) (183,656) 521 347 1,183 (4,507) (1,303) (11,858) (1,443) (2,691) 1,071 2,523 2,494 4,714 (92,202) (49,171) (188,546) 16,553 4,312 36,229 (75,649) \$ (44,859) \$ (152,317) \$ (2,914) (2,925) (11,784) (72,735) \$ (41,934) \$ (140,533) \$ <

(1) For the three and nine months ended September 30, 2023, we have recognized \$2.9 million and \$8.6 million, respectively, representing the recurring eash compensation earned by non-controlling interest shareholders post-DPLTA and an incremental \$3.2 million net loss attributable to non-controlling interests pre-DPLTA for the nine months ended September 30, 2023.

ADTRAN Holdings, Inc. CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS (Unaudited)

(In thousands)

	Three Months Ended September 30,				Nine Mont Septem		
		2023		2022	2023		2022
Net Loss	\$	(75,649)	\$	(44,859)	\$ (152,317)	\$	(43,843)
Other Comprehensive Loss, net of tax							
Net unrealized gain (loss) on available-for-sale securities		391		(396)	454		(1,320)
Defined benefit plan adjustments		(83)		(118)	(25)		(218)
Foreign currency translation loss		(29,716)		(23,172)	(14,098)		(26,930)
Other Comprehensive Loss, net of tax		(29,408)		(23,686)	(13,669)		(28,468)
Less: Comprehensive (Loss) Income attributable to non- controlling interest, net of tax		_		(94)	244		(94)
Comprehensive Loss attributable to ADTRAN Holdings, Inc., net of tax	\$	(105,057)	\$	(68,451)	\$ (166,230)	\$	(72,217)

ADTRAN Holdings, Inc. CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (Unaudited)

(In thousands, except per share amounts)

	Common Shares	Common Stock	Pa	litional aid-In	(D	etained Deficit) arnings		reasury Stock	Cor	cumulated Other mprehensiv e Income	No contro inter	lling		Total Equity
Balance as of December 31, 2022	78,088	\$ 781	\$	895,834	\$	55,338	\$	(4,125)	\$	46,713	\$ 309	1	\$	1,303,613
Net loss Reclassification and remeasurement	_	_		_		(37,274)		_		_	(.	3,179)		(40,453)
from equity to mezzanine equity for non- controlling interests in Adtran Networks	_	_		(137,620)		_		_		_	(30)	6,137)		(443,757)
Other comprehensive income, net of tax	_	_				_		_		8,538		244		8,782
Dividend payments to ADTRAN Holdings, Inc. shareholders (\$0.09 per share)	_	_		_		(7,076)		_		_		_		(7,076)
Deferred compensation adjustments, net of tax	_	_		_		_		(1,792)		_		_		(1,792)
ADTRAN RSUs and restricted stock vested	561	6		_		(144)		_		_		_		(138)
ADTRAN stock options exercised	6	_		_		58		_		_		_		58
ADTRAN stock-based compensation expense	_	_		3,812		_		_		_		_		3,812
Redemption of redeemable non- controlling interest	_	_		_		343		_		_		_		343
Foreign currency remeasurement of redeemable non-controlling interest	_	_		_		(430)		_		_		_		(430)
Annual recurring compensation earned	_	_		_		(2,809)		_		_		_		(2,809)
Adtran Networks stock-based compensation expense				9								_		9
Balance as of March 31, 2023	78,655	\$ 787	\$	762,035	\$	8,006	\$	(5,917)	\$	55,251	\$		\$	820,162
Net loss	_	_		_		(36,215)		_		_		_		(36,215)
Other comprehensive income, net of tax Dividend payments to ADTRAN Holdings, Inc. shareholders (\$0.09 per	_	_		_		_		_		6,957		_		6,957
share)	_	_		_		(7,076)		_		_		_		(7,076)
Dividends accrued for RSUs	_	_		_		9				_		_		9
Deferred compensation adjustments, net of tax ADTRAN RSUs and restricted stock	_	_		_		_		(26)		_		_		(26)
vested	6	_		_		(44)		_		_		_		(44)
Adtran Networks stock options exercised	_	_		92		_		_		_		_		92
ADTRAN stock-based compensation expense	_	_		4,291		_		_		_		_		4,291
Redemption of redeemable non- controlling interest	_	_		_		6		_		_		_		6
Foreign currency remeasurement of redeemable non-controlling interest	_	_		_		(2,814)		_		_		_		(2,814)
Annual recurring compensation earned	_	_		_		(2,882)		_		_		_		(2,882)
Adtran Networks stock-based compensation expense		_		10						_				10
Balance as of June 30, 2023	78,661	\$ 787	\$	766,428	\$	(41,010)	\$	(5,943)	\$	62,208	\$	_	\$	782,470
Net loss			=		-	(75,649)	=	(0,7.0)	-	-		_	Ψ	(75,649)
Other comprehensive loss, net of tax	_	_		_		_		_		(29,408)		_		(29,408)
Dividend payments (\$0.09 per share)	_	_		_		(7,085)		_				_		(7,085)
Dividends accrued for RSUs	_	_		_		(8)								(8)
Deferred compensation adjustments, net of tax	_	_		_		_		(27)		_		_		(27)
ADTRAN RSUs and restricted stock vested	25	_		_		(175)		_		_		_		(175)
ADTRAN stock options exercised	2			_		15				_				15
Addran Networks stock options exercised	_	_		8		_		_		_		_		8
ADTRAN stock-based compensation expense	_			4,126		_		_				_		4,126
Redemption of redeemable non- controlling interest	_	_		_		2		_		_		_		2
Foreign currency remeasurement of redeemable non-controlling interest	_	_		_		13,535		_		_		_		13,535
Annual recurring compensation earned	_	_		_		(2,914)		_		_		_		(2,914)
Adtran Networks stock-based compensation expense	_	_		3		_				_		_		3
Balance as of September 30, 2023	78,688	\$ 787	\$	770,565	\$	(113,289)	\$	(5,970)	\$	32,800	\$	_	\$	684,893
•					_	 ′.								

ADTRAN Holdings, Inc. CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (Unaudited)

(In thousands, except per share amounts)

	Common Shares	Com: Sto			dditional Paid-In Capital		Retained Earnings	Treasury Stock		cumulated Other pprehensive Loss	Non- controlling interest		Total Equity
Balance as of December 31, 2021	79,652	\$	797	\$	288,946	\$	740,820	\$ (661,547)	\$	(11,914)	\$ -	\$	357,102
Net loss	_		_		_		(1,127)				_		(1,127)
Other comprehensive loss, net of tax	_		_		_			_		(1,642)	_		(1,642)
Dividend payments (\$0.09 per													
share)	_		_		_		(4,438)	_		_	_		(4,438)
Dividends accrued on unvested RSUs	_		_		_		32	_		_	_		32
Deferred compensation adjustments, net of tax	_		_		_		_	(18)		_	_		(18)
PSUs, RSUs and restricted stock vested	_		_		_		(895)	841		_	_		(54)
Stock options exercised	_				_		(143)	711		_			568
Stock-based compensation expense					1,893		(113)	, 11					1,893
Balance as of March 31, 2022	79,652	\$	797	\$	290,839	\$	734,249	\$ (660,013)	\$	(13,556)	<u>s</u> –	\$	352,316
	77,032	3	131	Þ	290,039	Þ		3 (000,013)	Ф	(13,330)	<u> </u>	Þ	
Net income	_		—		_		2,143	_			_		2,143
Other comprehensive loss, net of tax	_		_		_		_	_		(3,140)	_		(3,140)
Dividend payments (\$0.09 per share)	_		_		_		(4,439)	_		_	_		(4,439)
Dividends accrued on unvested RSUs	_		_		_		(23)	_		_	_		(23)
Deferred compensation adjustments, net of tax	_		_		_		_	24		_	_		24
PSUs, RSUs and restricted stock vested	_		_		_		(90)	(210)		_	_		(300)
Stock options exercised	_		_		_		(19)	87		_	_		68
Stock-based compensation expense	_		_		1,888			_		_	_		1,888
Balance as of June 30, 2022	79,652	\$	797	\$	292,727	\$	731,821	\$ (660,112)	\$	(16,696)	<u>s</u> —	\$	348,537
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Net loss	27,995		280		577.980		(41,934)				(2,925)		(44,859)
Acquisition of Adtran Networks	. ,		280		377,980		_	_		_	316,415		894,675
Retirement of treasury stock	(30,33	((303)		_		(655,761)	656,064			_		
Other comprehensive loss, net of tax	_		—		_		_	_		(23,592)	(94)		(23,686)
Dividend payments (\$0.09 per share)	_		_		_		(6,982)	_		_	_		(6,982)
Deferred compensation adjustments, net of tax	_		_		_		_	(35)		_	_		(35)
ADTRAN RSUs and restricted													
stock vested	4		—		_		(40)	_		_	_		(40)
ADTRAN stock options exercised	298		2		_		4,431	_		_	_		4,433
ADTRAN stock-based													
compensation expense	_		_		11,195		_	_		_	_		11,195
Reclassification of Adtran Networks stock options	_		_		187		_	_		_	99		286
Adtran Networks stock options exercised	_		_		236		_	_		_	129		365
Adtran Networks stock-based compensation expense	_		_		885		_	_		_	53		938
Balance as of September 30, 2022	77,619	\$	776	\$	883,210	\$	31,535	\$ (4,083)	\$	(40,288)	\$ 313,677	\$	1,184,827
•				_		_			_			_	

ADTRAN Holdings, Inc. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited) (In thousands)

	Nine Months Ended September 30,			
		2023		2022
Cash flows from operating activities:				
Net loss	\$	(152,317)	\$	(43,843
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization		91,422		34,783
Asset impairment		_		16,969
Goodwill impairment		37,874		_
Amortization of debt issuance cost		607		200
(Gain) loss on investments, net		(3,316)		10,395
Stock-based compensation expense		12,229		15,912
Deferred income taxes		(45,941)		(26,366
Other, net		204		32
Inventory write down		21,043		_
Inventory reserves		29,836		(6,681
Changes in operating assets and liabilities:				
Accounts receivable, net		47,347		(34,535
Other receivables		8,340		(2,154
Inventory		536		(76,293
Prepaid expenses, other current assets and other assets		1,816		610
Accounts payable		(87,903)		70,381
Accrued expenses and other liabilities		6,476		(23,005
Income taxes payable, net		2,433		20,862
Net cash used in operating activities		(29,314)		(42,733
Cash flows from investing activities:				
Purchases of property, plant and equipment		(33,674)		(10,14)
Proceeds from sales and maturities of available-for-sale investments		10,545		30,474
Purchases of available-for-sale investments		(807)		(22,215
Proceeds from beneficial interests in securitized accounts receivable		1,178		1,294
Proceeds from disposals of property, plant and equipment		_		12
Acquisition of business, net of cash acquired		_		43,957
Net cash (used in) provided by investing activities		(22,758)		43,381
Cash flows from financing activities:				
Tax withholdings related to stock-based compensation settlements		(6,331)		(515
Proceeds from stock option exercises		187		5,434
Dividend payments		(21,237)		(15,859
Proceeds from draw on revolving credit agreements		163,760		133,141
Repayment of revolving credit agreements		(49,233)		(48,000
Non-controlling interest put option buyback		(1,196)		(10,000
Payment of debt issuance cost		(708)		(3,015
Repayment of notes payable		(24,931)		(10,057
Net cash provided by financing activities	<u></u>	60,311		61,129
		*****		,
Net increase in cash and cash equivalents		8,239		61,777
Effect of exchange rate changes		(791)		(7,496
Cash and cash equivalents, beginning of period		108,644		56,818
Cash and cash equivalents, end of period	\$	116,092	\$	111,099
Symplemental displacement of each financing activities:				
Supplemental disclosure of cash financing activities: Cash paid for interest	\$	8,540	\$	633
Cash used in operating activities related to operating leases	\$	7,378	\$	2,272
Supplemental disclosure of non-cash investing activities:				
Right-of-use assets obtained in exchange for lease obligations	\$	8,490	\$	904
Purchases of property, plant and equipment included in accounts payable Adtran Networks common shares exchanged in acquisition	\$ \$	2,508	\$ \$	1,037 565,491
Addran Networks options assumed in acquisition	\$		\$	12,769
Non-controlling interest related to Adtran Networks	\$	_	\$	315,415

ADTRAN Holdings, Inc. NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

GENERAL

ADTRAN Holdings, Inc. ("ADTRAN" or the "Company") is a leading global provider of networking and communications platforms, software, systems and services focused on the broadband access market, serving a diverse domestic and international customer base in multiple countries that includes large, medium and small Service Providers, alternative Service Providers, such as utilities, municipalities and fiber overbuilders, cable/MSOs, SMBs and distributed enterprises. Our innovative solutions and services enable voice, data, video and internet-communications across a variety of network infrastructures and are currently in use by millions worldwide. We support our customers through our direct global sales organization and our distribution networks. 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 optimal selling prices and increased functionality as compared to both the prior generation of a product and to the products of competitors in order to gain market share. To service our customers and grow revenue, we are continually conducting research and developing new products addressing customer needs and testing those products for the specific requirements of the particular customers. We offer a broad portfolio of flexible software and hardware network solutions and services that enable Service Providers to meet today's service demands, while enabling them to transition to the fully converged, scalable, highly-automated, cloud-controlled voice, data, internet and video network of the future. In addition to our global headquarters in Huntsville, Alabama, and our European headquarters in Munich, Germany, we have sales and research and development facilities in strategic global locations.

ADTRAN Holdings, Inc. solely owns ADTRAN, Inc. and is the majority shareholder of Adtran Networks (formerly ADVA Optical Networking SE). ADTRAN is a leading global provider of open, disaggregated networking and communications solutions. Adtran Networks is a global provider of network solutions for data, storage, voice and video services. The combined technology portfolio can best address current and future requirements, especially regarding the convergence of solutions at the network edge.

Domination and Profit and Loss Transfer Agreement

The DPLTA between the Company, as the controlling company, and Adtran Networks SE, as the controlled company, as executed on December 1, 2022, became effective on January 16, 2023, as a result of its registration with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) at the registered seat of Adtran Networks (Jena).

Under the DPLTA, subject to certain limitations pursuant to applicable law and the specific terms of the DPLTA, (i) the Company is entitled to issue binding instructions to the management board of Adtran Networks, (ii) Adtran Networks will transfer its annual profit to the Company, subject to, among other things, the creation or dissolution of certain reserves, and (iii) the Company will generally absorb the annual net loss incurred by Adtran Networks. The obligation of Adtran Networks to transfer its annual profit to the Company applies for the first time to the profit, if any, generated in the Adtran Networks fiscal year 2023. The obligation of the Company to absorb Adtran Networks annual net loss applies for the first time to the loss, if any, generated in the Adtran Networks fiscal year 2023.

Pursuant to the terms of the DPLTA, each Adtran Networks shareholder (other than the Company) has received an offer to elect either (1) to remain an Adtran Networks shareholder and receive from us an Annual Recurring Compensation payment, or (2) to receive Exit Compensation plus guaranteed interest. The guaranteed interest under the Exit Compensation is calculated from the effective date of the DPLTA to the date the shares are tendered, less any Annual Recurring Compensation paid. The guaranteed interest rate is 5.0% plus a variable component (according to the German Civil Code) that was 3.12% as of September 30, 2023. Assuming all the minority holders of currently outstanding Adtran Networks shares were to elect the second option, we would be obligated to make aggregate Exit Compensation payments, including guaranteed interest, of approximately €325.3 million or approximately \$344.2 million, based on an exchange rate as of September 30, 2023 and reflecting interest accrued through September 30, 2023 during the pendency of the appraisal proceedings discussed below. Shareholders electing the first option of Annual Recurring Compensation may later elect the second option. The opportunity for outside Adtran Networks shareholders to tender Adtran Networks shares in exchange for Exit Compensation had been scheduled to expire on March 16, 2023. However, due to the appraisal proceedings that have been initiated in accordance with applicable German law, this time period for tendering shares has been extended pursuant to the German Stock Corporation Act (*Aktiengesetz*) and will end two months after the date on which a final decision in such appraisal proceedings has been published in the Federal Gazette (*Bundesanzeiger*).

We are also obligated to absorb any annual net loss of Adtran Networks under the DPLTA. Additionally, our obligation to pay Annual Recurring Compensation under the DPLTA is a continuing payment obligation, which will amount to approximately €10.6 million or \$11.2 million (based on the current exchange rate) per year assuming none of the minority Adtran Networks shareholders were to elect Exit Compensation. The foregoing amounts do not reflect any potential increase in payment obligations that we may have depending on the outcome of ongoing appraisal proceedings in Germany. During the three and nine months ended September 30, 2023, we accrued \$2.9 million and \$8.6 million in Annual Recurring Compensation, which was reflected as a reduction to retained (deficit) earnings, respectively.

On October 18, 2022, the Company's Board of Directors authorized the Company to purchase additional shares of Adtran Networks through open market purchases not to exceed 15,346,544 shares. For the three and nine months ended September 30, 2023, less than 1 thousand shares and 64 thousand shares, respectively, of Adtran Networks stock was tendered to the Company and Exit Compensation payments of approximately €8 thousand and €1.1 million, respectively, or approximately \$9 thousand and \$1.2 million, respectively, based on an exchange rate as of September 30, 2023, were paid to Adtran Networks shareholders.

As of September 30, 2023, and as of the date of issuance of these financial statements, the Company does not have sufficient liquidity to meet payment obligations under the DPLTA pertaining to Exit Compensation assuming a substantial majority of Adtran Networks shareholders elect such option in the current period. We believe the probability that a substantial majority of Adtran Networks shareholders elect to receive Exit Compensation in the next twelve months is remote based on the diverse base of shareholders that must make this election on an individual shareholder basis, the current ongoing appraisal proceedings involving a dispute on the value of the Exit Compensation which is expected to take 24-36 months to resolve, the current guaranteed Annual Recurring Compensation payment plus the interest earned on such shares during the ongoing appraisal proceedings, and the current trading value of Adtran Networks SE shares.

Therefore, we believe that our cash and cash equivalents, investments, working capital management initiatives and access to funds under the Wells Fargo credit facility, including additional funding provided for under the First Amendment to the Wells Fargo credit facility that was signed on August 9, 2023, (described below) will be adequate to meet our operating and capital needs and our obligations under the DPLTA, including potential Exit Compensation, for at least the next 12 months, from the issuance of these financial statements, although we have suspended dividend payments and are implementing a business efficiency program, which includes, but is not limited to, planned reductions in our operating expenses and a site consolidation plan. In connection with the site consolidation plan, we are also exploring a potential sale of our headquarters in Huntsville. We may also need to further reduce capital expenditures and/or take other steps to preserve working capital in order to ensure that we can meet such needs and obligations. See Note 22, Subsequent Events, for additional information regarding the suspension of the quarterly dividend.

On July 18, 2022, ADTRAN Holdings, Inc. and ADTRAN, Inc., as the borrower, entered into a credit agreement with a syndicate of banks, including Wells Fargo Bank, National Association, as administrative agent ("Administrative Agent"), and the other lenders named therein (the "Credit Agreement"). The Credit Agreement allowed for borrowings of up to \$100.0 million in aggregate principal amount, but the borrowings increased to up to \$400.0 million in aggregate principal amount upon the DPLTA becoming effective on January 16, 2023.

On August 9, 2023, the Company, its wholly-owned direct subsidiary, ADTRAN, Inc., the lenders party thereto and the Administrative Agent entered into a First Amendment to the Credit Agreement (the "First Amendment" and, together with the Credit Agreement, the "Credit Facility"). The Credit Facility matures in July 2027; however, the Company has an option to request extensions subject to customary conditions. See Note 12, Revolving Credit Agreements, for additional information regarding the terms of the Credit Facility.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying unaudited Condensed Consolidated Financial Statements of ADTRAN Holdings, Inc. and its subsidiaries have been prepared pursuant to the rules and regulations of the SEC applicable to interim financial information presented in Quarterly Reports on Form 10-Q. Accordingly, certain information and notes required by generally accepted accounting principles in the United States of America ("U.S. GAAP") for complete financial statements are not included herein. The December 31, 2022 Condensed Consolidated Balance Sheet is derived from audited financial statements but does not include all disclosures required by U.S. GAAP.

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 financial statements should be read in conjunction with the consolidated financial statements and notes thereto included in Amendment No. 1 to the ADTRAN Holdings, Inc. Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC on August 14, 2023.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP 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. Significant estimates include allowance for credit losses on accounts receivable and contract assets, excess and obsolete inventory reserves, warranty reserves, customer rebates, determination and accrual of the deferred revenue related to performance obligations under contracts with customers, estimated costs to complete obligations associated with deferred and accrued revenues and network installations, estimated income tax provision and income tax contingencies, fair value of stock-based compensation, assessment of goodwill and other intangibles for impairment, estimated lives of intangible assets, estimates of intangible assets upon measurement, estimated pension liability and fair value of investments and estimated contingent liabilities. Actual amounts could differ significantly from these estimates.

We assessed certain accounting matters that generally require consideration of forecasted financial information in context with the information reasonably available to us and the unknown future impacts of supply chain constraints, inflationary pressures, the energy crisis, currency fluctuations and political tensions as of September 30, 2023, and through the date of this report. The accounting matters assessed included, but were not limited to, the allowance for credit losses, stock-based compensation, carrying value of goodwill, intangibles and other long-lived assets, financial assets, valuation allowances for tax assets, revenue recognition and costs of revenue. Future conditions related to supply chain constraints, inflationary pressures, the energy crisis, rising interest rates, instability in the financial services industry, currency fluctuations and political tensions could result in further impacts to the Company's consolidated financial statements in future reporting periods.

Redeemable Non-Controlling Interest

As of September 30, 2023 and December 31, 2022, the non-controlling Adtran Networks stockholders' equity ownership percentage in Adtran Networks was approximately 34.6% and 34.7%, respectively.

As a result of the effectiveness of the DPLTA on January 16, 2023, the Adtran Networks shares, representing the equity interest in Adtran Networks held by holders other than the Company, can be tendered at any time and are, therefore, redeemable and must be classified outside stockholders' equity. Therefore, the permanent equity noncontrolling interest balance was reclassified to redeemable non-controlling interest on January 16, 2023 and was remeasured to fair value based on the trading market price of the Adtran Networks shares.

Subsequently, the carrying value of the RNCI is adjusted to its maximum redemption value at each reporting date when the maximum redemption value is greater than the initial carrying amount of the RNCI. However, the RNCI will be remeasured using the current exchange rate at each reporting date as long as the RNCI is currently redeemable. For the period of time that the DPLTA is in effect, the RNCI will continue to be presented as RNCI outside of stockholders' equity in the Condensed Consolidated Balance Sheets.

See Note 16 for additional information on RNCI.

Recently Adopted Accounting Pronouncements

In October 2021, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2021-08, Business Combinations (Topic 805) Accounting for Contract Assets and Contract Liabilities from Contracts with Customers, which would require an acquirer to recognize and measure acquired contract assets and contract liabilities in a manner consistent with how the acquiree recognized and measured them in its pre-acquisition financial statements in accordance with Topic 606, Revenue Recognition. The Company early adopted ASU 2021-08 on July 1, 2022 and the standard was applied retrospectively beginning with January 1, 2022.

Recent Accounting Pronouncements Not Yet Adopted

There are currently no accounting pronouncements not yet adopted that are expected to have a material effect on the Condensed Consolidated Financial Statements.

2. BUSINESS COMBINATION

Adtran Networks SE (formerly ADVA Optical Networking SE)

On August 30, 2021, ADTRAN, Inc. and Adtran Networks (then known as ADVA Optical Networking SE) entered into a Business Combination Agreement, pursuant to which both companies agreed to combine their respective businesses and each become subsidiaries of a new holding company, ADTRAN Holdings, Inc. (formerly known as Acorn HoldCo, Inc.), which was formed as a wholly-owned subsidiary of ADTRAN, Inc. in order to consummate the transactions under the Business Combination Agreement. Under the terms of the Business Combination Agreement, on July 8, 2022, Acorn MergeCo, Inc, a Delaware corporation and wholly-owned direct subsidiary of the Company, merged with and into ADTRAN, Inc., with ADTRAN, Inc. surviving the Business Combination as a wholly-owned direct subsidiary of the Company.

Additionally, pursuant to the Business Combination Agreement, on July 15, 2022, the Company made a public offer to exchange each issued and outstanding no-par value bearer share of Adtran Networks for 0.8244 shares of Company Common Stock, par value \$0.01 per share of the Company. The Exchange Offer was settled on July 15, 2022 (the "Exchange Offer Settlement Date"), on which date the Company acquired 33,957,538 bearer shares of Adtran Networks, or 65.43% of Adtran Networks' outstanding bearer shares as of the Exchange Offer Settlement Date, in exchange for the issuance of an aggregate of 27,994,595 shares of Company Common Stock. Additionally, pursuant to the Business Combination Agreement, Adtran Networks stock option holders were entitled to have their Adtran Networks stock options assumed by ADTRAN Holdings, Inc. (applying the exchange ratio in the Business Combination Agreement), thereafter representing options to acquire stock of ADTRAN, Holdings, Inc. The fair value of the Adtran Networks stock options assumed by ADTRAN Holdings, Inc. was \$12.8 million, estimated using the Monte Carlo method.

ADTRAN, Inc. and Adtran Networks became subsidiaries of ADTRAN Holdings, Inc. as a result of the Business Combination. ADTRAN, Inc. was determined to be the accounting acquirer of Adtran Networks based on ADTRAN, Inc. shareholders' majority equity stake in the combined company, the composition of the board of directors and senior management of the combined company, among other factors. The Business Combination with Adtran Networks has been accounted for using the acquisition method of accounting as per the provisions of Accounting Standards Codification 805, "Business Combinations" ("ASC 805"). The Business Combination Agreement used a fixed exchange ratio of Company Common Stock for Adtran Networks shares of common stock, which resulted in a 36.0% equity stake for Adtran Networks stockholders and a 64.0% equity stake for ADTRAN, Inc. stockholders in the post-closing combined company (calculated on a fully diluted basis and utilizing the tender of 65.43% of Adtran Networks' current issued and outstanding share capital) as of July 15, 2022. Therefore, ADTRAN, Inc. shareholders continued to hold a majority interest in the combined company following the completion of the Business Combination. Additionally, following the transaction, the Board of Directors was comprised of six members from ADTRAN, Inc. and three members from Adtran Networks; the ADTRAN, Inc. chief executive officer became and continues to act as the chairman of the Board of Directors and the former Adtran Networks chief executive officer became the vice chairman of the Board of Directors. Additionally, the ADTRAN, Inc. chief executive officer and ADTRAN, Inc. chief financial officer held these positions within the combined company immediately following the completion of the Business Combination. Based upon these and other considerations as outlined in ASC 805, ADTRAN, Inc. represented the accounting acquirer.

The following table summarizes the purchase price for the Adtran Networks business combination:

(In thousands, except shares, share price and exchange ratio)	Pt	urchase Price
Adtran Networks shares exchanged		33,957,538
Exchange ratio		0.8244
ADTRAN Holdings, Inc. shares issued		27,994,595
ADTRAN Holdings, Inc. share price on July 15, 2022	\$	20.20
Purchase price paid for Adtran Networks shares	\$	565,491
Equity compensation (1)	\$	12,769
Total purchase price	\$	578,260

⁽¹⁾ Represents the portion of replacement share-based payment awards that relates to pre-combination vesting.

Assets acquired and liabilities assumed were recognized at their respective fair values as of July 15, 2022. In determining the fair value, the Company utilized various methods of the income, cost and market approaches depending on the asset or liability being fair valued. The estimation of fair value required significant judgment related to future net cash flows reflecting the risk inherent in each cash flow stream, competitive trends, market comparables and other factors. Inputs were generally determined by taking into account historical data, current and anticipated market conditions, and growth rates.

Developed technology and customer relationships were valued using the multi-period excess earnings method. Backlog was valued using the distributor method. Significant assumptions used in the discounted cash flow analysis for (i) developed technology were the revenue growth rates, long-term revenue growth rate, discount rate, and earnings before interest, taxes, depreciation and amortization ("EBITDA") margins, obsolescence factors, income tax rate, tax depreciation, and economic depreciation; (ii) customer relationships were earnings before interest and taxes ("EBIT") margins, contributory asset charges, and customer attrition rate; and (iii) backlog were EBIT margins, adjusted EBIT margins, and contributory asset charges.

The allocation of the purchase price to the assets acquired and liabilities assumed was subject to adjustment within the measurement period (up to one year from the acquisition date). The measurement period adjustments since initial preliminary estimates resulted from changes to the fair value estimates of the acquired assets and assumed liabilities based on finalizing the valuations of inventory, prepaid expenses and other current assets, property plant and equipment, intangible assets, other non-current assets and deferred tax assets and liabilities. The cumulative effect of all measurement period adjustments resulted in a decrease to recognized goodwill of \$8.7 million.

The following table summarizes the final purchase price allocation for each major class of assets acquired and liabilities assumed in the Business Combination (in thousands):

(In thousands)	
Total purchase price	\$ 578,260
Non-controlling interest	\$ 316,415
Net Assets:	
Cash and cash equivalents	\$ 44,003
Accounts receivable	114,659
Other receivables	1,457
Inventory	200,331
Prepaid expenses and other current assets	28,208
Property plant and equipment	55,480
Deferred tax assets	1,759
Intangibles	403,780
Other non-current assets	31,074
Accounts payable	(98,587)
Current unearned revenue	(26,047)
Accrued expenses and other liabilities	(59,600)
Current portion of notes payable	(25,254)
Income tax payable, net	(4,898)
Tax liabilities	(1,400)
Non-current unearned revenue	(11,498)
Pension liability	(6,820)
Other non-current liabilities	(6,094)
Non-current portion of revolving credit agreements and notes payable	(15,250)
Non-current lease obligations	(20,046)
Deferred tax liabilities	(61,040)
Total net assets acquired	\$ 544,217
Goodwill	\$ 350,458

The fair value of the assets acquired included accounts receivable of \$114.7 million and other receivables of \$1.5 million. The unpaid principal balance under these receivables was \$118.5 million and \$1.5 million, respectively. The difference between the fair value and the unpaid principal balance primarily represents amounts determined to be uncollectible.

The fair value of the identifiable intangible assets acquired as of the acquisition date:

(In thousands)	Estimated-average useful life (in years) (1)	F	Fair value	Income Statement Amortization Classification
Developed technology	8.5	\$	291,925	Cost of revenue - Network Solutions
Backlog	1.4		52,165	Cost of revenue - Network Solutions and Services &
				Support
Customer relationships	10.5		32,704	Selling, general and administrative expenses
Trade name	2.8		26,986	Selling, general and administrative expenses
Total		\$	403,780	

(1) Determination of the weighted average period of the individual categories of intangible assets was based on the nature of the applicable intangible asset and the expected future cash flows to be derived from the intangible asset. Amortization of intangible assets with definite lives is recognized over the period of time the assets are expected to contribute to future cash flows.

Goodwill represents the excess of the purchase price over the fair value of the net tangible and intangible assets acquired. The Business Combination resulted in the recognition of goodwill of \$350.5 million, which the Company believes is attributable to the value driven by the Company's expected growth of the business, synergies, and expanded market and product opportunities. Goodwill created as a result of the Business Combination is not deductible for tax purposes.

After the Business Combination, the chief operating decision maker assessed and will continue to assess the Company's performance and allocate resources to its two segments (1) Network Solutions and (2) Services & Support. The goodwill resulting from the Business Combination of \$272.8 million was allocated to the Network Solutions segment, and \$77.7 million was allocated to the Services & Support segment. See Note 18 of the Notes to Consolidated Financial Statements, included in this report for more information about the Company's segments.

As of the acquisition date, the fair value of the non-controlling interest was approximately \$316.4 million and determined using a market approach. As a portion of Adtran Networks' shares remains trading after the Business Combination, the non-controlling interest was calculated using 17,941,496 Adtran Networks shares held by non-controlling interest multiplied by the Adtran Networks closing share price of €17.58 (\$17.64 using the July 15, 2022 EUR to USD conversion rate of \$1.00318) on July 15, 2022.

The Company has included the financial results of Adtran Networks in its consolidated financial statements since July 15, 2022, the acquisition date. The net revenue from the Adtran Networks business for the three and nine months ended September 30, 2023, was \$158.4 million and \$537.5 million, respectively, and the net loss from the Adtran Networks business for the three and nine months ended September 30, 2023, was \$38.8 million and \$79.4 million, respectively, which are included in the Company's Consolidated Statement of Loss. There was no net loss attributable to non-controlling interest from the Adtran Networks business for the three months ended September 30, 2023. The net loss attributable to non-controlling interest from the Adtran Networks business for the nine months ended September 30, 2023 was \$3.2 million. For the three and nine months ended September 30, 2023, we recognized \$2.9 million and \$8.6 million, respectively, representing the portion of the annual recurring cash compensation to the non-controlling shareholders accrued during such periods, which will be paid after the ordinary general shareholders' meeting of Adtran Networks beginning in 2024. See Note 1 and Note 20 for additional information on RNCI and the annual dividend.

As of September 30, 2023, the Company has incurred \$26.2 million of transaction costs related to the Business Combination. During the three and nine months ended September 30, 2023, \$8 thousand and \$0.1 million of transaction costs were incurred, respectively. During the three and nine months ended September 30, 2022, \$10.6 million and \$13.3 million of transaction costs were incurred, respectively. These transaction costs are recorded in selling, general and administrative expenses in the Consolidated Statements of Loss.

Supplemental Pro Forma Information (Unaudited)

The unaudited pro forma financial information in the table below summarizes the combined results of operations for ADTRAN, Inc. and Adtran Networks as though the Business Combination had occurred on January 1, 2022. The pro forma amounts have been adjusted for differences in basis of accounting which are determined before taking into effect the impacts of purchase accounting and Business Combination accounting impacts.

The following unaudited pro forma information is presented for illustrative purposes only. It is not necessarily indicative of the results of operations of future periods, the results of operations that actually would have been realized had the entities been a single company as of January 1, 2022, or the future operating results of the combined entities. The unaudited pro forma information does not give effect to the potential impact of current financial conditions, regulatory matters or any anticipated synergies, operating efficiencies or cost savings that may be associated with the acquisition. The unaudited pro forma information also does not include any integration costs that the Company has incurred and may continue to incur related to the Business Combination as part of combining the operations of the companies.

(In thousands)	per 30, 2022	September 30, 2022			
Revenue	\$ 368,192	\$	1,053,510		
Net loss	\$ (48,084)	\$	(60,494)		

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3. REVENUE

The following is a description of the principal activities from which revenue is generated by reportable segment:

Network Solutions Segment - Includes hardware and software products that enable a digital future which support the Company's Subscriber, Access & Aggregation, and Optical Networking Solutions.

Services & Support Segment - Includes network design, implementation, maintenance and cloud-hosted services supporting the Company's Subscriber, Access & Aggregation, and Optical Networking Solutions.

Revenue by Category

In addition to the Company's reportable segments, revenue is also reported for the following three categories – Subscriber Solutions, Access & Aggregation Solutions and Optical Networking Solutions.

Prior to the Business Combination with Adtran Networks on July 15, 2022, ADTRAN reported revenue across the following three categories: (1) Access & Aggregation, (2) Subscriber Solutions & Experience and (3) Traditional & Other Products. Following the Business Combination with Adtran Networks, we have recast these revenues such that ADTRAN's former Access & Aggregation revenue is combined with a portion of the applicable Adtran Networks SE solutions to create Access & Aggregation Solutions; ADTRAN's former Subscriber Solutions & Experience revenue is combined with a portion of the applicable Adtran Networks solutions to create Subscriber Solutions; and the revenue from Traditional & Other products is now included in the applicable Access & Aggregation Solutions or Subscriber Solutions category. Optical Networking Solutions is a new revenue category added to represent a meaningful portion of Adtran Networks' portfolio.

Our Subscriber Solutions portfolio is used by Service Providers to terminate their access services infrastructure at the customer premises while providing an immersive and interactive experience for residential, business and wholesale subscribers. This revenue category includes hardware- and software-based products and services. These solutions include fiber termination solutions for residential, business and wholesale subscribers, Wi-Fi access solutions for residential and business subscribers, Ethernet switching and network edge virtualization solutions for business subscribers, and cloud software solutions covering a mix of subscriber types.

Our Access & Aggregation Solutions are solutions that are used by communications Service Providers to connect residential subscribers, business subscribers and mobile radio networks to the Service Providers' metro network, primarily through fiber-based connectivity. This revenue category includes hardware- and software-based products and services. Our solutions within this category are a mix of fiber access and aggregation platforms, precision network synchronization and timing solutions, and access orchestration solutions that ensure highly reliable and efficient network performance.

Our Optical Networking Solutions are used by communications Service Providers, internet content providers and large-scale enterprises to securely interconnect metro and regional networks over fiber. This revenue category includes hardware- and software-based products and services. Our solutions within this category include open optical terminals, open line systems, optical subsystems and modules, network infrastructure assurance systems, and automation platforms that are used to build high-scale, secure and assured optical networks.

The following tables disaggregate revenue by reportable segment and revenue category. Prior year amounts presented below have been reclassified to conform to the current period revenue category presentation:

	Three Months Ended													
		September 30, 2023					September 30, 2022							
(In thousands)		Network Solutions		rvices & Support		Total	-		Network Solutions		rvices & Support		Total	
Optical Networking Solutions	\$	94,592	\$	21,608	\$	116,200		\$	103,011	\$	15,834	\$	118,845	
Access & Aggregation														
Solutions		81,051		13,595		94,646			76,591		11,598		88,189	
Subscriber Solutions		52,921		8,564		61,485			125,338		8,337		133,675	
Total	\$	228,564	\$	43,767	\$	272,331		\$	304,940	\$	35,769	\$	340,709	

		Nine Months Ended											
	September 30, 2023					September 30, 2022							
(In thousands)		Network Solutions		ervices & Support		Total		Network Solutions		ervices & Support		Total	
Optical Networking Solutions	\$	342,390	\$	64,562	\$	406,952	\$	103,011	\$	15,834	\$	118,845	
Access & Aggregation Solutions		254,868		39,315		294,183		243,396		34,877		278,273	
Subscriber Solutions		196,726		25,760		222,486		252,899		17,248		270,147	
Total	\$	793,984	\$	129,637	\$	923,621	\$	599,306	\$	67,959	\$	667,265	

The aggregate amount of transaction price allocated to remaining performance obligations that have not been satisfied as of September 30, 2023 and December 31, 2022 related to contractual maintenance agreements, contractual SaaS and subscription services, and hardware contracts that exceed one year in duration amounted to \$314.0 million and \$277.2 million, respectively. As of September 30, 2023, approximately 68.6% is expected to be recognized over the next 12 months and the remainder recognized thereafter. The majority of the Company's remaining performance obligations as of September 30, 2023 are related to contracts or orders that have an original expected duration of one year or less, for which the Company is electing to utilize the practical expedient available within the guidance, and are excluded from the transaction price related to these future obligations. The Company will generally satisfy the remaining performance obligations as we transfer control of the products ordered or services to our customers, excluding maintenance services, which are satisfied over time.

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

		As of	As of
(In thousands)	Septe	mber 30, 2023	 December 31, 2022
Accounts receivable, net	\$	229,333	\$ 279,435
Contract assets ⁽¹⁾	\$	888	\$ 1,852
Unearned revenue	\$	49,832	\$ 41,193
Non-current unearned revenue	\$	23,501	\$ 19,239

(1) Included in other receivables on the Condensed Consolidated Balance Sheets.

The Company is party to a receivables purchase agreement with a third-party financial institution (the "Factor"), which accelerates receivable collection and helps to better manage cash flow. Total accounts receivables sold for the nine months ended September 30, 2023 and the twelve months ended December 31, 2022, totaled \$17.8 million and \$14.9 million, respectively, of which \$1.4 million was retained by the Factor in the reserve account. The balance in the reserve account is included in other assets on the Condensed Consolidated Balance Sheets. As of September 30, 2023 and December 31, 2022, the Company had an allowance for credit losses related to factored accounts receivable totaling less than \$0.1 million. The cost of the receivables purchase agreement is included in interest expense in the Condensed Consolidated Statements of Loss and totaled \$0.3 million and \$0.9 million for the three and nine months ended September 30, 2023, respectively.

Of the outstanding unearned revenue balances as of December 31, 2022, \$6.1 million and \$31.3 million were recognized as revenue during the three and nine months ended September 30, 2023, respectively. Of the \$17.7 million of outstanding unearned revenue balances as of December 31, 2021, \$2.8 million and \$12.3 million were recognized as revenue during the three and nine months ended September 30, 2022, respectively.

Accounts Receivable

The Company records accounts receivable in the normal course of business as products are shipped or services are performed and invoiced, but payment has not yet been remitted by the customer. Accounts receivable balances are considered past due when payment has not been received by the date indicated on the relevant invoice or based on agreed upon terms between the customer and the Company.

As of September 30, 2023 and December 31, 2022, the Company's outstanding accounts receivable balance was \$229.3 million and \$279.4 million, respectively. The Company assessed the need for an allowance for credit losses related to its outstanding accounts receivable using the historical loss-rate method, as well as assessing asset-specific risks. The assessment of asset-specific risks included the evaluation of relevant available information, from internal and external sources, relating to current conditions that may affect a customer's ability to pay, such as the customer's current financial condition, credit rating by geographic location, as provided by a third party and/or by customer, if needed, and the overall macro-economic conditions in which the customer operates. The Company pooled assets by geographic location to determine if an allowance should be applied to its accounts receivable balance, assessing the specific country risk rating and overall economics of that particular country. If elevated risk existed, or customer specific risk indicated the accounts receivable balance was at risk, the Company further analyzed the need for an allowance related to specific accounts receivable balances. Additionally, the Company determined that significant changes to customer country risk rating from period-to-period and from the end of the prior year to the end of the current quarter would require further review and analysis by the Company.

The allowance for credit losses was \$15 thousand and \$49 thousand as of September 30, 2023 and December 31, 2022, respectively, related to accounts receivable.

Contract Assets

The Company records contract assets when it has recognized revenue but has not yet billed the customer. As of September 30, 2023 and December 31, 2022, the Company's outstanding contract asset balance was \$0.9 million and \$1.9 million, respectively, which is included in other receivables on the Consolidated Balance Sheets. The Company assessed the need for an allowance for credit losses related to its outstanding contract assets using the historical loss-rate method, as well as asset-specific risks. The Company's historical losses related to contract assets receivable have been immaterial as evidenced by historical write-offs due to collectability. Asset-specific risk included the evaluation of relevant available information, from internal and external sources, relating to current conditions that may affect a customer's ability to pay once invoiced, such as the customer's financial condition, credit rating by geographic location as provided by a third party and/or by customer, if needed, and the overall macro-economic conditions in which the customer operates. The Company pooled assets by geographic location to determine if an allowance should be applied to its contract asset balance, assessing the specific country risk rating and the overall economics of that particular country. If elevated risk existed, or customer specific risk indicated the contract balance was at risk, the Company further analyzed the need for an allowance related to specific customer balances. Additionally, the Company determined that significant changes to customer country risk rating from period-to-period and from the end of the prior year to the end of the current quarter would be subject to further review and analysis by the Company.

No allowance for credit losses was recorded for the three months ended September 30, 2023 and 2022 related to contract assets.

4. INCOME TAXES

The Company's effective tax rate changed from a benefit of 8.8% of pre-tax loss for the three months ended September 30, 2022, to a benefit of 18.0% of pre-tax loss for the three months ended September 30, 2023 and changed from a benefit of 9.4% of pre-tax loss for the nine months ended September 30, 2022, to a benefit of 19.2% of pre-tax loss for the nine months ended September 30, 2023. The change in the effective tax rate for the three and nine months ended September 30, 2023, was driven primarily by a change in our estimated tax rate as a result of the closing of the Business Combination with Adtran Networks during the third quarter of 2022, as well as the release of our domestic valuation allowance during the fourth quarter of 2022, with exception for certain research and development credits in a particular state in which we do not have sufficient activity to utilize them prior to expiration.

During the second quarter of 2023, the Company concluded a review with the Internal Revenue Services of its amended tax returns previously filed related to refund claims arising from the Company's request to revoke an IRC Section 59(e) election made on the Company's originally filed 2018 U.S. federal tax return. The Company had previously received an unfavorable response to its Private Letter Ruling request, in which it requested the Commissioner's approval for revoking the election. As a result of that review, and after taking into consideration other factors, including weighing the potential benefits with projected costs to litigate and the hazards of litigation, management has concluded that it will not pursue the claims any further. As a result, the Company has removed the previously recorded receivable of \$15.2 million and related research and development credit carryforward of \$1.8 million, as well as the offsetting uncertain tax position reserves against them of \$17.0 million during the second quarter of 2023.

The Company continually reviews the adequacy of its valuation allowance and recognizes the benefits of deferred tax assets only as the assessment indicates that it is more likely than not that the deferred tax assets will be recognized in accordance with ASC 740, Income Taxes. As of September 30, 2023, the Company had net deferred tax assets totaling \$57.3 million, and a valuation allowance totaling \$5.0 million against those deferred tax assets. The remaining \$52.3 million in deferred tax assets are primarily related to capitalized R&D expenses in the U.S., partially offset by net purchase price intangibles from the Business Combination closed with Adtran Networks during the third quarter of 2022. Our assessment of the realizability of our deferred tax assets includes the evaluation of historical operating results, as well as the evaluation of evidence which requires significant judgment, including the evaluation of our three-year cumulative income position, future taxable income projections and tax planning strategies. Should management's conclusion change in the future and an additional valuation allowance, or a partial or full release of the valuation allowance becomes necessary, it may have a material effect on our consolidated financial statements.

Supplemental balance sheet information related to deferred tax assets (liabilities) is as follows:

	 As of September 30, 2023									
(In thousands)	d Tax Assets abilities)	Valuati	ion Allowance	D	eferred Tax Assets (Liabilities), net					
Domestic	\$ 84,274	\$	(3,177)	\$	81,097					
International	(26,975)		(1,839)		(28,814)					
Total	\$ 57,299	\$	(5,016)	\$	52,283					

	 As of December 31, 2022										
(In thousands)	ed Tax Assets iabilities)	Valuat	ion Allowance		erred Tax Assets Liabilities), net						
Domestic	\$ 61,726	\$	(3,177)	\$	58,549						
International	(50,315)		(2,024)		(52,339)						
Total	\$ 11,411	\$	(5,201)	\$	6,210						

5. STOCK-BASED COMPENSATION

For the three months ended September 30, 2023 and 2022, stock-based compensation expense was \$4.2 million and \$12.1 million, respectively, and for the nine months ended September 30, 2023 and 2022, stock-based compensation expense was \$12.2 million and \$15.9 million, respectively.

PSUs, RSUs and Restricted Stock - ADTRAN Holdings, Inc.

The following table summarizes the RSUs and restricted stock outstanding as of December 31, 2022 and September 30, 2023 and the changes that occurred during the nine months ended September 30, 2023:

	Number of Shares (in thousands)	Date	ed Avg. Grant Fair Value er share)
Unvested RSUs and restricted stock outstanding, December 31, 2022	1,086	\$	17.54
RSUs and restricted stock granted	1,484	\$	16.58
RSUs and restricted stock vested	(56)	\$	20.37
RSUs and restricted stock forfeited	(51)	\$	16.42
Unvested RSUs and restricted stock outstanding, September 30, 2023	2,463	\$	17.01

During the nine months ended September 30, 2023, the Company granted 0.9 million performance-based PSUs to its executive officers and certain employees. The grant-date fair value of these performance-based awards was based on the closing price of the Company's stock on the date of grant. These awards vest over either a two or three-year period, subject to the grantee's continued employment, with the ability to earn shares in a range of 0% to either 100% or 150% of the awarded number of PSUs based on the achievement of defined performance targets. Equity-based compensation expense and liabilities with respect to these awards may be adjusted over the vesting period to reflect the probability of achievement of performance targets defined in the award agreements.

The fair value of RSUs and restricted stock is equal to the closing price of its stock on the date of grant. The fair value of PSUs with market conditions is calculated using a Monte Carlo simulation valuation method.

As of September 30, 2023, total unrecognized compensation expense related to non-vested market-based RSUs and restricted stock was approximately \$19.1 million, which will be recognized over the remaining weighted-average period of 2.2 years. There was \$11.3 million of unrecognized compensation expense related to unvested 2023 performance-based PSUs, which will be recognized over the remaining requisite service period of 2.3 years if achievement of the performance obligation becomes probable. Unrecognized compensation expense will be adjusted for actual forfeitures.

As of September 30, 2023, 2.0 million shares were available for issuance under stockholder-approved equity plans.

Stock Options - ADTRAN Holdings, Inc.

The following table summarizes the ADTRAN Holdings, Inc. stock options outstanding as of December 31, 2022 and September 30, 2023 and the changes that occurred during the nine months ended September 30, 2023:

	Number of Stock Options (in thousands)	Weighted Avg. Exercise Price (per share)	Weighted Avg. Remaining Contractual Life (in years)	Aggregate Intrinsic Value (in thousands)			
Stock options outstanding, December 31, 2022	3,148	\$ 14.37	3.42	\$	16,251		
Stock options granted	7	\$ 12.17					
Stock options exercised	(8)	\$ 8.72					
Stock options forfeited	(40)	\$ 11.93					
Stock options expired	(33)	\$ 16.44					
Stock options outstanding, September 30, 2023	3,074	\$ 14.39	2.68	\$	736		
Stock options exercisable, September 30, 2023	1,691	\$ 15.88	1.23	\$	556		

As of September 30, 2023, there was \$5.2 million of unrecognized compensation expense related to stock options which will be recognized over the remaining weighted-average period of 1.9 years.

Pursuant to the Business Combination, which closed on July 15, 2022, Adtran Networks stock option holders were entitled to have their Adtran Networks stock options assumed by ADTRAN Holdings, Inc. (applying the exchange ratio in the Business Combination Agreement), thereafter representing options to acquire stock of ADTRAN Holdings, Inc. The maximum number of shares of ADTRAN Holdings, Inc. stock potentially issuable upon such assumption was 2.3 million shares. The period in which such options could be assumed ended on July 22, 2022. A total of 2.1 million shares of ADTRAN Holdings, Inc. stock could be issued pursuant to the exercise of the assumed Adtran Networks options. The determination of the fair value of stock options assumed by ADTRAN Holdings, Inc. was estimated using the Monte Carlo method and is affected by its 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. The stock option pricing model requires the use of several assumptions that impact the fair value estimate. These variables include, but are not limited to, the volatility of the Company's stock price and employee exercise behaviors.

All of the options were previously issued at exercise prices that approximated fair market value at the date of grant.

The aggregate intrinsic value of stock options represents the total pre-tax intrinsic value (the difference between the Company's closing stock price on the last trading day of the quarter and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on September 30, 2023. The amount of aggregate intrinsic value was \$0.7 million as of September 30, 2023, which will change based on the fair market value of the Company's stock. The total pre-tax intrinsic value of options exercised during the nine months ended September 30, 2023 was \$50 thousand.

Stock Options - Adtran Networks

The following table summarizes the Adtran Networks stock options outstanding as of December 31, 2022 and September 30, 2023 and the changes that occurred during the nine months ended September 30, 2023:

Number of Options (In thousands)	Exe	Average ercise Price	Weighted Avg. Remaining Contractual Life in Years	Intri	gregate nsic Value housands)
81	\$	8.58	4.00	\$	1,222
(13)	\$	8.22			
(9)	\$	10.58			
(1)	\$	9.20			
58	\$	8.18	3.39	\$	746
12	\$	6.03	1.48	\$	182
	Options (In thousands) 81 (13) (9) (1) 58	Number of Options (In thousands) Exc (I	Options (In thousands) Exercise Price (Per share) 81 \$ 8.58 (13) \$ 8.22 (9) \$ 10.58 (1) \$ 9.20 58 \$ 8.18	Number of Options (In thousands) Average Exercise Price (Per share) Remaining Contractual Life in Years 81 \$ 8.58 4.00 (13) \$ 8.22 (9) \$ 10.58 (1) \$ 9.20 58 \$ 8.18 3.39	Number of Options (In thousands) Average Exercise Price (Per share) Remaining Contractual Life in Years Ag Intri (In the in Years) (13) \$ 8.58 4.00 \$ (9) \$ 10.58 \$ (1) \$ 9.20 \$ 58 \$ 8.18 3.39 \$

As of September 30, 2023, there was \$0.1 million of unrecognized compensation expense related to Adtran Networks stock options which will be recognized over the remaining weighted-average period of 3.4 years.

All of the Adtran Networks options were previously issued at exercise prices that approximated fair market value at the date of grant.

The aggregate intrinsic value of Adtran Networks stock options represents the total pre-tax intrinsic value (the difference between Adtran Networks closing stock price on the last trading day of the quarter and the exercise price, multiplied by the number of in-themoney options) that would have been received by the option holders had all option holders exercised their options on September 30, 2023. The amount of aggregate intrinsic value was \$0.7 million as of September 30, 2023 and will change based on the fair market value of Adtran Networks stock. The total pre-tax intrinsic value of Adtran Networks options exercised during the nine months ended September 30, 2023 was \$0.2 million.

6. INVESTMENTS

Debt Securities and Other Investments

The following debt securities and other investments were included on the Condensed Consolidated Balance Sheets and recorded at fair value as of December 31, 2022:

	As of December 31, 2022											
	An	nortized		Gross Ur	realize	d		Fair				
(In thousands)		Cost	(Gains		Losses		Value				
Corporate bonds	\$	2,538	\$	5	\$	(81)	\$	2,462				
Municipal fixed-rate bonds		185		_		(5)		180				
Asset-backed bonds		818		1		(24)		795				
Mortgage/Agency-backed bonds		1,853		_		(105)		1,748				
U.S. government bonds		3,870		3		(188)		3,685				
Foreign government bonds		407		_		(24)		383				
Available-for-sale debt securities held at fair value	\$	9,671	\$	9	\$	(427)	\$	9,253				

The Company did not have any debt securities and other investments as of September 30, 2023.

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

		Three Mont Septemb			Nine Months Ended September 30,					
(In thousands)		2023		2022		2023		2022		
Gross realized gain on debt securities	\$ 5		\$	1	\$	\$ 9		14		
Gross realized loss on debt securities		(317)		(116)		(355)		(242)		
Total loss recognized, net	\$ (312)			\$ (115)		\$ (346)		(228)		

Income generated from available-for-sale debt securities was recorded as interest and dividend income in the Condensed Consolidated Statements of Loss. No allowance for credit losses was recorded for the nine months ended September 30, 2023 and 2022 related to available-for-sale debt securities. The Company's investment policy provides limitations for issuer concentration, which limits, at the time of purchase, the concentration in any one issuer to 5.0% of the market value of its total investment portfolio. The Company did not purchase any available-for-sale debt security with credit deterioration during the nine months ended September 30, 2023.

Realized and unrealized gains and losses related to marketable equity securities were as follows:

		Three Mon Septem				Nine Mon Septem		
(In thousands)	2023			2022		2023		2022
Unrealized gain (loss) on equity securities held	\$	(1,130)	\$	(1,217)	\$	1,404	\$	(8,849)
Realized gain (loss) on equity securities sold		(1)		(1,358)		13		(1,675)
Total gain (loss) recognized, net	\$	(1,131)	\$	(2,575)	\$	1,417	\$	(10,524)

Income generated from marketable equity securities was recorded as interest and dividend income in the Condensed Consolidated Statements of Loss. U.S. GAAP establishes a three-level valuation hierarchy based upon observable and unobservable inputs for fair value measurement of financial instruments:

- Level 1 Observable outputs; values based on unadjusted quoted prices for identical assets or liabilities in an active market;
- Level 2 Significant inputs that are observable; values based on quoted prices in markets that are not active or model inputs that are observable either directly or indirectly;
- Level 3 Significant unobservable inputs; values based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement. These inputs could include information supplied by investees.

The Company's cash equivalents and investments held at fair value are categorized into this hierarchy as follows:

			Fair Value Measurements as of September 30, 2023 Using							
(In thousands)		in Activ Market Identic Assets		Quoted Prices in Active Market for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)			Significant nobservable Inputs (Level 3)		
Cash equivalents										
U.S. government securities	\$	_	\$	_	\$		\$	_		
Money market funds		5,245		5,245		_		_		
Commercial paper		_		_						
Total cash equivalents	\$	5,245	\$	5,245	\$	_	\$	_		
Marketable equity securities										
Marketable equity securities – various industries		815		815		_		_		
Deferred compensation plan assets		24,364		24,364				_		
Total long-term investments	\$	25,179	\$	25,179	\$	_	\$	_		
Total	\$	30,424	\$	30,424	\$	_	\$	_		

			Fair Value Measurements as of December 31, 2022 Using							
(In thousands)	1	air Value	•	uoted Prices in Active Market for Identical Assets (Level 1)	_	Significant Other Observable Inputs (Level 2)		significant nobservable Inputs (Level 3)		
Cash equivalents	Ф	220	Ф	220	Ф		Ф			
Money market funds	\$	228	\$	228	\$		\$			
Total cash equivalents	\$	228	\$	228	\$	_	\$	_		
Available-for-sale debt securities										
Corporate bonds	\$	2,462	\$	_	\$	2,462	\$	_		
Municipal fixed-rate bonds		180				180				
Asset-backed bonds		795		_		795		_		
Mortgage/Agency-backed bonds		1,748				1,748		_		
U.S. government bonds		3,685		3,685				—		
Foreign government bonds		383				383		_		
Marketable equity securities										
Marketable equity securities - various industries		810		810		_		_		
Deferred compensation plan assets		22,942		22,942		_		—		
Total short-term and long-term investments	\$	33,005	\$	27,437	\$	5,568	\$	-		
Total	\$	33,233	\$	27,665	\$	5,568	\$	_		

The fair value of its 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, 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.

7. INVENTORY

Inventory consisted of the following:

(In thousands)	Septe	As of ember 30, 2023	Dece	As of mber 31, 2022
Raw materials	\$	156,287	\$	186,346
Work in process		15,648		12,087
Finished goods	202,036			229,098
Total inventory, net	\$ 373,971		\$	427,531

Inventory reserves are established for estimated excess and obsolete inventory equal to the difference between the cost of the inventory and the estimated net realizable value of the inventory based on estimated reserve percentages, which considers historical usage, known trends, inventory age and market conditions. As of September 30, 2023 and December 31, 2022, inventory reserves were \$86.3 million and \$57.0 million, respectively.

In connection with the Company's restructuring efforts, during the quarter ended September 30, 2023, management determined that there would be a discontinuation of product lines in the Network solutions segment and, as a result, wrote-down related inventories of \$21.0 million and is included in cost of revenue in the Condensed Consolidated Statements of Loss. There was no write-down of inventory during the three and nine months ended September 30, 2022.

8. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consisted of the following:

		As of		As of
(In thousands)	Septe	ember 30, 2023	Dece	mber 31, 2022
Engineering and other equipment	\$	\$ 179,049		170,785
Building		85,966		82,932
Computer hardware and software		97,192		80,455
Building and land improvements		51,284		47,861
Furniture and fixtures		23,686		22,403
Land		5,325		5,364
Total property, plant and equipment		442,502		409,800
Less: accumulated depreciation		(323,879)		(299,101)
Total property, plant and equipment, net	\$	118,623	\$	110,699

Long-lived assets used in operations are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable and the undiscounted cash flows estimated to be generated by the asset are less than the asset's carrying value. In connection with the planned integration of information technology following the Business Combination, we determined that certain projects no longer fit our needs. As a result, the Company recognized impairment charges of \$17.0 million during the three and nine months ended September 30, 2022 related to capitalized implementation costs for a cloud computing arrangement. The impairment charges were determined based on actual costs incurred. During the three and nine months ended September 30, 2023, no impairment charges were recognized.

Depreciation expense was \$7.4 million and \$7.1 million for the three months ended September 30, 2023 and 2022, respectively, and \$22.6 million and \$12.6 million for the nine months ended September 30, 2023 and 2022, respectively, which is recorded in cost of revenue, selling, general and administrative expenses and research and development expenses in the Condensed Consolidated Statements of Loss.

9. GOODWILL

The changes in the carrying amount of goodwill for the nine months ended September 30, 2023 are as follows:

(In thousands)	Netwo	Network Solutions		es & Support	Total		
As of December 31, 2022	\$	298,280	\$	83,444	\$	381,724	
Goodwill impairment		_		(37,500)		(37,500)	
Foreign currency translation adjustments		(3,873)		(1,268)		(5,141)	
As of September 30, 2023	\$	294,407	\$	44,676	\$	339,083	

Related to the Business Combination with Adtran Networks, the Company recognized \$350.5 million of goodwill upon the closing of the Business Combination on July 15, 2022. Goodwill represents the excess purchase price over the fair value of net assets acquired. The Company performed an impairment assessment as of September 30, 2023, prior to our October 1, 2023 annual measurement date. The Company's policy is to assess the realizability of its goodwill, and to evaluate such assets for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets (or group of assets) may not be recoverable. During the third quarter of 2023, qualitative factors such as a decrease in the Company's market capitalization and long-term projections, triggered a quantitative impairment assessment for our reporting units. The Company determined the fair value of each reporting unit using a combination of an income approach and a market based peer group analysis. It was determined that the decreases in projected future cash flows, discount rates, overall macroeconomic conditions, as well as the decrease in our market capitalization applied in the valuation, were required to align with market-based assumptions and company-specific risk, which resulted in lower fair values of the Services & Support reporting unit. The Company determined upon its quantitative impairment assessment to recognize a \$37.9 million non-cash goodwill impairment charge for the Services & Support Unit to result in any future cash expenditures. The Company did not recognize any impairment charges for the Network Solutions reporting unit as of September 30, 2023.

Subsequent to September 30, 2023, the Company has experienced volatility in its stock price which reduced the market value of the Company's common stock as of this filing. The Company will continue to monitor its stock price, operating results and other macroeconomic factors to determine if there is further indication of a sustained decline in fair value requiring an event driven assessment of the recoverability of its goodwill within the fourth quarter of 2023.

10. INTANGIBLE ASSETS

Intangible assets consisted of the following:

		As	of September 30, 20	023	As	of December 31, 20)22
(In thousands)	Weighted Average Useful Life (in years)	Gross Carrying Amount	Accumulated Amortization	Net Book Value	Gross Carrying Amount	Accumulated Amortization	Net Book Value
Customer relationships	10.9	\$ 53,247	\$ (14,490)	\$ 38,757	\$ 55,517	\$ (12,772)	\$ 42,745
Backlog	1.6	55,017	(49,061)	5,956	55,782	(22,725)	33,057
Developed technology	8.5	316,083	(49,944)	266,139	320,364	(21,856)	298,508
Licensed technology	9.0	5,900	(3,633)	2,267	5,900	(3,141)	2,759
Licensing agreements	8.5	560	(353)	207	560	(298)	262
Patents	7.3	500	(483)	17	500	(431)	69
Trade names	3.0	28,461	(13,109)	15,352	29,066	(5,255)	23,811
Total		\$ 459,768	\$ (131,073)	\$ 328,695	\$ 467,689	\$ (66,478)	\$ 401,211

Intangible assets are reviewed for impairment whenever events and circumstances indicate impairment may have occurred. The Company assessed impairment triggers related to intangible assets during each financial period in 2023 and 2022. During the third quarter of 2023, the Company's market capitalization and long-term projections decreased which triggered a reassessment of our estimated future undiscounted cash flows. The Company determined that our estimated future undiscounted cash flows exceeded the carrying amount of intangible assets as of September 30, 2023. No quantitative impairment test of long-lived assets was performed as of September 30, 2022. No impairment losses of intangible assets were recorded during the three and nine months ended September 30, 2023 and 2022.

Amortization expense was \$16.5 million and \$20.4 million in the three months ended September 30, 2023 and 2022, respectively, and \$68.8 million and \$22.2 million in the nine months ended September 30, 2023 and 2022, respectively and was included in cost of revenue, selling, general and administrative expenses and research and development expenses in the Condensed Consolidated Statements of Loss.

Estimated future amortization expense of intangible assets is as follows:

(In thousands)	Septer	As of nber 30, 2023
2023	\$	13,770
2024		56,800
2025		45,504
2026		42,290
2027		40,941
Thereafter		129,390
Total	\$	328,695

11. HEDGING

The Company has certain forward rate agreements to hedge foreign currency exposure of expected future cash flows in foreign currency. The Company does not hold or issue derivative instruments for trading or other speculative purposes. Derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently re-measured to their fair value at the end of each reporting period. All changes in the fair value of derivative instruments are recognized as other income (expense) in the Consolidated Statements of Loss and are classified as Level II under the fair value hierarchy. The derivative instruments are not subject to master netting agreements and are not offset in the Consolidated Balance Sheets. We are exposed to risk from credit-related losses resulting from nonperformance by counterparties to our financial instruments. We perform credit evaluations of our counterparties under forward exchange contracts and expect all counterparties to meet their obligations. We have not experienced credit losses from our counterparties. As of September 30, 2023, the Company had 49 forward rate contracts outstanding.

Foreign Currency Hedging Arrangements

On November 3, 2022, the Company entered into a Euro/U.S. forward contract arrangement (the "Initial Forward") with Wells Fargo Bank, N.A. (the "Hedge Counterparty"). The Initial Forward, which is governed by the provisions of an ISDA Master Agreement (including schedules thereto and transaction confirmations that supplement such agreement) entered into between the Company and the Hedge Counterparty, enables the Company to convert a portion of its Euro denominated payment obligations under the DPLTA into U.S. Dollars. Under the Initial Forward, the Company agreed to exchange an aggregate notional amount of €160.0 million for U.S. dollars at a daily fixed forward rate ranging from \$0.98286 to \$1.03290. The aggregate amount of €160.0 million is divided into eight quarterly tranches of €20.0 million, which commenced in the fourth quarter of 2022. During the nine months ended September 30, 2023, the Company settled three €20.0 million forward contract tranches and the remaining amount will be divided into five quarterly tranches of €20.0 million. The Company, at its sole discretion, may exchange all or part of each tranche on any given day within the applicable quarter; provided, however, that it must exchange the full tranche by the end of such quarter. The Initial Forward may be accelerated or terminated early for a number of reasons, including but not limited to (i) non-payment by the Company or the Hedge Counterparty, (ii) breach of representation or warranty or covenant by either party or (iii) insolvency or bankruptcy of either party.

On March 21, 2023, the Company entered into a Euro/U.S. dollar forward contract arrangement (the "Forward") with the Hedge Counterparty. Under the Forward, which is governed by the provisions of an ISDA Master Agreement (including schedules thereto and transaction confirmations that supplement such agreement) entered into between the Company and the Hedge Counterparty, the Company will exchange an aggregate notional amount of €160.0 million for U.S. dollars at a daily fixed forward rate of \$1.085 per €1.00 in average. During the nine months ended September 30, 2023, the Company settled three €20.0 million forward contract tranches, and the remaining amount will be divided into five quarterly tranches of €20.0 million. These forward contracts were executed on March 21, 2023 (to sell EUR/buy USD) and were entered into for the purpose of unwinding the Initial Forward (to buy EUR/sell USD). The drawdown dates of the Initial Forward are set to the same date as the maturity of the new offsetting Forward.

The fair values of the Company's derivative instruments recorded in the Condensed Consolidated Balance Sheet as of September 30, 2023 and December 31, 2022 were as follows:

(In thousands)	Location	Septen	nber 30, 2023	December 31, 2022		
Derivatives Not Designated as Hedging Instruments (Level 2):						
Foreign exchange contracts – derivative assets	Other receivables	\$	7,530	\$	11,992	
Foreign exchange contracts – derivative liabilities	Accounts payable	\$	(10)	\$	(633)	
Total derivatives		\$	7,520	\$	11,359	

The change in the fair values of the Company's derivative instruments recorded in the Condensed Consolidated Statements of Loss during the three and nine months ended September 30, 2023 and 2022 were as follows:

		Three Mon	nths Ended	Nine Mor	nths Ended	
		Septen	iber 30,	Septen	nber 30,	
(In thousands)	Income Statement Location	2023	2022	2023	2022	
Derivatives Not Designated as Hedging Instruments:						
Foreign exchange contracts	Other income, net	\$ 1,012	\$ —	\$ 1,076	\$ —	

12. REVOLVING CREDIT AGREEMENTS

The carrying amounts of the Company's current and non-current revolving credit agreements in its Condensed Consolidated Balance Sheets were as follows:

As of September 30, 2023		Decer	As of nber 31, 2022
\$	10,580	\$	_
			16,091
	_		10,727
			9,118
\$	10,580	\$	35,936
Septem \$	200,000	\$	As of nber 31, 2022 60,000 60,000
	\$	\$ 10,580	September 30, 2023 Decer

As of September 30, 2023, the weighted average interest rate on our revolving credit agreements was 7.11%.

Wells Fargo Credit Agreement

On July 18, 2022, ADTRAN Holdings, Inc. and ADTRAN, Inc., as the borrower, entered into a credit agreement with a syndicate of banks, including Wells Fargo Bank, National Association, as administrative agent ("Administrative Agent"), and the other lenders named therein (the "Credit Agreement"). The Credit Agreement initially allowed for borrowings of up to \$100.0 million in aggregate principal amount, but the permitted borrowings increased to up to \$400.0 million in aggregate principal amount upon the DPLTA becoming effective on January 16, 2023.

On August 9, 2023, (the "First Amendment Effective Date") the Company, its wholly-owned direct subsidiary, ADTRAN, Inc., the lenders party thereto and the Administrative Agent entered into a First Amendment to the Credit Agreement (the "First Amendment" and together with the Credit Agreement, the "Credit Facility").

The First Amendment, provides for, among other things, a new \$50.0 million delayed draw term loan ("DDTL"), which is available for borrowing in the event of the purchase by the Company of at least sixty percent (60.0%) of the outstanding shares of Adtran Networks that were not owned by the Company as of the First Amendment Effective Date (such event, a "Springing Covenant Event"). Proceeds of the DDTL may only be used to repurchase minority shares of Adtran Networks. The DDTL remains available for borrowing from the occurrence of a Springing Covenant Event through the period that is three consecutive fiscal quarters thereafter.

The First Amendment further added additional financial flexibility by amending the \$30.0 million external debt capped basket to be an unlimited amount and permitting, subject to certain requirements, the incurrence of convertible indebtedness by the Company in an aggregate principal amount of up to \$172.5 million. Any such convertible indebtedness must be incurred in pro forma compliance with the financial covenants in the Credit Agreement, unsecured and otherwise rank junior to borrowings under the Credit Agreement, and have a stated maturity date of at least 91 days after the latest scheduled maturity date of loans and commitments under the Credit Agreement. Net cash proceeds from any incurrence of convertible indebtedness must be used to repurchase minority shares of Adtran Networks or repay revolver borrowings under the Credit Agreement.

As of September 30, 2023, ADTRAN, Inc.'s borrowings under the revolving line of credit were \$200.0 million. As of September 30, 2023, there were no borrowings under the DDTL. The Credit Facility matures in July 2027; however, the Company has an option to request extensions subject to customary conditions. In addition, we may issue up to \$25.0 million in letters of credit against our \$400.0 million total facility. As of September 30, 2023, we had a total of \$2.2 million in letters of credit under ADTRAN, Inc. outstanding against our eligible borrowings, leaving a net amount of \$197.8 million available for future borrowings. Any future credit extensions

under the Credit Agreement are subject to customary conditions precedent. The proceeds of any loans are expected to be used for general corporate purposes and to pay a portion of the Exchange Offer consideration.

Revolving Line of Credit Interest Rate

All U.S. borrowings under the revolving line of credit (other than swingline loans, which bear interest at the Base Rate (as defined below)) bear interest, at the Company's option, at a rate per annum equal to (A)(i) the highest of (a) the federal funds rate (i.e., for any day, the rate per annum equal to the weighted average of the rates on overnight federal funds transactions with members of the Federal Reserve System, as published by the Federal Reserve Bank of New York on the business day next succeeding such day) plus ½ of 1.0%, (b) the prime commercial lending rate of the Administrative Agent, as established from time to time at its principal U.S. office (which such rate is an index or base rate and will not necessarily be its lowest or best rate charged to its customers or other banks), and (c) the daily Adjusted Term SOFR (as defined in the Credit Agreement) for a one-month tenor plus 1.0%, plus (ii) the applicable rate, ranging from 0.65% to 1.65% (the "Base Rate"), or (B) the sum of the Adjusted Term SOFR (as defined in the Credit Agreement) plus the applicable rate, ranging from 1.65% to 2.65%, provided that such sum is subject to a 0.0% floor (such loans utilizing this interest rate, "SOFR Loans"). All E.U. borrowings under the Credit Agreement (other than swingline loans) bear interest at a rate per annum equal to the sum of the Euro Interbank Offered Rate as administered by the European Money Markets Institute (or a comparable or successor administrator approved by the Administrative Agent) plus the applicable rate, ranging from 1.75% to 2.75%, provided that such sum is subject to a 0.0% floor (such loans utilizing this interest rate, "EURIBOR Loans"). The applicable rate is based on the consolidated net leverage ratio of the Company and its subsidiaries as determined pursuant to the terms of the Credit Agreement. Default interest is 2.0% per annum in excess of the rate otherwise applicable in the case of any overdue principal or any other overdue amount.

In addition to paying interest on outstanding principal under the Credit Agreement, the Company is required to pay a commitment fee to the lenders under the Credit Agreement in respect of unutilized revolving loan commitments and an additional commitment ticking fee at a rate ranging from 0.20% to 0.25% per annum on the average daily unused portion of the revolving credit commitment of each lender until the earliest of (i) the date of the Senior Credit Facilities Increase, (ii) the Company's voluntary termination of the credit facility commitment, and (iii) December 31, 2023. The Company is also required to pay a participation fee to the Administrative Agent for the account of each lender with respect to the Company's participation in letters of credit at the then applicable rate for SOFR Loans.

DDTL Interest Rate

All U.S. borrowings under the DDTL bear interest, at the Company's option, at a rate per annum equal to (A)(i) the highest of (a) the federal funds rate (i.e., for any day, the rate per annum equal to the weighted average of the rates on overnight federal funds transactions with members of the Federal Reserve System, as published by the Federal Reserve Bank of New York on the business day next succeeding such day) plus ½ of 1.0%, (b) the prime commercial lending rate of the Administrative Agent, as established from time to time at its principal U.S. office (which such rate is an index or base rate and will not necessarily be its lowest or best rate charged to its customers or other banks), and (c) the sum of the Adjusted Term SOFR (as defined in the Credit Agreement) plus the applicable rate, ranging from 1.9% to 2.9%, provided that such sum is subject to a 0.0% floor (such loans utilizing this interest rate, "SOFR Loans") or (B) the sum of the daily Adjusted Term SOFR (as defined in the Credit Agreement) for a one-month tenor plus 1.0%, plus (ii) the applicable rate, ranging from 0.9% to 1.9%. The applicable rate is based on the consolidated net leverage ratio of the Company and its subsidiaries as determined pursuant to the terms of the Credit Agreement. Default interest is 2.0% per annum in excess of the rate otherwise applicable in the case of any overdue principal or any other overdue amount.

In addition to paying interest on outstanding principal under the DDTL loan, the Company is required to pay a commitment fee to the lenders under the Credit Agreement in respect of unutilized DDTL commitments at a rate of 0.25% per annum on the daily unused portion of the aggregate DDTL commitment until the earliest of (i) the delayed draw funding date, (ii) the delayed draw funding deadline and (iii) the termination in full of the DDTL commitments.

Covenants Under the Credit Agreement

The First Amendment permits the Company to prepay any or all of the outstanding loans or to reduce the commitments under the First Amendment without incurring premiums or penalties (except breakage costs with respect to SOFR Loans and EURIBOR Loans). The First Amendment contains customary affirmative and negative covenants, including incurrence covenants and certain other limitations on the ability of the Company and the Company's subsidiaries to incur additional debt, guarantee other obligations, grant liens on assets, make investments, dispose of assets, pay dividends or other payments on capital stock, make restricted payments, engage in mergers or consolidations, engage in transactions with affiliates, modify its organizational documents, and enter into certain restrictive agreements. It also contains customary events of default (subject to customary cure periods and materiality thresholds).

The First Amendment further included the following revised financial covenants; (i) the addition of an automatic step up in the consolidated total net leverage ratio to 5.00:1.00 from 3.25:1.00 upon the occurrence of a Springing Covenant Event and continuing for the fiscal quarter in which the Springing Covenant Event occurs and the next three consecutive fiscal quarters thereafter (such period, a "Springing Covenant Period") and (ii) the addition of a consolidated senior secured net leverage ratio covenant to be tested quarterly during a Springing Covenant Period and sized at 4.00:1.00 during the first quarter ending after a Springing Covenant Event, 3.75:1.00 during the second quarter ending after a Springing Covenant Event and 3.50:1.00 during the third and fourth quarters ending after a Springing Covenant Event. Further, if the Company or any of its subsidiaries incurs unsecured indebtedness under the uncapped general indebtedness basket or permitted convertible indebtedness basket of the Credit Agreement in excess of \$50.0 million in connection with a transaction that is a Springing Covenant Event or during a Springing Covenant Period, then the maximum consolidated senior secured net leverage ratio shall be, or shall automatically step down to, 3.50:1.00 at the time of such incurrence.

The First Amendment also requires that the consolidated interest coverage ratio (as defined in the First Amendment) of the Company and its subsidiaries tested on the last day of each fiscal quarter not fall below 3.00 to 1.00. As of September 30, 2023, the Company was in compliance with all material covenants.

Finally, pursuant to a Collateral Agreement, dated as of July 18, 2022, among the Company, ADTRAN, Inc. and the Administrative Agent, ADTRAN, Inc.'s obligations under the First Amendment are secured by substantially all of the assets of ADTRAN, Inc. and the Company. In addition, the Company has guaranteed ADTRAN, Inc.'s obligations under the First Amendment pursuant to a Guaranty Agreement, dated as of July 18, 2022, by ADTRAN, Inc. and the Company in favor of the Administrative Agent.

Nord/LB Revolving Line of Credit

On March 29, 2023, Adtran Networks entered into a \$16.1 million unsecured revolving line of credit with Norddeutsche Landesbark - Girozentrale (Nord/LB) that bears interest of Euro Short Term Rate plus 1.94%. The line of credit has a perpetual term that can be terminated by the Company or Nord/LB at any time. As of September 30, 2023, Adtran Networks borrowed \$10.6 million under this facility.

Prior Nord/LB Revolving Line of Credit

On August 8, 2022, Adtran Networks entered into a \$16.1 million revolving line of credit with Norddeutsche Landesbark - Girozentrale (Nord/LB) that bears interest of Euro Short Term Rate plus 1.4% and matured in August 2023. On January 31, 2023, the Company repaid the outstanding borrowings under the Nord/LB revolving line of credit. No amounts are available for future borrowings.

Syndicated Credit Agreement Working Capital Line of Credit

In September 2018, Adtran Networks entered into a syndicated credit agreement with Bayerische Landesbank and Deutsche Bank AG Branch German Business to borrow up to \$10.7 million as part of a working capital line of credit. On January 31, 2023, the Company repaid the outstanding borrowings under the syndicated credit agreement working capital line of credit. No amounts are available for future borrowings.

DZ Bank Revolving Line of Credit

In the fourth quarter of 2022, Adtran Networks entered into a revolving line of credit with DZ Bank to borrow up to \$9.1 million. Interest on the line of credit reset monthly based on renewal of the loan and was 2.8% at the time the loan was repaid. On March 12, 2023, the Company repaid the outstanding borrowings under the DZ Bank revolving line of credit. No amounts are available for future borrowings.

13. NOTES PAYABLE

The carrying amounts of the Company's notes payable in its Condensed Consolidated Balance Sheets were as follows:

	Fair Val	lue as of Car	rrying Value as of	Carrying	g Value as of
(In thousands)	Septembe	r 30, 2023 Sej	ptember 30, 2023	Decemb	per 31, 2022
Syndicated credit agreement notes payable	\$	\$	<u> </u>	\$	24,598
Total Notes Payable	\$	\$	_	\$	24,598

Syndicated Credit Agreement Note Payable

In September 2018, Adtran Networks entered into a syndicated credit agreement with Bayerische Landesbank and Deutsche Bank AG Branch German Business to borrow \$63.7 million. On January 31, 2023, the Company repaid the outstanding borrowings under the syndicated credit agreement note payable. No amounts are available for future borrowings.

14. EMPLOYEE BENEFIT PLANS

The Company maintains defined benefit pension plans covering employees in certain foreign countries.

In connection with the Business Combination, we acquired \$29.6 million of additional obligations and \$22.3 million of assets related to post-employment benefit plans for certain groups of employees at our new operations outside of the U.S. Plans vary depending on the legal, economic, and tax environments of the respective country. For defined benefit plans, accruals for pensions and similar commitments have been included in the results for this year. The new defined benefit plans are for employees in Switzerland, Italy, Israel and India:

- In Switzerland, there are two defined benefit pension plans. Both plans provide benefits in the event of retirement, death or disability. The plan's benefits are based on age, years of service, salary and on a participants old age account. The plans are financed by contributions paid by the participants and by the Company.
- In Italy, the post-employment benefit plan is required due to statutory provisions. The plan is financed directly by the Company on a pay as you go basis. Employees receive their pension payments as a function of salary, inflation and a notional account.
- In Israel, there is a defined benefit pension plan that provides benefits in the event of a participant being dismissed involuntarily, retirement or death. The plan's benefits are based on the higher of the severance benefit required by law or the cash surrender value of the severance benefit component of any qualifying insurance policy or long-term employee benefit fund that is registered in the participants' name. The plan is financed by contributions paid by the Company.
- In India, the post-employment benefit plan is required due to statutory provisions. The plan is financed directly by the Company on a pay as you go basis.

The Company's net pension liability for all defined benefit pension plans totaled \$10.7 million and \$10.6 million as of September 30, 2023 and December 31, 2022, respectively.

The following table summarizes the components of net periodic pension cost related to the Company's defined benefit pension plans:

		Three Months Ended September 30,					Nine Months Ended September 30,			
(In thousands)	_	2023		2022		2023		2022		
Service cost	\$	401	\$	478	\$	1,203	\$	981		
Interest cost		(33)		204		(99)		638		
Expected return on plan assets		59		(465)		177		(1,384)		
Amortization of actuarial losses		7		81		20		254		
Net periodic pension cost	\$	434	\$	298	\$	1,300	\$	489		

The components of net periodic pension cost, other than the service cost component, are included in other income, net in the Condensed Consolidated Statements of Loss. Service cost is included in cost of revenue, selling, general and administrative expenses and research and development expenses in the Condensed Consolidated Statements of Loss. The Company made contributions to the defined benefit pension plans totaling \$2.8 million and \$1.2 million during the nine months ended September 30, 2023 and 2022, respectively. Contributions to the defined benefit pension plans for the remainder of 2023 will be limited to benefit payments to retirees which are paid out of the operating cash flows of the Company and are expected to be approximately \$0.9 million.

15. EQUITY

Accumulated Other Comprehensive (Loss) Income

The following tables present the changes in accumulated other comprehensive (loss) income, net of tax, by component:

(In thousands) Balance as of June 30, 2023 Other comprehensive income (loss) before reclassifications Amounts reclassified from accumulated other comprehensive loss Net current period other comprehensive income (loss)	Unrea (Loss Gai On Availl for-S Secur	ses) ins n able- Sale	Do Beno	efined efit Plan ustments	F Cı				
Other comprehensive income (loss) before reclassifications Amounts reclassified from accumulated other comprehensive loss Net current period other comprehensive income	\$	(773)	\$		Foreign Currency Adjustments		ASU 2018-02 Adoption		Total
reclassifications Amounts reclassified from accumulated other comprehensive loss Net current period other comprehensive income				(958)	\$	63,554	\$	385	\$ 62,208
comprehensive loss Net current period other comprehensive income		635		_		(29,716)		_	(29,081)
· · · · · · · · · · · · · · · · · · ·		(244)		(83)					(327)
		391		(83)		(29,716)		_	(29,408)
Balance as of September 30, 2023	\$	(382)	\$	(1,041)	\$	33,838	\$	385	\$ 32,800
	Unrealized (Losses) Gains			Three Mont	ded Septemb	oer 30, 20)22		
(In thousands)	Avai	on ilable- -Sale urities	Ber	Defined nefit Plan justments	C	Foreign urrency justments		018-02 ption	Total
Balance as of June 30, 2022	\$	(1,476)	\$	(5,713)	\$	(9,892)	\$	385	\$ (16,696)
Other comprehensive loss before reclassifications		(254)		_		(23,172)		_	(23,426)
Amounts reclassified from accumulated other comprehensive loss		(142)		(118)		<u> </u>			(260)
Net current period other comprehensive loss		(396)		(118)		(23,172)			 (23,686)
Less: Comprehensive loss attributable to non- controlling interest, net of tax				<u> </u>		(94)		<u> </u>	(94)
Balance as of September 30, 2022	\$	(1,872)	\$	(5,831)	\$	(32,970)	\$	385	\$ (40,288)
	Nine Months Ended September 30, 2023						23		
(In thousands)	Unrealized (Losses) Gains on Available- for-Sale Securities		Defined Benefit Plan Adjustments		Foreign Currency Adjustments		ASU 2018-02 Adoption		Total
	\$	(836)	\$	(1,016)	\$	48,180	\$	385	\$ 46,713
Other comprehensive income (loss) before reclassifications		733		_		(14,098)		_	(13,365)
Amounts reclassified from accumulated other comprehensive loss		(279)		(25)		<u> </u>			(304)
Net current period other comprehensive income (loss)		454		(25)		(14,098)		<u> </u>	 (13,669)
Less: Comprehensive income attributable to non- controlling interest, net of tax		_		_		244		_	244
Balance as of September 30, 2023	\$	(382)	\$	(1,041)	\$	33,838	\$	385	\$ 32,800

	Nine Months Ended September 30, 2022								
(In thousands)	(I Av fe	nrealized Losses) Gains on vailable- or-Sale ecurities	Be	Defined enefit Plan ljustments	(Foreign Currency Ljustments		J 2018-02 doption	Total
Balance as of December 31, 2021	\$	(552)	\$	(5,613)	\$	(6,134)	\$	385	\$ (11,914)
Other comprehensive loss before reclassifications		(1,818)		_		(26,930)		_	(28,748)
Amounts reclassified from accumulated other comprehensive income (loss)		498		(218)		_		_	280
Net current period other comprehensive loss		(1,320)		(218)		(26,930)			(28,468)
Less: Comprehensive loss attributable to non- controlling interest, net of tax		_				(94)			(94)
Balance as of September 30, 2022	\$	(1,872)	\$	(5,831)	\$	(32,970)	\$	385	\$ (40,288)

The following tables present the details of reclassifications out of accumulated other comprehensive loss:

	Three Months Ended September 30, 2023						
(In thousands)	Recla fr Accun Ot Compr	ount ssified om ulated her ehensive oss	Affected Line Item in the Statement Where Net Loss Is Presented				
Unrealized gain (loss) on available-for-sale securities:							
Net realized loss on sales of securities	\$	321	Net investment (loss) gain				
Defined benefit plan adjustments – actuarial loss		120	(1)				
Total reclassifications for the period, before tax		441					
Tax benefit		(114)					
Total reclassifications for the period, net of tax	\$	327					

(1) A part of the computation of net periodic pension cost, which is included in other income, net in the Condensed Consolidated Statements of Loss.

	Three Months Ended September 30, 2022							
(In thousands)	Re Acc	amount classified from umulated Other prehensive Loss	Affected Line Item in the Statement Where Net Loss Is Presented					
Unrealized gain (loss) on available-for-sale securities:								
Net realized loss on sales of securities	\$	187	Net investment (loss) gain					
Defined benefit plan adjustments – actuarial loss		171	(1)					
Total reclassifications for the period, before tax		358						
Tax benefit		(98)						
Total reclassifications for the period, net of tax	\$	260						

⁽¹⁾ A part of the computation of net periodic pension cost, which is included in other income, net in the Condensed Consolidated Statements of Loss.

	_		Nine Mo	onths Ended September 30, 2023
(In thousands)		Amou Reclass from Accumu Oth Compreh Los	sified m ılated er ıensive	Affected Line Item in the Statement Where Net Loss Is Presented
Unrealized gain (loss) on available-for-sale securities:	_			
Net realized loss on sales of securities	\$	5	367	Net investment (loss) gain
Defined benefit plan adjustments – actuarial loss			36	(1)
Total reclassifications for the period, before tax	_		403	
Tax benefit			(99)	
Total reclassifications for the period, net of tax	5	S	304	
	=			

(1) A part of the computation of net periodic pension cost, which is included in other income, net in the Condensed Consolidated Statements of Loss.

		Nine Mo	onths Ended September 30, 2022
(In thousands)	Recl fi Accur O Compi	nount assified rom nulated ther rehensive	Affected Line Item in the Statement Where Net Loss Is Presented
Unrealized gain (loss) on available-for-sale securities:			
Net realized gain on sales of securities	\$	(655)	Net investment (loss) gain
Defined benefit plan adjustments – actuarial loss		316	(1)
Total reclassifications for the period, before tax		(339)	
Tax expense		59	
Total reclassifications for the period, net of tax	\$	(280)	

⁽¹⁾ A part of the computation of net periodic pension cost, which is included in other income, net in the Condensed Consolidated Statements of Loss.

The following table presents the tax effects related to the change in each component of other comprehensive (loss) income:

	Three Months Ended September 30, 2023							Three Months Ended September 30, 2022						
(In thousands)	Before- Tax Amount		Tax (Expense) Benefit		Net-of-Tax Amount		Before- Tax Amount		Tax (Expense) Benefit		Net-of-Tax Amount			
Unrealized gain (loss) on available-for-sale securities	\$	836	\$	(201)	\$	635	\$	(334)	\$	80	\$	(254)		
Reclassification adjustment for amounts related to available-for-sale investments included in net (loss) gain	((321)		77		(244)		(187)		45		(142)		
Reclassification adjustment for amounts related to defined benefit plan adjustments included in net loss	((120)		37		(83)		(171)		53		(118)		
Foreign currency translation adjustments	(29,	,716)		_	(2	9,716)	(2	23,172)		_	(2	23,172)		
Total Other Comprehensive Loss	\$ (29	,321)	\$	(87)	\$ (2	9,408)	\$ (2	23,864)	\$	178	\$ (2	23,686)		

			Ionths Endonber 30, 202		Nine Months Ended September 30, 2022						
(In thousands)	Before- Tax Amount		Tax (Expense) Benefit		Net-of-Tax Amount		Before- Tax Amount	Tax (Expense Benefit			of-Tax 10unt
Unrealized gain (loss) on available-for-sale securities	\$	964	\$	(231)	\$	733	\$ (2,392)	\$	574	\$ (1,818)
Reclassification adjustment for amounts related to available-for-sale investments included in net (loss)		(367)		88		(270)	655		(157)		498
Reclassification adjustment for amounts related to defined benefit plan adjustments included in net loss		(36)		11		(279)	(316)		98		(218)
Foreign currency translation adjustments	(14,09 8)				(14,098)	(26,93 0)			(26,93 0)
Total Other Comprehensive Loss	\$	13,53 7)	\$	(132)	\$	(13,669)	(28,98 \$ 3)	\$	515	\$	28,46 8)

16. REDEEMABLE NON-CONTROLLING INTEREST

The following table summarizes the redeemable non-controlling interest activity for the nine months ended September 30, 2023:

		Months Ended
(In thousands)	Septe	mber 30, 2023
Balance at beginning of period	\$	_
Reclassification of non-controlling interests		443,757
Redemption of redeemable non-controlling interest		(1,558)
Net income attributable to redeemable non-controlling interests		8,605
Annual recurring compensation earned		(8,605)
Translation adjustment		(10,291)
Adtran Networks stock option exercises		13
Balance as of September 30, 2023	\$	431,921

Annual recurring compensation payable on untendered outstanding shares under the DPLTA must be recognized as it is accrued. For the three and nine months ended September 30, 2023, we have recognized \$2.9 million and \$8.6 million, respectively, representing the portion of the annual recurring cash compensation to the non-controlling shareholders accrued during such periods, which will be paid after the ordinary general shareholders' meeting of Adtran Networks beginning in 2024. See Note 1 and Note 20 for additional information on RNCI and the annual dividend.

17. LOSS PER SHARE

The calculation of basic and diluted loss per share is as follows:

	Three Months Ended September 30,					Nine Months Ended September 30,			
(In thousands, except per share amounts)		2023	2022		2023			2022	
Numerator									
Net loss attributable to ADTRAN Holdings, Inc.	\$	(72,735)	\$	(41,934)	\$	(140,533)	\$	(40,918)	
Denominator									
Weighted average number of shares - basic		78,389		73,036		78,378		57,175	
Effect of dilutive securities									
Stock options		_		_		_		_	
PSUs, RSUs and restricted stock		_		_		_		_	
Weighted average number of shares - diluted		78,389		73,036		78,378		57,175	
Loss per share attributable to ADTRAN Holdings, Inc basic	\$	(0.93)	\$	(0.57)	\$	(1.79)	\$	(0.72)	
Loss per share attributable to ADTRAN Holdings, Inc. – diluted	\$	(0.93)	\$	(0.57)	\$	(1.79)	\$	(0.72)	

For the three months ended September 30, 2023 and 2022, 0.5 million and 4 thousand shares, respectively, and for the nine months ended September 30, 2023 and 2022, 0.4 million and 4 thousand shares, respectively, of unvested PSUs, RSUs and restricted stock were excluded from the calculation of diluted earnings per share due to their anti-dilutive effect.

For the three months ended September 30, 2023 and 2022, 2.6 million and 0.1 million stock options, respectively, and for the nine months ended September 30, 2023 and 2022, 1.4 million and 0.2 million stock options, respectively, were outstanding but were not included in the computation of diluted earnings per share. These stock options were excluded because their exercise prices were greater than the average market price of the common shares during the applicable period, making them anti-dilutive under the treasury stock method.

18. SEGMENT INFORMATION

The chief operating decision maker regularly reviews the Company's financial performance based on two reportable segments: (1) Network Solutions and (2) Services & Support.

The Network Solutions segment includes hardware and software products that enable a digital future which support the Company's Subscriber, Access & Aggregation, and Optical Networking Solutions. The Company's cloud-managed Wi-Fi gateways, virtualization software, and switches provide a mix of wired and wireless connectivity at the customer premises. In addition, its Carrier Ethernet products support a variety of applications at the network edge ranging from mobile backhaul to connecting enterprise customers ("Subscriber Solutions"). The Company's portfolio includes products for multi-gigabit service delivery over fiber or alternative media to homes and businesses.

The Services & Support segment offers a comprehensive portfolio of network design, implementation, maintenance and cloud-hosted services supporting its Subscriber, Access & Aggregation, and Optical Networking Solutions. These services assist operators in the deployment of multi-vendor networks while reducing their cost to maintain these networks. The cloud-hosted services include a suite of SaaS applications under the Company's Mosaic One platform that manages end-to-end network and service optimization for both fiber access infrastructure and mesh Wi-Fi connectivity. The Company backs these services with a global support organization that offers on-site and off-site support services with varying SLAs.

The performance of these segments is evaluated based on revenue, gross profit and gross margin; therefore, selling, general and administrative expenses, research and development expenses, interest and dividend income, interest expense, net investment (loss) gain, other income, net and income tax benefit are reported on a Company-wide basis only. There is no inter-segment revenue. Asset information by reportable segment is not produced and, therefore, is not reported.

The following tables present information about the revenue and gross profit of the Company's reportable segments:

				Three Mo	nths E	nded		
		Septembe	er 30, 2	023	September 30,			022
(In thousands)		Revenue		ross Profit	Revenue		G	ross Profit
Network Solutions	\$	228,564	\$	47,277	\$	304,940	\$	82,334
Services & Support		43,767		26,960		35,769		20,693
Total	\$	272,331	\$	74,237	\$	340,709	\$	103,027
				Nine Mon	ths En	ıded		
		Septembe	er 30, 2	023		Septembe	er 30, 2	:022
(In thousands)		Revenue	G	ross Profit		Revenue	G	ross Profit
Network Solutions	\$	793,984	\$	176,607	\$	599,306	\$	186,126
Services & Support		129,637		77,991		67,959		33,723

For the three months ended September 30, 2023 and 2022, \$1.5 million and \$1.1 million, respectively, of depreciation expense was included in gross profit for our Network Solutions segment. For the nine months ended September 30, 2023 and 2022, \$4.5 million and \$1.6 million, respectively, of depreciation expense was included in gross profit for our Network Solutions segment. For the three months ended September 30, 2023 and 2022, \$2.4 thousand of depreciation expense was included in gross profit for our Services & Support segment. For the nine months ended September 30, 2023 and 2022, \$7.3 thousand and \$8.0 thousand, respectively, of depreciation expense was included in gross profit for our Services & Support segment.

923,621

254,598

667,265

219,849

Revenue by Category

Total

In addition to its reportable segments, revenue is also reported for the following three categories – Subscriber Solutions, Access & Aggregation Solutions and Optical Networking Solutions.

Prior to the Business Combination with Adtran Networks on July 15, 2022, ADTRAN reported revenue across the following three categories: (1) Access & Aggregation, (2) Subscriber Solutions & Experience and (3) Traditional & Other Products. Following the Business Combination with Adtran Networks, the Company has recast these revenues such that ADTRAN's former Access & Aggregation revenue is combined with a portion of the applicable Adtran Networks solutions to create Access & Aggregation Solutions, ADTRAN's former Subscriber Solutions & Experience revenue is combined with a portion of the applicable Adtran Networks solutions to create Subscriber Solutions, and the revenue from Traditional & Other products is now included in the applicable Access & Aggregation Solutions or Subscriber Solutions category. Optical Networking Solutions is a new revenue category added to represent a meaningful portion of Adtran Networks' portfolio.

Our Subscriber Solutions portfolio is used by Service Providers to terminate their access services infrastructure at the customer premises while providing an immersive and interactive experience for residential, business and wholesale subscribers. This revenue category includes hardware- and software-based products and services. These solutions include fiber termination solutions for residential, business and wholesale subscribers, Wi-Fi access solutions for residential and business subscribers, Ethernet switching and network edge virtualization solutions for business subscribers, and cloud software solutions covering a mix of subscriber types.

Our Access & Aggregation Solutions are solutions that are used by communications Service Providers to connect residential subscribers, business subscribers and mobile radio networks to the Service Providers' metro network, primarily through fiber-based connectivity. This revenue category includes hardware- and software-based products and services. Our solutions within this category are a mix of fiber access and aggregation platforms, precision network synchronization and timing solutions, and access orchestration solutions that ensure highly reliable and efficient network performance.

Our Optical Networking Solutions are used by communications Service Providers, internet content providers and large-scale enterprises to securely interconnect metro and regional networks over fiber. This revenue category includes hardware- and software-based products and services. Our solutions within this category include open optical terminals, open line systems, optical subsystems and modules, network infrastructure assurance systems, and automation platforms that are used to build high-scale, secure and assured optical networks.

The table below presents revenue information by category. Prior year amounts presented below have been reclassified to conform to the current period revenue category presentation:

	Three Months Ended September 30,					Nine Months Ended September 30,			
(In thousands)		2023		2022		2023		2022	
Optical Networking Solutions	\$	116,200	\$	118,845	\$	406,952	\$	118,845	
Access & Aggregation Solutions		94,646		88,189		294,183		278,273	
Subscriber Solutions		61,485		133,675		222,486		270,147	
Total	\$	272,331	\$	340,709	\$	923,621	\$	667,265	

Revenue by Geographic Area

The following table presents revenue information by geographic area:

	Three Months Ended September 30,					Nine Mon Septen	ths End iber 30,		
(In thousands)	2023 2022			2023	2022				
United States	\$	111,494	\$	169,669	\$	375,254	\$	374,470	
Germany		60,347		64,234		212,171		71,945	
United Kingdom		41,242		46,569		150,710		123,477	
Other international		59,248		60,237		185,486		97,373	
Total	\$	272,331	\$	340,709	\$	923,621	\$	667,265	

19. LIABILITY FOR WARRANTY RETURNS

The Company's products generally include warranties of 90 days to five years for product defects. The Company accrues for warranty returns at the time of product shipment based on its historical return rate and estimate of the cost to repair or replace the defective products. The Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its component suppliers. The increasing complexity of the Company's products may cause warranty incidences, when they arise, to be more costly. 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 the Company's actual experience relative to these factors be worse than its estimates, the Company will be required to record additional warranty expense. The liability for warranty obligations totaled \$6.6 million and \$7.2 million as of September 30, 2023 and December 31, 2022, respectively, and is included in accrued expenses and other liabilities in the Condensed Consolidated Balance Sheets. The warranty expense and write-off activity for the three and nine months ended September 30, 2023 and 2022 are summarized as follows:

	Three Mor Septem	ths End	ded		ed		
(In thousands)	2023		2022		2023		2022
Balance at beginning of period	\$ 6,831	\$	4,842	\$	7,196	\$	5,403
Plus: Adtran Networks acquisition	_		3,756		_		3,756
Plus: Amounts charged to cost and							
expenses	752		616		2,289		1,727
Plus: Foreign currency translation adjustments	(73)		_		(33)		_
Less: Deductions	(943)		(613)		(2,885)		(2,285)
Balance at end of period	\$ 6,567	\$	8,601	\$	6,567	\$	8,601

20. COMMITMENTS AND CONTINGENCIES

Legal Matters

From time to time, the Company is subject to or otherwise involved in various lawsuits, claims, investigations and legal proceedings that arise out of or are incidental to the conduct of our business (collectively, "Legal Matters"), including those relating to employment matters, patent rights, regulatory compliance matters, stockholder claims, and contractual and other commercial disputes. Such Legal Matters, even if not meritorious, could result in the expenditure of significant financial and managerial resources. Additionally, an unfavorable outcome in a legal matter, including in a patent dispute, could require the Company to pay damages, entitle claimants to other relief, such as royalties, or could prevent the Company from selling some of its products in certain jurisdictions. At this time, the Company is unable to predict the outcome of or estimate the possible loss or range of loss, if any, associated with such legal matters.

Adtran Networks Legal Matter

On May 8, 2023, Adtran Networks SE and its subsidiary, ADVA Optical Networking North America, Inc. (together, "Adtran Networks"), filed a lawsuit in the U.S District Court for the Eastern District of Texas ("EDTX") against Huawei Technologies Co. Ltd ("Huawei") seeking a declaration from the court that Huawei violated its commitments to negotiate in good faith and to license standard essential patents ("SEPs"), to the extent any SEPs are practiced by Adtran Networks, on Fair, Reasonable and Non-Discriminatory ("FRAND") terms and conditions. The case also sought to obtain a ruling by the EDTX that Adtran Networks has complied with its own commitments and requested that the Court establish FRAND terms and conditions for obtaining a FRAND license on any SEPs to the extent they are practiced by Adtran Networks. The lawsuit further sought to enjoin Huawei from enforcing certain Huawei patents that Adtran Networks considers invalid and/or not practiced, and Adtran Networks alleged that Huawei had infringed upon an Adtran Networks patent. On July 20, 2023, Adtran Networks SE was served with a complaint filed by Huawei against Adtran Networks SE in the District Court München I, Germany, alleging that certain of its products infringe upon one of Huawei's patents. On August 22, 2023, Adtran Networks entered into a settlement agreement with Huawei pursuant to which the parties agreed to, among other things, dismiss the lawsuits described above.

DPLTA Exit and Recurring Compensation Costs

Pursuant to the terms of the DPLTA, each Adtran Networks shareholder (other than the Company) has received an offer to elect either (1) to remain an Adtran Networks shareholder and receive from us an Annual Recurring Compensation payment, or (2) to receive Exit Compensation plus guaranteed interest. The guaranteed interest under the Exit Compensation is calculated from the effective date of the DPLTA to the date the shares are tendered, less any Annual Recurring Compensation paid. The guaranteed interest rate is 5.0% plus a variable component (according to the German Civil Code) that was 3.12% as of September 30, 2023. Assuming all the minority holders of currently outstanding Adtran Networks shares were to elect the second option, we would be obligated to make aggregate Exit Compensation payments, including guaranteed interest, of approximately €325.3 million or approximately \$344.2 million, based on an exchange rate as of September 30, 2023 and reflecting interest accrued through September 30, 2023 during the pendency of the appraisal proceedings discussed below. Shareholders electing the first option of Annual Recurring Compensation may later elect the second option. The opportunity for outside Adtran Networks shareholders to tender Adtran Networks shares in exchange for Exit Compensation had been scheduled to expire on March 16, 2023. However, due to the appraisal proceedings that have been initiated in accordance with applicable German law, this time period for tendering shares has been extended pursuant to the German Stock Corporation Act (*Aktiengesetz*) and will end two months after the date on which a final decision in such appraisal proceedings has been published in the Federal Gazette (*Bundesanzeiger*).

Our obligation to pay Annual Recurring Compensation under the DPLTA is a continuing payment obligation, which will amount to approximately £10.6 million or \$11.2 million (based on the current exchange rate) per year assuming none of the minority Adtran Networks shareholders were to elect Exit Compensation. The foregoing amounts do not reflect any potential increase in payment obligations that we may have depending on the outcome of ongoing appraisal proceedings in Germany. During the three and nine months ended September 30, 2023, we accrued \$2.9 million and \$8.6 million in Annual Recurring Compensation, which was reflected as a reduction to retained (deficit) earnings, respectively.

For the three and nine months ended September 30, 2023, less than 1 thousand shares and 64 thousand shares, respectively, of Adtran Networks stock was tendered to the Company and Exit Compensation payments of approximately €8 thousand and €1.1 million, respectively, or approximately \$9 thousand and \$1.2 million, respectively, based on an exchange rate as of September 30, 2023, were paid to Adtran Networks shareholders.

Performance Bonds

Certain contracts, customers and jurisdictions in which we do business require us to provide various guarantees of performance such as bid bonds, performance bonds and customs bonds. As of September 30, 2023 and December 31, 2022, we had commitments related to these bonds totaling \$11.8 million and \$22.0 million, respectively, which expire at various dates through April 2031. In general, we would only be liable for the amount of these guarantees in the event of default under each contract, the probability of which we believe is remote.

Purchase Commitments

The Company purchases components from a variety of suppliers and use contract manufacturers to provide manufacturing services for our products. Our inventory purchase commitments are for short-term product manufacturing requirements, as well as for commitments to suppliers to secure manufacturing capacity. Certain of our inventory purchase commitments with contract manufacturers and suppliers relate to arrangements to secure supply and pricing for certain product components for multi-year periods. As of September 30, 2023, purchase commitments totaled \$308.4 million.

21. RESTRUCTURING

During the fourth quarter of 2022, the Company initiated a restructuring program designed to optimize the assets and business processes, and information technology systems of the Company in relation to the Business Combination with Adtran Networks. The restructuring program is expected to maximize cost synergies by realizing operation scale, combining sales channels, streamlining corporate and general and administrative functions, including human capital resources and combining sourcing and production costs. This restructuring program is expected to be completed in late 2024.

In February 2019, the Company announced the restructuring of a certain portion of its workforce predominantly in Germany, which included the closure of a subsidiary's office location in Munich, Germany accompanied by relocation or severance benefits for the affected employees. Voluntary early retirement was offered to certain other employees and was announced in March 2019 and again in August 2020. This plan was completed in 2021 and all amounts were paid in 2022.

During the three and nine months ended September 30, 2023, we recognized a certain write down of inventory of \$21.0 million due to a restructuring discontinuation of certain product lines within our Network Solutions segment. There was no write down of inventory during the three and nine months ended September 30, 2022. See Note 7, Inventory, for additional information regarding the write down of inventory.

A reconciliation of the beginning and ending restructuring liabilities, which is included in accrued wages and benefits in the Condensed Consolidated Balance Sheets as of September 30, 2023 and December 31, 2022, is as follows:

(In thousands)	 Ionths Ended aber 30, 2023	Months Ended mber 30, 2023
Balance at beginning of period	\$ 6,452	\$ 159
Plus: Amounts charged to cost and expense	3,830	12,135
Less: Amounts paid	(4,729)	(6,741)
Balance as of September 30, 2023	\$ 5,553	\$ 5,553

(In thousands)	December 31, 20					
Balance as of December 31, 2021	\$	1,514				
Plus: Amounts charged to cost and expense		1,629				
Less: Amounts paid		(2,984)				
Balance as of December 31, 2022	\$	159				

Restructuring expenses included in the Condensed Consolidated Statements of Loss are for the three and nine months ended September 30, 2023 and 2022:

	Three Months Ended September 30,				Nine Months Ended September 30,			
(In thousands)		2023		2022		2023	-	2022
Network Solutions - Cost of revenue	\$	611	\$	_	\$	669	\$	_
Network Solutions - Inventory write down		21,043		_		21,043		_
Services & Support - Cost of revenue		(24)		_		(6)		_
Cost of revenue	\$	21,630	\$	_	\$	21,706	\$	
Selling, general and administrative expenses		3,387		_		6,960		2
Research and development expenses		(144)		_		4,512		_
Total restructuring expenses	\$	24,873	\$	_	\$	33,178	\$	2

The following table represents the components of restructuring expenses by geographic area for the three and nine months ended September 30, 2023 and 2022:

	Three Months Ended September 30,				Nine Months Ended September 30,			
(In thousands)	2023		2022		2023		2022	
United States	\$ 22,598	\$	_	\$	25,217	\$	2	
International	2,275		_		7,961		_	
Total restructuring expenses	\$ 24,873	\$	_	\$	33,178	\$	2	

22. SUBSEQUENT EVENTS

Dividend Suspension

On November 6, 2023, the Board of Directors suspended the Company's quarterly cash dividend which will be redirected to reduce debt and interest expense and support the Company's capital efficiency program. The payment of any future dividends will be at the discretion of the Board of Directors and will depend on the Company's financial condition, results of operations, capital requirements, and any other factors deemed relevant by the Board of Directors.

Business Efficiency Program

On November 6, 2023, due to the uncertainty around the current macroeconomic environment and its impact on customer spending levels, the Company's management determined to implement a comprehensive business efficiency program, which includes (i) a cost efficiency program targeting the reduction of ongoing operating expenses, and (ii) a capital efficiency program, which includes a site consolidation plan exploring the partial sale of owned real estate and the suspension of the quarterly dividend. See Part II, Item 5 (a) of this report for additional information regarding the business efficiency program.

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

The following discussion should be read in conjunction with the Condensed Consolidated Financial Statements and the related notes that appear in Part I, Item 1 of this document. In addition, the following discussion should be read in conjunction with our audited consolidated financial statements for the year ended December 31, 2022, Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, and Part I, Item 1A, Risk Factors, included in Amendment No. 1 to our Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC on August 14, 2023 (the "2022 Form 10-K/A"), as well as Part I, Item 1, Business, included in our Annual Report on Form 10-K filed with the SEC on March 1, 2023.

This discussion is designed to provide the reader with information that will assist in understanding our Condensed Consolidated Financial Statements, the changes in certain key items in those financial statements from period to period, and the primary factors that accounted for those changes, as well as how certain accounting principles affect our Condensed Consolidated Financial Statements. See "Cautionary Note Regarding Forward-Looking Statements" on page 4 of this report for a description of important factors that could cause actual results to differ from expected results. See also Part 1, Item 1A, Risk Factors, of the 2022 Form 10-K/A and Part II, Item 1A, Risk Factors of this Form 10-O.

Unless the context otherwise indicates or requires, references in this Quarterly Report on Form 10-Q to "ADTRAN", the "Company," "we," "us" and "our" refer to ADTRAN Holdings, Inc. and its consolidated subsidiaries for periods subsequent to the Merger and to ADTRAN, Inc. and its consolidated subsidiaries for periods prior to the Merger. The prior period results do not include the results of Adtran Networks prior to the Business Combination which occurred on July 15, 2022.

OVERVIEW

The Company is a leading global provider of networking and communications platforms, software, systems and services focused on the broadband access market, serving a diverse domestic and international customer base in multiple countries that includes Large, Medium and Small Service Providers, alternative Service Providers, such as utilities, municipalities and fiber overbuilders, cable/MSOs, SMBs and distributed enterprises. Our innovative solutions and services enable voice, data, video and internet-communications across a variety of network infrastructures and are currently in use by millions worldwide. We support our customers through our direct global sales organization and our distribution networks. 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 optimal selling prices and increased functionality as compared to both the prior generation of a product and the products of competitors in order to gain market share. To service our customers and grow revenue, we are continually conducting research and developing new products addressing customer needs and testing those products for the specific requirements of the particular customers. We offer a broad portfolio of flexible software and hardware network solutions and services that enable Service Providers to meet today's service demands while enabling them to transition to the fully converged, scalable, highly-automated, cloud-controlled voice, data, internet and video network of the future. In addition to our global headquarters in Huntsville, Alabama, and our European headquarters in Munich, Germany, we have sales and research and development facilities in strategic global locations.

ADTRAN Holdings, Inc. solely owns ADTRAN, Inc. and is the majority shareholder of Adtran Networks (formerly ADVA Optical Networking SE). ADTRAN is a leading global provider of open, disaggregated networking and communications solutions. Adtran Networks is a global provider of network solutions for data, storage, voice and video services. The combined technology portfolio can best address current and future requirements, especially regarding the convergence of solutions at the network edge.

The chief operating decision maker regularly reviews the Company's financial performance based on two reportable segments: (1) Network Solutions and (2) Services & Support. In addition to the Company's reportable segments, revenue is also reported for the following three categories – Subscriber Solutions, Access & Aggregation Solutions, and Optical Networking Solutions.

Prior to the Business Combination with Adtran Networks on July 15, 2022, ADTRAN reported revenue across the following three categories: (1) Access & Aggregation, (2) Subscriber Solutions & Experience and (3) Traditional & Other Products. Following the Business Combination with Adtran Networks, we have recast these revenues such that ADTRAN's former Access & Aggregation revenue is combined with a portion of the applicable Adtran Networks solutions to create Access & Aggregation Solutions, ADTRAN's former Subscriber Solutions & Experience revenue is combined with a portion of the applicable Adtran Networks solutions to create Subscriber Solutions and the revenue from Traditional & Other products is now included in the applicable Access & Aggregation Solutions or Subscriber Solutions category. Optical Networking Solutions is a new revenue category added to represent a meaningful portion of Adtran Networks portfolio.

Our Subscriber Solutions portfolio is used by Service Providers to terminate their access services infrastructure at the customer premises while providing an immersive and interactive experience for residential, business and wholesale subscribers. This revenue category includes hardware- and software-based products and services. These solutions include fiber termination solutions for residential, business and wholesale subscribers, Wi-Fi access solutions for residential and business subscribers, Ethernet switching and network edge virtualization solutions for business subscribers and cloud software solutions covering a mix of subscriber types.

Our Access & Aggregation Solutions are solutions that are used by communications Service Providers to connect residential subscribers, business subscribers and mobile radio networks to the Service Providers' metro network, primarily through fiber-based connectivity. This revenue category includes hardware- and software-based products and services. Our solutions within this category are a mix of fiber access and aggregation platforms, precision network synchronization and timing solutions and access orchestration solutions that ensure highly reliable and efficient network performance.

Our Optical Networking Solutions are used by communications Service Providers, internet content providers and large-scale enterprises to securely interconnect metro and regional networks over fiber. This revenue category includes hardware- and software-based products and services. Our solutions within this category include open optical terminals, open line systems, optical subsystems and modules, network infrastructure assurance systems and automation platforms that are used to build high-scale, secure and assured optical networks.

ADTRAN NETWORKS DOMINATION AND PROFIT AND LOSS TRANSFER AGREEMENT

The DPLTA between the Company, as the controlling company, and Adtran Networks, as the controlled company, which was executed on December 1, 2022, became effective on January 16, 2023, as a result of its registration with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) at the registered seat of Adtran Networks (Jena).

Under the DPLTA, subject to certain limitations pursuant to applicable law and the specific terms of the DPLTA, (i) the Company is entitled to issue binding instructions to the management board of Adtran Networks, (ii) Adtran Networks will transfer its annual profit to the Company, subject to, among other things, the creation or dissolution of certain reserves, and (iii) the Company will generally absorb the annual net loss incurred by Adtran Networks. The obligation of Adtran Networks to transfer its annual profit to the Company applies for the first time to the profit, if any, generated in the Adtran Networks fiscal year 2023. The obligation of the Company to absorb Adtran Networks annual net loss applies for the first time to the loss, if any, generated in the Adtran Networks fiscal year 2023.

Additionally, and subject to certain limitations pursuant to applicable law and the specific terms of the DPLTA, the DPLTA provides that Adtran Networks shareholders (other than us) be offered, at their election, (i) to put their Adtran Networks shares to the Company in exchange for compensation in cash of €17.21 per share plus guaranteed interest (the "Exit Compensation"), or (ii) to remain Adtran Networks shareholders and receive a recurring compensation in cash of €0.59 (€0.52 net under the current tax regime) per share for each full fiscal year of Adtran Networks (the "Annual Recurring Compensation"). The guaranteed interest component under the Exit Compensation is calculated from the effective date of the DPLTA to the date the shares are tendered, less any Annual Recurring Compensation paid. The guaranteed interest rate is 5.0% plus a variable component that was 3.12% as of September 30, 2023. The Annual Recurring Compensation is due on the third banking day following the ordinary general shareholders' meeting of Adtran Networks for the respective preceding fiscal year (but in any event within eight months following expiration of the fiscal year) and is first granted for the 2023 fiscal year, payable for the first time after the ordinary general shareholders' meeting of Adtran Networks in 2024. The adequacy of both forms of compensation has been challenged by minority shareholders of Adtran Networks via court-led appraisal proceedings under German law, and it is possible that the courts in such appraisal proceedings may adjudicate a higher Exit Compensation or Annual Recurring Compensation (in each case, including interest thereon) than agreed upon in the DPLTA.

The opportunity for outside Adtran Networks shareholders to tender Adtran Networks shares in exchange for Exit Compensation had been scheduled to expire on March 16, 2023. However, due to the appraisal proceedings that have been initiated in accordance with applicable German law, this time period for tendering shares has been extended pursuant to the German Stock Corporation Act (*Aktiengesetz*) and will end two months after the date on which a final decision in such appraisal proceedings has been published in the Federal Gazette (*Bundesanzeiger*). For the three and nine months ended September 30, 2023, less than one thousand shares and 64 thousand shares, respectively, of Adtran Networks stock was tendered to the Company and Exit Compensation payments of approximately €8 thousand and €1.1 million, respectively, or approximately \$9 thousand and \$1.2 million, respectively, based on an exchange rate as of September 30, 2023, were paid to Adtran Networks' shareholders.

We currently hold 33,957,538 no-par value bearer shares of Adtran Networks, representing 65.36% of Adtran Networks outstanding shares as of September 30, 2023.

The foregoing description of the DPLTA does not purport to be complete and is qualified in its entirety by reference to the DPLTA, a non-binding English translation of which is incorporated by reference to Exhibit 10.5 of the 2022 Form 10-K/A.

As of September 30, 2023, the Company has incurred \$26.2 million of transaction costs related to the Business Combination. During the three and nine months ended September 30, 2023, \$8 thousand and \$0.1 million of transaction costs were incurred, respectively. During the three and nine months ended September 30, 2022, \$10.6 million and \$13.3 million of transaction costs were incurred, respectively. These transaction costs are recorded in selling, general and administrative expenses in the Consolidated Statements of Loss

MULTI-YEAR INTEGRATION PROGRAM

During the fourth quarter of 2022, the Company initiated a two-year integration program designed to optimize the assets, business processes, and information technology systems of the Company.

The program has identified several potential cost synergies, including:

- realizing operational scale;
- combined sales channels;
- streamlining corporate and general and administrative functions; and
- · combined sourcing and production costs.

We have and will continue to invest significant dollars to restructure the workforce, optimize legacy systems, streamline legal entities and consolidate real estate holdings. By executing these integration activities, we expect to deliver greater innovation for customers, career enrichment opportunities for employees, and enhanced value for shareholders. During the three and nine months ended September 30, 2023, we recognized \$1.7 million and \$3.1 million of integration costs related to the Business Combination, respectively, that are included in selling, general and administrative expenses in the Condensed Consolidated Statement of Loss. We expect to incur additional integration costs and costs associated with the implementation of the DPLTA during the remainder of 2023 and into 2024 and such costs are expected to be material.

During the three and nine months ended September 30, 2023, we recognized \$24.9 million and \$33.2 million of restructuring costs relating to the Business Combination that are included in cost of revenue, selling, general and administrative expenses and research and development expenses in the Condensed Consolidated Statement of Loss, respectively. See Note 21 of the Notes to Condensed Consolidated Financial Statements, included in Part I, Item 1 of this report for additional information.

FINANCIAL PERFORMANCE AND TRENDS

We ended the third quarter of 2023 with a year-over-year revenue decrease of 20.1% as compared to the three months ended September 30, 2022, driven by decreased volume of sales activity due to customers' focus on reducing inventory levels and due to the unfavorable impact on revenue generated outside of the U.S. as a result of the strengthened U.S. dollar. During the third quarter of 2023, we had one customer with revenues greater than 10.0% which was an international Service Provider customer and our five largest customers comprised 36.5% of our revenue. Our year-over-year domestic revenue decreased by 34.3%, driven by decreased volume of sales activity due to customer focus on reducing inventory levels. Internationally, our year-over-year revenue decreased by 6.0%, primarily driven by the unfavorable impact on revenue as a result of the strengthened U.S. dollar and decreased shipments to two Large network operators and one alternative network operator in Europe.

Growing customer concerns over inventory stocking levels affected our third quarter Subscriber Solutions category. We believe that this over-supply of CPE products will continue into the fourth quarter of 2023 and the first half of 2024. Revenue for our Optical Networking products was unfavorably impacted by strengthened U.S. dollar in the third quarter. Revenue for our Access products grew sequentially. We expect to see some improvement to the over-supply of CPE products in the coming quarters. Despite these challenges, we have maintained our emphasis on product development to enable us to respond to rapidly changing technology and evolving industry standards. For example, we expect public funding through projects such as IPCEI ME/CT to further our research and development for new communication technologies. Additionally, public funding through the Broadband Equity, Access and Deployment Program is expected to commence in late 2024 through 2026, which provides a positive outlook for the future.

Our operating results have fluctuated and may continue to fluctuate on a quarterly basis due to several factors, including customer order activity, supply chain constraints, component availability, and the Company's consolidation, purchase accounting, and integration with Adtran Networks. Further, a significant percentage of orders require delivery within a few-days requiring us to maintain higher inventory levels. These factors may result in limited order flow visibility. For example, during the recent pandemic and a global semiconductor chip shortage, we experienced disruption and delays in our supply chain and significant price increases with certain of our manufacturing partners. Although, expedite fees and lead times for semiconductor chips and other key components began to ease during the first three quarters of 2023, we continued to be negatively impacted by price increases, which could continue to have a material adverse effect on customer relations and our financial condition. We have taken decisive steps to transform our business into a leaner, more efficient and more profitable company, including through the implementation of a comprehensive business efficiency program, which includes a significant cost efficiency program targeting a reduction of ongoing operating expenses, a capital efficiency program that includes a site consolidation plan that management expects to generate proceeds through the partial sale of owned real estate (including the potential sale of our headquarters), and the suspension of the quarterly dividend. Nevertheless, our operating expenses are relatively fixed in the short term; therefore, a shortfall in quarterly revenues has and may again in the future significantly impact our financial results in a given quarter.

The coronavirus ("COVID-19") pandemic and related countermeasures previously impacted our operations. Notwithstanding improvement in many markets in which we operate due to a return to more normalized business operations, certain markets may in the future be adversely impacted by pandemic or endemic diseases including COVID-19 or as a result of policies relating to such diseases.

Our operating results have significantly fluctuated and may do so in the future as a result of a number of other factors, including a decline in general economic and market conditions, foreign currency exchange rate movements, inflation, regional conflicts, 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, tariffs and announcements of new products by us or our competitors. In recent years, inflationary pressures on input costs, such as raw materials and labor, and distribution costs had a negative impact on our operating results. However, inflationary pressures on our supply chain have eased somewhat, which has led to reductions in cost premiums on raw material costs and freight. We continue to support our customer demand for our products by working with our suppliers, contract manufacturers, distributors, and customers to address and to limit the disruption to our operations and order fulfillment. 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 ensure prompt delivery of our products may cause us to incur expediting costs to meet customer delivery requirements, which may negatively impact our operating results.

We are exposed to changes in foreign currencies relative to the U.S. dollar, which are references to the differences between the foreign-exchanges rates we use to convert the financial results of our international operations from local currencies into U.S. dollars for financial reporting purposes. This impact of foreign-exchange rate changes is calculated based on the difference between the current period's currency exchange rates and that of the comparable prior period. Our primary exposures to foreign currency exchange rate movements are with the Euro and the British pound sterling. As a result of our global operations, our revenue, gross margins, operating expense and operating loss in some international markets have been and may continue to be affected by foreign currency fluctuations.

The Company's policy is to assess the realizability of its goodwill, and to evaluate such assets for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets (or group of assets) may not be recoverable. During the third quarter of 2023, qualitative factors, such as a decrease in the Company's market capitalization and changes in the Company's long-term projections, triggered a quantitative impairment assessment for our reporting units. The Company determined the fair value of each of its reporting units using a combination of an income approach and a market based peer group analysis. It was determined that decreases in projected future cash flows, discount rates, overall macroeconomic conditions, as well as decreases in our market capitalization applied in the valuation, were required to align with market-based assumptions and company-specific risk, which resulted in lower fair values of the Services & Support reporting unit. The Company determined upon its quantitative impairment assessment to recognize a \$37.9 million non-cash goodwill impairment charge for the Services & Support reporting unit. The Company does not expect the impairment charge for the Services & Support Unit to result in any future cash expenditures. The Company did not recognize any impairment charges for the Network Solutions reporting unit as of September 30, 2023.

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 Part I, Item 1A of the 2022 Form 10-K/A and Part II, Item 1A of this Form 10-Q.

EFFECT OF RECENT ACCOUNTING PRONOUNCEMENTS

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

RESULTS OF OPERATIONS – THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2023 COMPARED TO THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2022

The following table presents selected financial information derived from our Condensed Consolidated Statements of Loss expressed as a percentage of revenue for the periods indicated. Amounts may not foot due to rounding.

	Three Months I September 3		Nine Months Ended September 30,		
	2023	2022	2023	2022	
Revenue					
Network Solutions	83.9 %	89.5 %	86.0 %	89.8 %	
Services & Support	16.1	10.5	14.0	10.2	
Total Revenue	100.0	100.0	100.0	100.0	
Cost of Revenue					
Network Solutions	58.8	65.3	64.6	61.9	
Network Solutions - Inventory Write Down	7.7	_	2.3	_	
Services & Support	6.2	4.4	5.6	5.1	
Total Cost of Revenue	72.7	69.8	72.4	67.1	
Gross Profit	27.3	30.2	27.6	32.9	
Selling, general and administrative expenses	23.1	22.0	21.3	19.6	
Research and development expenses	23.0	17.4	22.0	16.8	
Asset impairment	_	5.0	_	2.5	
Goodwill impairment	13.9	_	4.1	_	
Operating Loss	(32.8)	(14.1)	(19.9)	(6.0)	
Interest and dividend income	0.2	0.1	0.1	0.1	
Interest expense	(1.7)	(0.4)	(1.3)	(0.2)	
Net investment (loss) gain	(0.5)	(0.8)	0.1	(1.6)	
Other income, net	0.9	0.7	0.5	0.4	
Loss Before Income Taxes	(33.9)	(14.4)	(20.4)	(7.3)	
Income tax benefit	6.1	1.3	3.9	0.7	
Net Loss	(27.8) %	(13.2) %	(16.5) %	(6.6) %	
Less: Net Loss attributable to non-controlling interest	(1.1)	_	(1.3)	_	
Net Loss attributable to ADTRAN Holdings, Inc.	(26.7) %	(12.3) %	(15.2) %	(6.1) %	

REVENUE

Our revenue decreased 20.1% from \$340.7 million for the three months ended September 30, 2022 to \$272.3 million for the three months ended September 30, 2023 and increased 38.4% from \$667.3 million for the nine months ended September 30, 2022 to \$923.6 million for the nine months ended September 30, 2023. The decrease in revenue for the three months ended September 30, 2023 is primarily driven by a \$63.0 million decrease in volume of sales activity related to our ADTRAN, Inc. operations due to customers' focus on reducing inventory levels and \$5.4 million decrease due to the unfavorable impact on revenue generated outside of the U.S. as a result of the strengthened U.S. dollar. The increase in revenue for the nine months ended September 30, 2023 is primarily attributable to a \$379.0 million increase in volume of sales activity due to the Business Combination with Adtran Networks during the first half of 2023 partially offset by a \$117.3 million decrease in volume of sales activity due to customers' focus on reducing inventory levels in our domestic ADTRAN, Inc. operations. The decrease in revenue by category for the three months ended September 30, 2023 was primarily attributable to a \$72.2 million decrease in Subscriber Solutions products, and a \$2.6 million decrease in Optical Networking Solutions products partially offset by a \$6.5 million increase in Access & Aggregation revenue. The increase in revenue by category for the nine months ended September 30, 2023 was primarily attributable to a \$288.1 million increase in Optical Networking Solutions products and a \$15.9 million increase in Access and Aggregation revenue partially offset by a \$47.7 million decrease in Subscriber Solutions products. Growing customer concerns over inventory stocking levels have affected our revenue in the first three quarters in our Subscriber Solutions category. We believe that this over-supply of CPE products will continue into the fourth quarter of 2023 and into the first half of 2024. Revenue for our Access and Optical Networking products grew sequentially. We do not see any material changes to our near-term opportunities and our long-term growth catalysts as carriers around the world upgrade their networks to fiber.

Network Solutions segment revenue decreased 25.0% from \$304.9 million for the three months ended September 30, 2022 to \$228.6 million for the three months ended September 30, 2023 and increased 32.5% from \$599.3 million for the nine months ended September 30, 2022 to \$794.0 million for the nine months ended September 30, 2023. The decrease in Network Solutions revenue for the three months ended September 30, 2023 was due to the decrease of \$72.4 million in volume of sales activity in Subscriber Solutions products primarily in our ADTRAN, Inc. operations and a decrease of \$8.4 million in Optical Networking products partially offset by an increase of \$4.5 million in volume of sales activity in Access & Aggregation revenue. The increase in revenue for the nine months

ended September 30, 2023 was due to an increase of \$326.9 million in volume of sales activity due to the Business Combination with Adtran Networks during the first half of 2023 partially offset by a decrease of \$114.8 million in Subscriber Solutions products, a decrease of \$8.9 million in Access & Aggregation Solutions and a decrease of \$8.4 million in Optical Networking products. More specifically, the decrease in revenue for the three and nine months ended September 30, 2023 of our Subscriber Solutions products was primarily due to lower volume of sales of our residential solutions products as a result of customers focus on reducing inventory levels.

Services & Support segment revenue increased 22.4% from \$35.8 million for the three months ended September 30, 2023 and increased 90.8% from \$68.0 million for the nine months ended September 30, 2023 and increased 90.8% from \$68.0 million for the nine months ended September 30, 2022 to \$129.6 million for the nine months ended September 30, 2023. The increase in revenue for the three months ended September 30, 2023 was primarily attributable a \$5.8 million increase in revenue for Optical Networking products a \$2.0 million increase in revenue for Access & Aggregation revenue and a \$0.2 million increase in revenue for Subscriber Solutions services. The increase in revenue for the nine months ended September 30, 2023 was primarily attributable to the increase of \$52.2 million in volume of sales activity from the Business Combination with Adtran Networks a \$5.8 million increase in revenue for Optical Networking products a \$2.0 million increase in revenue for Access & Aggregation revenue and a \$1.8 million increase in revenue for Subscriber Solutions services. More specifically, the increase in revenue for the three and nine months ended September 30, 2023 of our ADTRAN, Inc. operations was primarily due to higher volume of sales of our software services and business solutions services.

Domestic revenue decreased by 34.3% from \$169.7 million for the three months ended September 30, 2022 to \$111.5 million for the three months ended September 30, 2023 and increased by 0.2% from \$374.5 million for the nine months ended September 30, 2022 to \$375.3 million for the nine months ended September 30, 2023. The decrease in domestic revenue for the three months ended September 30, 2023 was primarily due to lower volume of sales of our residential solutions products as a result of customers focus on reducing inventory levels in our Subscriber Solutions segment. The increase in domestic revenue for the nine months ended September 30, 2023 was primarily due to an increase in volume of sales activity from the Business Combination with Adtran Networks in the first half of 2023 partially offset by lower volume of sales of our residential solutions products as a result of customers focus on reducing inventory levels in our Subscriber Solutions segment.

International revenue, which is defined as revenue generated from the Network Solutions and Services & Support segments provided to a customer outside of the U.S., decreased by 6.0% from \$171.0 million for the three months ended September 30, 2022 to \$160.8 million for the three months ended September 30, 2023 and increased by 87.3% from \$292.8 million for the nine months ended September 30, 2022 to \$548.4 million for the nine months ended September 30, 2023. International revenue, as a percentage of total revenue, increased from 50.2% for the three months ended September 30, 2022 to 59.1% for the three months ended September 30, 2023 and increased from 43.9% for the nine months ended September 30, 2022 to 59.4% for the nine months ended September 30, 2023. The decrease in international revenue for the three months ended September 30, 2023 was primarily due to the unfavorable impact on revenue generated outside of the U.S. as a result of the strengthened U.S. dollar. The change for the nine months ended September 30, 2023 was primarily attributable to an increase in volume of sales activity from the Business Combination with Adtran Networks in the first half of 2023 and increased shipments partially offset by the unfavorable impact on revenue generated outside of the U.S. as a result of the strengthened U.S. dollar. While international revenue has increased to approximately 59.1% and 59.4% of total revenues for the three and nine months ended September 30, 2023, the mix of our Network Solutions and Services & Support segments as a percentage of total international revenue remains relatively linear. For the three and nine months ended September 30, 2023 as compared to the three and nine months ended September 30, 2022, changes in foreign currencies relative to the U.S. dollar increased our net revenue by approximately \$11.1 million and increased our net revenue by approximately \$3.6 million, respectively.

Our ADTRAN, Inc. international revenue is largely focused on broadband infrastructure and is consequently affected 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. Consequently, while we expect the global trend towards deployment of more robust broadband speeds and access to continue creating additional market opportunities for us, the factors described above have resulted in and may continue to result in pressure on revenue and operating income. Our Adtran Networks international revenue is largely focused on the manufacture and selling of networking solutions that are based on three core areas of expertise: fiber-optic transmission technology (cloud interconnect), cloud access technology for rapid creation of innovative services around the network edge and solutions for precise timing and synchronization of networks. In addition, Adtran

Networks international operations offers a comprehensive portfolio of network design, implementation and maintenance services to assist operators in the deployment of market-leading networks while reducing costs to maintain these networks.

COST OF REVENUE

As a percentage of revenue, cost of revenue increased from 69.8% for the three months ended September 30, 2022 to 72.7% for the three months ended September 30, 2023 and increased from 67.1% for the nine months ended September 30, 2022 to 72.4% for the nine months ended September 30, 2023 was primarily attributable to \$13.5 million and \$79.6 million, respectively, of adjustments consisting of intangible amortization of backlog, developed technology and fair value adjustments to inventory costs that flow through to cost of revenue as a result of the Business Combination with Adtran Networks, acquisition related expenses, a \$21.0 million write down of inventory due to a restructuring discontinuation of certain product lines within our Network Solutions segment, and to a lesser extent changes in customer and product mix and a regional revenue shift in our ADTRAN, Inc. operations partially offset by supply chain cost improvements. As the inventory that was acquired in the Business Combination with Adtran Networks is sold, our cost of revenue as a percentage of revenue will return to more normalized levels. For the three and nine months ended September 30, 2023 as compared to the three and nine months ended September 30, 2022, changes in foreign currencies relative to the U.S. dollar increased our cost of revenue by approximately \$1.8 million and increased our cost of revenue by approximately \$0.1 million, respectively. See additional information related to amortization lives and expense in Notes 2 and 10 of Notes to the Condensed Consolidated Financial Statements included in Part I, Item 1 of this report.

Network Solutions cost of revenue including the inventory write down, as a percentage of that segment's revenue, increased from 73.0% for the three months ended September 30, 2022 to 79.3% for the three months ended September 30, 2023 and increased from 68.9% for the nine months ended September 30, 2023. The increase in cost of revenue as a percentage of revenue for the three and nine months ended September 30, 2023 was primarily attributable to acquisition related expenses, amortizations and adjustments consisting of intangible amortization of backlog, developed technology and fair value adjustments to inventory costs that flow through to cost of revenue as a result of the Business Combination with Adtran Networks, a write down of inventory due to a restructuring discontinuation of certain product lines and to a lesser extent changes in customer and product mix and a regional revenue shift in our ADTRAN, Inc. operations partially offset by supply chain cost improvements.

Services & Support cost of revenue, as a percentage of that segment's revenue, decreased from 42.1% for the three months ended September 30, 2022 to 38.4% for the three months ended September 30, 2023 and decreased from 50.4% for the nine months ended September 30, 2022 to 39.8% for the nine months ended September 30, 2023. The decrease in cost of revenue as a percentage of revenue for the three and nine months ended September 30, 2023 was primarily attributable to customer mix and changes in Services & Support mix as a result of the Business Combination with Adtran Networks.

Services & Support revenue is 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 in the long-term. 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. Within the Services & Support segment, we do expect variability in gross margins from quarter-to-quarter based on the mix of the services recognized.

GROSS PROFIT

As a percentage of revenue, gross profit decreased from 30.2% for the three months ended September 30, 2022 to 27.3% for the three months ended September 30, 2023 and decreased from 32.9% for the nine months ended September 30, 2022 to 27.6% for the nine months ended September 30, 2023 was primarily attributable to \$13.5 million and \$79.6 million, respectively, of adjustments consisting of intangible amortization of backlog, developed technology and fair value adjustments to inventory costs that flow through to cost of revenue as a result of the Business Combination with Adtran Networks, acquisition related expenses, a decrease in volume of sales activity due to customers focus on reducing inventory levels in our domestic ADTRAN, Inc. operations a decrease due to the unfavorable impact on revenue generated outside of the U.S. as a result of the strengthened U.S. dollar and a write down of inventory due to a restructuring discontinuation of certain product lines.

As a percentage of that segment's revenue, Network Solutions gross profit decreased from 27.0% for the three months ended September 30, 2022 to 20.7% for the three months ended September 30, 2023 and decreased from 31.1% for the nine months ended September 30, 2023. The decrease was primarily attributable to increases in cost of revenue related to acquisition related expenses, adjustments consisting of intangible amortization of backlog, developed technology and fair value adjustments to inventory costs that flow through to cost of revenue as a result of the Business Combination with Adtran Networks and a decrease in volume of sales activity related to our ADTRAN, Inc. operations, a decrease in volume of sales activity due to customers focus on reducing inventory levels in our domestic ADTRAN, Inc. operations a decrease due to the unfavorable impact on revenue generated outside of the U.S. as a result of the strengthened U.S. dollar and a write down of inventory due to a restructuring discontinuation of certain product lines partially offset by an increase in volume of sales activity in the first half of 2023 due to the Business Combination with Adtran Networks.

As a percentage of that segment's revenue, Services & Support gross profit increased from 57.9% for the three months ended September 30, 2022 to 61.6% for the three months ended September 30, 2023 and increased from 49.6% for the nine months ended September 30, 2023 to 60.2% for the nine months ended September 30, 2023. The increase was primarily attributable to an increase in volume of sales activity in the first half of 2023 due to the Business Combination with Adtran Networks and a decrease in cost of revenue as a percentage of revenue attributable to customer mix and changes in Services & Support mix as a result of the Business Combination with Adtran Networks.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

As a percentage of revenue, selling, general and administrative expenses increased from 22.0% for the three months ended September 30, 2022 to 23.1% for the three months ended September 30, 2023 and increased from 19.6% for the nine months ended September 30, 2023. While selling, general and administrative expenses as a percentage of revenue will generally fluctuate whenever there is a significant fluctuation in revenue for the periods being compared, in the three and nine months ended September 30, 2023 we saw a more significant increase due to higher expenses related to the Business Combination with Adtran Networks and other items described below. Our restructuring and integration programs are in the process of consolidating, streamlining and integrating the workforce, systems and processes of ADTRAN and Adtran Networks, which we expect will lower selling, general and administrative expense as a percentage of revenue over time.

Selling, general and administrative expenses decreased 16.0% from \$74.9 million for the three months ended September 30, 2022 to \$62.9 million for the three months ended September 30, 2023 and increased 50.7% from \$130.6 million for the nine months ended September 30, 2022 to \$196.9 million for the nine months ended September 30, 2023. Selling, general and administrative expenses include personnel costs for management, accounting, information technology, human resources, sales and marketing, as well as independent auditor, tax and other professional fees, contract services and legal and litigation related costs. The decrease in selling, general and administrative expenses for the three months ended September 30, 2023 was primarily attributable to decreased expenses for employee-related costs, depreciation of property, plant and equipment, and stock-based compensation expense partially offset by increased costs related to our restructuring program and amortization of intangible assets. The increase in selling, general and administrative expenses for the nine months ended September 30, 2023 was primarily attributable to increased expenses in the first half of 2023 related to the Business Combination with Adtran Networks such as employee-related costs due to an increase in the number of employees, costs related to our restructuring program, amortization of intangible assets, depreciation of property, plant and equipment, restructuring expenses and transactions costs partially offset by decreased stock-based compensation expense. For the three and nine months ended September 30, 2023 as compared to the three and nine months ended September 30, 2022, changes in foreign currencies relative to the U.S dollar increased our selling, general and administrative expenses by approximately \$1.5 million and increased our selling, general and administrative expenses by approximately \$0.2 million, respectively.

RESEARCH AND DEVELOPMENT EXPENSES

As a percentage of revenue, research and development expenses increased from 17.4% for the three months ended September 30, 2022 to 23.0% for the three months ended September 30, 2023 and increased from 16.8% for the nine months ended September 30, 2022 to 22.0% for the nine months ended September 30, 2023. Although, research and development expenses as a percentage of revenue will fluctuate whenever there are incremental product development activities or significant fluctuations in revenue for the periods being compared, in the first half of 2023 we saw a more significant increase due to increased expenses related to the Business Combination with Adtran Networks and other items described below. Our restructuring and integration programs are in the process of consolidating, streamlining and integrating the workforce, systems and processes of ADTRAN and Adtran Networks, which we expect will lower research and development expense as a percentage of revenue over time.

Research and development expenses increased 6.0% from \$59.2 million for the three months ended September 30, 2022 to \$62.8 million for the three months ended September 30, 2023 and increased 81.4% from \$112.2 million for the nine months ended September 30, 2022 to \$203.5 million for the nine months ended September 30, 2023. The increase in research and development expenses was primarily attributable to increased expenses in the first half of 2023 related to the Business Combination with Adtran Networks such as employee-related costs due to an increase in the number of employees, restructuring expenses and depreciation of property, plant and equipment. For the three and nine months ended September 30, 2023 as compared to the three and nine months ended September 30, 2022, changes in foreign currencies relative to the U.S. dollar increased our research and development expenses by approximately \$1.2 million and decreased our research and development expenses by approximately \$0.90 million, respectively.

Adtran Networks has arrangements with governmental entities for the purpose of obtaining funding for research and development activities. The Company classifies government grants received under these arrangements as a reduction to research and development expense incurred. For the three and nine months ended September 30, 2023, the Company recognized \$0.8 million and \$2.3 million as a reduction of research and development expense, respectively.

We expect to continue to incur research and development expenses in connection with our new and existing products. We continually evaluate new product opportunities and engage in significant 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 revenue from a major new product group.

GOODWILL IMPAIRMENT

The Company's policy is to assess the realizability of its goodwill, and to evaluate such assets for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets (or group of assets) may not be recoverable. During the third quarter of 2023, qualitative factors, such as a decrease in the Company's market capitalization and long-term projections, triggered a quantitative impairment assessment for our reporting units. The Company determined the fair value of each of its reporting units using a combination of an income approach and a market based peer group analysis. It was determined that the decreases in projected future cash flows, discount rates, overall macroeconomic conditions, as well as the decrease in our market capitalization applied in the valuation were required to align with market-based assumptions and company-specific risk, which resulted in lower fair values of the Services & Support reporting unit. The Company determined upon its quantitative impairment assessment to recognize a \$37.9 million non-cash goodwill impairment charge for the Services & Support Unit to result in any future cash expenditures. The Company does not expect the impairment charges for the Services & Support Unit to result in any future cash expenditures. The Company did not recognize any impairment charges for the Network Solutions reporting unit as of September 30, 2023. Furthermore, no impairment of goodwill was recorded for either reporting unit as of September 30, 2022.

ASSET IMPAIRMENT

In connection with the planned integration of information technology following the Business Combination, we determined that certain projects no longer fit our needs. As a result the Company recognized impairment charges of \$17.0 million during the three and nine months ended September 30, 2022 related to capitalized implementation costs for a cloud computing arrangement. There were no asset impairments recognized during the three and nine months ended September 30, 2023. See Note 8 of Notes to the Condensed Consolidated Financial Statements included in Part I, Item 1 of this report for additional information.

INTEREST AND DIVIDEND INCOME

Interest and dividend income increased from \$0.3 million for the three months ended September 30, 2022 to \$0.5 million for the three months ended September 30, 2023 and increased from \$0.8 million for the nine months ended September 30, 2022 to \$1.2 million for the nine months ended September 30, 2023. Interest and dividend income was up due to increased income related to the Business Combination with Adtran Networks in the first half of 2023 and increased dividend income from the deferred compensation plan.

INTEREST EXPENSE

Interest expense increased from \$1.3 million for the three months ended September 30, 2022 to \$4.5 million for the three months ended September 30, 2023 and increased from \$1.4 million for the nine months ended September 30, 2022 to \$11.9 million for the nine months ended September 30, 2023. The increase in interest expense during the three and nine months ended September 30, 2023 was primarily related to an increase in the Wells Fargo Credit Agreement and the assumed debt associated with the Business Combination with Adtran Networks. See Note 12 and Note 13 of the Notes to Condensed Consolidated Financial Statements, included in Part I, Item 1 of this report.

NET INVESTMENT (LOSS) GAIN

We recognized a net investment loss of \$2.7 million and \$1.4 million for the three months ended September 30, 2022 and 2023, respectively and recognized a net investment loss of \$10.8 million compared to a gain of \$1.1 million for the nine months ended September 30, 2022 and 2023, respectively. The fluctuations in our net investments were primarily attributable to changes in the fair value of our securities recognized during the period. We expect that any future market volatility could result in continued fluctuations in our investment portfolio. See Note 6 of the Notes to Condensed Consolidated Financial Statements, included in Part I, Item 1 of this report, and "Investing Activities" in "Liquidity and Capital Resources" below for additional information.

OTHER INCOME, NET

Other expense, net, which primarily consisted of gains and losses on foreign currency transactions and income from excess material sales, was flat with income of \$2.5 million for the three months ended September 30, 2022 and 2023 and increased from \$2.9 million for the nine months ended September 30, 2022 compared to \$4.7 million for the nine months ended September 30, 2023.

INCOME TAX BENEFIT

The Company's effective tax rate changed from a benefit of 8.8% of pre-tax loss for the three months ended September 30, 2022, to a benefit of 18.0% of pre-tax loss for the three months ended September 30, 2023 and changed from a benefit of 9.4% of pre-tax loss for the nine months ended September 30, 2022, to a benefit of 19.2% of pre-tax loss for the nine months ended September 30, 2023. In 2022, we benefited from a change in our annual estimated tax rate as a result of the requirement to begin capitalizing research and development expenses for U.S. tax purposes beginning in 2022 as previously passed as part of the Tax Cuts and Jobs Act in December 2017, and the associated impact of those changes on our previously established valuation allowance. The change in the effective tax rate for the three and nine months ended September 30, 2023, was driven primarily by a change in our estimated tax rate as a result of the closing of the Business Combination with Adtran Networks during the third quarter of 2022, as well as the release of our domestic

valuation allowance during the fourth quarter of 2022, with exception for certain research and development credits in a particular State in which we do not have sufficient activity to utilize them prior to expiration.

NET LOSS ATTRIBUTABLE TO ADTRAN HOLDINGS, INC.

As a result of the above factors, net loss attributable to ADTRAN Holdings, Inc. increased from net loss of \$41.9 million for the three months ended September 30, 2022 to a net loss of \$72.7 million for the three months ended September 30, 2023 and increased from net loss of \$40.9 million for the nine months ended September 30, 2022 to a net loss of \$140.5 million for the nine months ended September 30, 2023. Upon the DPLTA becoming effective on January 16, 2023, the Company began absorbing all Adtran Networks losses rather than just the loss related to the Company's ownership percentage in Adtran Networks.

LIQUIDITY AND CAPITAL RESOURCES

We have historically financed our ongoing business with existing cash, investments and cash flow from operations. In the current environment we have begun to and expect to continue to utilize our credit arrangements to manage our working capital needs. We have used, and expect to continue to use, existing cash, investments, credit arrangements and cash generated from operations for working capital, business acquisitions, shareholder dividends and other general corporate purposes, including product development activities to enhance our existing products and develop new products, expand our sales and marketing activities and fund capital expenditures.

Pursuant to the terms of the DPLTA, each Adtran Networks shareholder (other than the Company) has received an offer to elect either (1) to remain an Adtran Networks shareholder and receive from us an Annual Recurring Compensation payment, or (2) to receive Exit Compensation plus guaranteed interest. The guaranteed interest under the Exit Compensation is calculated from the effective date of the DPLTA to the date the shares are tendered, less any Annual Recurring Compensation paid. The guaranteed interest rate is 5.0% plus a variable component (according to the German Civil Code) that was 3.12% as of September 30, 2023. Assuming all the minority holders of currently outstanding Adtran Networks shares were to elect the second option, we would be obligated to make aggregate Exit Compensation payments, including guaranteed interest, of approximately €325.3 million or approximately \$344.2 million, based on an exchange rate as of September 30, 2023 and reflecting interest accrued through September 30, 2023 during the pendency of the appraisal proceedings discussed below. Shareholders electing the first option of Annual Recurring Compensation may later elect the second option. The opportunity for outside Adtran Networks shareholders to tender Adtran Networks shares in exchange for Exit Compensation had been scheduled to expire on March 16, 2023. However, due to the appraisal proceedings that have been initiated in accordance with applicable German law, this time period for tendering shares has been extended pursuant to the German Stock Corporation Act (*Aktiengesetz*) and will end two months after the date on which a final decision in such appraisal proceedings has been published in the Federal Gazette (*Bundesanzeiger*).

We are also obligated to absorb any annual net loss of Adtran Networks under the DPLTA. Additionally, our obligation to pay Annual Recurring Compensation under the DPLTA is a continuing payment obligation, which will amount to approximately &10.6 million or \$11.2 million (based on the current exchange rate) per year assuming none of the minority Adtran Networks shareholders were to elect Exit Compensation. The foregoing amounts do not reflect any potential increase in payment obligations that we may have depending on the outcome of ongoing appraisal proceedings in Germany. During the three and nine months ended September 30, 2023, we accrued \$2.9 million and \$8.6 million in Annual Recurring Compensation, which was reflected as a reduction to retained (deficit) earnings, respectively. For the three and nine months ended September 30, 2023, less than 1 thousand shares and 64 thousand shares, respectively, of Adtran Networks stock was tendered to the Company and Exit Compensation payments of approximately &8 thousand and &1.1 million, respectively, or approximately &9 thousand and &1.2 million, respectively, based on an exchange rate as of September 30, 2023, were paid to Adtran Networks shareholders.

As of September 30, 2023, the Company does not have sufficient liquidity to meet payment obligations under the DPLTA pertaining to Exit Compensation assuming a substantial majority of Adtran Networks shareholders elect such option in the current period. We believe the probability that a substantial majority of Adtran Networks shareholders elect to receive Exit Compensation in the next twelve months is remote based on the diverse base of shareholders that must make this election on an individual shareholder basis, the current ongoing appraisal proceedings involving a dispute on the value of the Exit Compensation which is expected to take 24-36 months to resolve, the current guaranteed Annual Recurring Compensation payment plus the interest earned on such shares during the ongoing appraisal proceedings, and the current trading value of Adtran Networks SE shares.

Therefore, we believe that our cash and cash equivalents, investments, working capital management initiatives and access to funds under the Wells Fargo credit facility, including additional funding provided for under the First Amendment to the Wells Fargo credit facility that was signed on August 9, 2023, (described below) will be adequate to meet our operating and capital needs and our obligations under the DPLTA, including potential Exit Compensation, for at least the next 12 months, from the issuance of these financial statements, although we have suspended dividend payments and are implementing a business efficiency program, which includes, but is not limited to, planned reductions in our operating expenses and a site consolidation plan. In connection with the site consolidation plan, we are also exploring a potential sale of our headquarters in Huntsville. We may also need to further reduce capital expenditures and/or take other steps to preserve working capital in order to ensure that we can meet such needs and obligations.

On July 18, 2022, ADTRAN Holdings, Inc. and ADTRAN, Inc., as the borrower, entered into a credit agreement with a syndicate of banks, including Wells Fargo Bank, National Association, as administrative agent ("Administrative Agent"), and the other lenders named therein (the "Credit Agreement"). The Credit Agreement initially allowed for borrowings of up to \$100.0 million in aggregate principal amount, but the permitted borrowings increased to up to \$400.0 million in aggregate principal amount upon the DPLTA becoming effective on January 16, 2023.

On August 9, 2023, (the "First Amendment Effective Date") the Company, its wholly-owned direct subsidiary, ADTRAN, Inc., the lenders party thereto and the Administrative Agent entered into a First Amendment to the Credit Agreement (the "First Amendment" and together with the Credit Agreement, the "Credit Facility").

The First Amendment, provides for, among other things, a new \$50.0 million delayed draw term loan ("DDTL"), which is available for borrowing in the event of the purchase by the Company of at least sixty percent (60.0%) of the outstanding shares of Adtran Networks that were not owned by the Company as of the First Amendment Effective Date (such event, a "Springing Covenant Event"). Proceeds of the DDTL may only be used to repurchase minority shares of Adtran Networks. The DDTL remains available for borrowing from the occurrence of a Springing Covenant Event through the period that is three consecutive fiscal quarters thereafter.

The First Amendment further added additional financial flexibility by amending the \$30.0 million external debt capped basket to be an unlimited amount and permitting, subject to certain requirements, the incurrence of convertible indebtedness by the Company in an aggregate principal amount of up to \$172.5 million. Any such convertible indebtedness must be incurred in pro forma compliance with the financial covenants in the Credit Agreement, unsecured and otherwise rank junior to borrowings under the Credit Agreement, and have a stated maturity date of at least 91 days after the latest scheduled maturity date of loans and commitments under the Credit Agreement. Net cash proceeds from any incurrence of convertible indebtedness must be used to repurchase minority shares of Adtran Networks or repay revolver borrowings under the Credit Agreement.

As of September 30, 2023, ADTRAN, Inc.'s borrowings under the revolving line of credit were \$200.0 million. As of September 30, 2023, there were no borrowings under the DDTL. The Credit Facility matures in July 2027; however, the Company has an option to request extensions subject to customary conditions. In addition, we may issue up to \$25.0 million in letters of credit against our \$400.0 million total facility. As of September 30, 2023, we had a total of \$2.2 million in letters of credit under ADTRAN, Inc. outstanding against our eligible borrowings, leaving a net amount of \$197.8 million available for future borrowings. Any future credit extensions under the Credit Agreement are subject to customary conditions precedent. The proceeds of any loans are expected to be used for general corporate purposes and to pay a portion of the Exchange Offer consideration.

Revolving Line of Credit Interest Rate

All U.S. borrowings under the revolving line of credit (other than swingline loans, which bear interest at the Base Rate (as defined below)) bear interest, at the Company's option, at a rate per annum equal to (A)(i) the highest of (a) the federal funds rate (i.e., for any day, the rate per annum equal to the weighted average of the rates on overnight federal funds transactions with members of the Federal Reserve System, as published by the Federal Reserve Bank of New York on the business day next succeeding such day) plus ½ of 1.0%, (b) the prime commercial lending rate of the Administrative Agent, as established from time to time at its principal U.S. office (which such rate is an index or base rate and will not necessarily be its lowest or best rate charged to its customers or other banks), and (c) the daily Adjusted Term SOFR (as defined in the Credit Agreement) for a one-month tenor plus 1.0%, plus (ii) the applicable rate, ranging from 0.65% to 1.65% (the "Base Rate"), or (B) the sum of the Adjusted Term SOFR (as defined in the Credit Agreement) plus the applicable rate, ranging from 1.65% to 2.65%, provided that such sum is subject to a 0.0% floor (such loans utilizing this interest rate, "SOFR Loans"). All E.U. borrowings under the Credit Agreement (other than swingline loans) bear interest at a rate per annum equal to the sum of the Euro Interbank Offered Rate as administered by the European Money Markets Institute (or a comparable or successor administrator approved by the Administrative Agent) plus the applicable rate, ranging from 1.75% to 2.75%, provided that such sum is subject to a 0.0% floor (such loans utilizing this interest rate, "EURIBOR Loans"). The applicable rate is based on the consolidated net leverage ratio of the Company and its subsidiaries as determined pursuant to the terms of the Credit Agreement. Default interest is 2.0% per annum in excess of the rate otherwise applicable in the case of any overdue principal or any other overdue amount.

In addition to paying interest on outstanding principal under the Credit Agreement, the Company is required to pay a commitment fee to the lenders under the Credit Agreement in respect of unutilized revolving loan commitments and an additional commitment ticking fee at a rate ranging from 0.20% to 0.25% per annum on the average daily unused portion of the revolving credit commitment of each lender until the earliest of (i) the date of the Senior Credit Facilities Increase, (ii) the Company's voluntary termination of the credit facility commitment, and (iii) December 31, 2023. The Company is also required to pay a participation fee to the Administrative Agent for the account of each lender with respect to the Company's participation in letters of credit at the then applicable rate for SOFR Loans.

DDTL Interest Rate

All U.S. borrowings under the DDTL bear interest, at the Company's option, at a rate per annum equal to (A)(i) the highest of (a) the federal funds rate (i.e., for any day, the rate per annum equal to the weighted average of the rates on overnight federal funds transactions with members of the Federal Reserve System, as published by the Federal Reserve Bank of New York on the business day next succeeding such day) plus ½ of 1.0%, (b) the prime commercial lending rate of the Administrative Agent, as established from time to

time at its principal U.S. office (which such rate is an index or base rate and will not necessarily be its lowest or best rate charged to its customers or other banks), and (c) the sum of the Adjusted Term SOFR (as defined in the Credit Agreement) plus the applicable rate, ranging from 1.9% to 2.9%, provided that such sum is subject to a 0.0% floor (such loans utilizing this interest rate, "SOFR Loans") or (B) the sum of the daily Adjusted Term SOFR (as defined in the Credit Agreement) for a one-month tenor plus 1.0%, plus (ii) the applicable rate, ranging from 0.9% to 1.9%. The applicable rate is based on the consolidated net leverage ratio of the Company and its subsidiaries as determined pursuant to the terms of the Credit Agreement. Default interest is 2.0% per annum in excess of the rate otherwise applicable in the case of any overdue principal or any other overdue amount.

In addition to paying interest on outstanding principal under the a DDTL loan, the Company is required to pay a commitment fee to the lenders under the Credit Agreement in respect of unutilized DDTL commitments at a rate of 0.25% per annum on the daily unused portion of the aggregate DDTL commitment until the earliest of (i) the delayed draw funding date, (ii) the delayed draw funding deadline and (iii) the termination in full of the DDTL commitments.

Covenants Under the Credit Agreement

The First Amendment permits the Company to prepay any or all of the outstanding loans or to reduce the commitments under the First Amendment without incurring premiums or penalties (except breakage costs with respect to SOFR Loans and EURIBOR Loans). The First Amendment contains customary affirmative and negative covenants, including incurrence covenants and certain other limitations on the ability of the Company and the Company's subsidiaries to incur additional debt, guarantee other obligations, grant liens on assets, make investments, dispose of assets, pay dividends or other payments on capital stock, make restricted payments, engage in mergers or consolidations, engage in transactions with affiliates, modify its organizational documents, and enter into certain restrictive agreements. It also contains customary events of default (subject to customary cure periods and materiality thresholds).

The First Amendment further included the following revised financial covenants; (i) the addition of an automatic step up in the consolidated total net leverage ratio to 5.00:1.00 from 3.25:1.00 upon the occurrence of a Springing Covenant Event and continuing for the fiscal quarter in which the Springing Covenant Event occurs and the next three consecutive fiscal quarters thereafter (such period, a "Springing Covenant Period") and (ii) the addition of a consolidated senior secured net leverage ratio covenant to be tested quarterly during a Springing Covenant Period and sized at 4.00:1.00 during the first quarter ending after a Springing Covenant Event, 3.75:1.00 during the second quarter ending after a Springing Covenant Event and 3.50:1.00 during the third and fourth quarters ending after a Springing Covenant Event. Further, if the Company or any of its subsidiaries incurs unsecured indebtedness under the uncapped general indebtedness basket or permitted convertible indebtedness basket of the Credit Agreement in excess of \$50.0 million in connection with a transaction that is a Springing Covenant Event or during a Springing Covenant Period, then the maximum consolidated senior secured net leverage ratio shall be, or shall automatically step down to, 3.50:1.00 at the time of such incurrence.

The First Amendment also requires that the consolidated interest coverage ratio (as defined in the First Amendment) of the Company and its subsidiaries tested on the last day of each fiscal quarter not fall below 3.00 to 1.00. As of September 30, 2023, the Company was in compliance with all material covenants.

Finally, pursuant to a Collateral Agreement, dated as of July 18, 2022, among the Company, ADTRAN, Inc. and the Administrative Agent, ADTRAN, Inc.'s obligations under the First Amendment are secured by substantially all of the assets of ADTRAN, Inc. and the Company. In addition, the Company has guaranteed ADTRAN, Inc.'s obligations under the First Amendment pursuant to a Guaranty Agreement, dated as of July 18, 2022, by ADTRAN, Inc. and the Company in favor of the Administrative Agent.

As of September 30, 2023, our cash on hand was \$116.1 million of which \$94.4 million was held by our foreign subsidiaries. As of December 31, 2022, cash on hand was \$108.6 million and short-term investments were \$0.3 million, which resulted in available short-term liquidity of \$108.9 million, of which \$86.3 million was held by our foreign subsidiaries. Generally, we intend to permanently reinvest funds held outside the U.S., except to the extent that any of these funds can be repatriated without withholding tax.

In addition to our cash and cash equivalents and the credit facility, we may fund a portion or all of the Exit Compensation through the sale of securities or additional alternative funding sources, if available. There can be no assurances that we would be successful in effecting these actions on commercially reasonable terms or at all. If we cannot raise additional funds as needed, it could have a material adverse impact on our financial results and financial condition.

Operating Activities

Net cash used in operating activities of \$29.3 million during the nine months ended September 30, 2023 improved by \$13.4 million compared to net cash used in operating activities of \$42.7 million during the nine months ended September 30, 2022. The decrease in net cash used was primarily due to the net loss for the period, for the reasons discussed above, as adjusted primarily for increased depreciation and increased deferred taxes, increased impairments and write downs and decreased net cash outflows from working capital. Additional details related to our working capital and its drivers are discussed below.

Net accounts receivable decreased 17.9% from \$279.4 million as of December 31, 2022 to \$229.3 million as of September 30, 2023. There was an allowance for credit losses of less than \$15 thousand as of September 30, 2023 and an allowance for credit losses of less than \$0.1 million as of December 31, 2022. The decrease in net accounts receivable was due primarily to sales volume and timing within the quarter, customer and geographical mix. Quarterly accounts receivable DSO increased from 72 days as of December 31, 2022 to 77

days as of September 30, 2023. The increase in DSO was due to customer and geographical mix associated with the Business Combination with Adtran Networks and timing of sales within the quarter.

Other receivables decreased 25.9% from \$32.8 million as of December 31, 2022 to \$24.3 million as of September 30, 2023. The decrease in other receivables was primarily attributable to a decrease for sales of raw materials.

Quarterly inventory turnover was 2.5 turns as of December 31, 2022 and 2.0 turns as of September 30, 2023. Inventory decreased 12.5% from \$427.5 million as of December 31, 2022 to \$374.0 million as of September 30, 2023. The decrease in inventory was primarily due to a \$21.0 million write down of inventory due to a restructuring discontinuation of certain product lines within our Network Solutions segment, a reduction in component purchases due to improved lead times and utilization of buffer stock. We expect inventory levels to fluctuate as we attempt to maintain sufficient inventory in response to supply chain uncertainties.

Accounts payable decreased 37.4% from \$237.7 million as of December 31, 2022 to \$148.9 million as of September 30, 2023. The decrease in accounts payable was primarily due to a decrease in the average number of days payable to our trade suppliers. Accounts payable will fluctuate due to variations in the timing of the receipt of inventory, supplies and services and our subsequent payments for these purchases.

Investing Activities

Capital expenditures totaled approximately \$33.7 million and \$10.1 million for the nine months ended September 30, 2023 and 2022, respectively. These expenditures were primarily used to purchase manufacturing and test equipment, software, computer hardware and building improvements. The increase in capital expenditures for the nine months ended September 30, 2023 is primarily attributable to an increase in expenditures due to the Business Combination with Adtran Networks and for expenditures related to the construction of a terafactory building in Europe.

Our combined short-term and long-term investments decreased \$7.8 million from \$33.0 million as of December 31, 2022 to \$25.2 million as of September 30, 2023. This decrease reflects the impact of the net unrealized and realized gains and losses on our investments and the sale of our fixed income investments.

We typically invest all available cash not required for immediate use in operations, primarily in securities that we believe bear minimal risk of loss. See Note 6 of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report for additional information.

Our long-term investments decreased 22.9% from \$32.7 million as of December 31, 2022 to \$25.2 million as of September 30, 2023. Our investments include various marketable equity securities classified as long-term investments with a fair market value of \$0.7 million and \$0.8 million as of September 30, 2023 and December 31, 2022, respectively. Our investments include various available-for-sale debt securities classified as long-term investments with a fair market value of \$9.3 million as of December 31, 2022. The Company did not hold any available-for-sale debt securities as of September 30, 2023. Long-term investments as of September 30, 2023 and December 31, 2022 also included \$24.4 million and \$22.9 million, respectively, related to our deferred compensation plans.

Financing Activities

Dividends

During the nine month periods ended September 30, 2023 and 2022, we paid dividends totaling \$21.2 million and \$15.9 million, respectively. On November 6, 2023, the Board of Directors suspended the Company's quarterly cash dividend which will be redirected to reduce debt and interest expense and support the Company's capital efficiency program. The payment of any future dividends will be at the discretion of the Board of Directors and will depend on the Company's financial condition, results of operations, capital requirements, and any other factors deemed relevant by the Board of Directors.

Stock Repurchase Program

There were no stock repurchases during the periods ended September 30, 2023 and 2022, and there currently is no authorized stock repurchase program.

To accommodate employee stock option exercises, the Company issued 8 thousand and 0.4 million shares of common stock and treasury stock which resulted in proceeds of \$0.1 million and \$4.8 million during the nine months ended September 30, 2023 and 2022, respectively. Additionally, to accommodate Adtran Networks SE stock option exercises, Adtran Networks issued 13 thousand shares of Adtran Networks common stock which resulted in proceeds of \$0.1 million, for the nine months ended September 30, 2023. Adtran Networks SE stock options outstanding as of September 30, 2023 totaled 58 thousand (representing less than 0.2% of Adtran Networks outstanding shares), of which 12 thousand were exercisable.

Off-Balance Sheet Arrangements

We have exposure to credit losses from off-balance sheet exposures, to provide various guarantees of performance such as bid bonds, performance bonds and customs bonds, where we believe the risk of loss is immaterial to our financial statements as of September 30, 2023. Otherwise, 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. See Note 20 of the Notes to Condensed Consolidated Financial Statements, included in Part I, Item 1 of this report for additional information.

Cash Requirements

The following table summarizes the Company's material short- and long-term cash requirements from known obligations pursuant to certain contracts and commitments as of September 30, 2023, as well as an estimate of the timing in which such obligations and payments are expected to be satisfied (but excluding payments that may be made pursuant to the DPLTA and currency hedging arrangements, which are discussed below). Other than operating lease obligations, the cash requirements table excludes interest payments.

(In thousands)	Total	2023	2024	2025	2026	2027	After 2027
Wells Fargo credit agreement ⁽¹⁾	\$ 200,000	\$ —	\$ —	\$ —	\$ —	\$ 200,000	\$ —
Nord/LB revolving line of credit ⁽²⁾	10,580	10,580					
Purchase obligations ⁽³⁾	308,424	187,247	108,054	12,822	301		
Operating lease obligations ⁽⁴⁾	39,095	2,206	8,708	7,308	5,280	3,857	11,736
Totals	\$ 558,099	\$ 200,033	\$ 116,762	\$ 20,130	\$ 5,581	\$ 203,857	\$ 11,736

⁽¹⁾ See description below.

Wells Fargo Credit Agreement

On July 18, 2022, ADTRAN Holdings, Inc. and ADTRAN, Inc., as the borrower, entered into a credit agreement with a syndicate of banks, including the Administrative Agent and the other lenders named therein. See "Liquidity and Capital Resources" above for additional information regarding the Wells Fargo credit agreement.

New Nord/LB Revolving Line of Credit

On March 29, 2023, Adtran Networks entered into a \$16.1 million unsecured revolving line of credit with Norddeutsche Landesbark - Girozentrale (Nord/LB) that bears interest of Euro Short Term Rate plus 1.94%. The line of credit has a perpetual term that can be terminated by the Company or Nord/LB at any time. As of September 30, 2023, Adtran Networks borrowed \$10.6 million under this facility.

Prior Nord/LB Revolving Line of Credit

On August 8, 2022, Adtran Networks entered into a \$16.1 million revolving line of credit with Norddeutsche Landesbark - Girozentrale (Nord/LB) that bears interest of Euro Short Term Rate plus 1.4% and matured in August 2023. On January 31, 2023, the Company repaid the outstanding borrowings under the Nord/LB revolving line of credit. No amounts are available for future borrowings.

Syndicated Credit Agreement Working Capital Line of Credit

In September 2018, Adtran Networks entered into a syndicated credit agreement with Bayerische Landesbank and Deutsche Bank AG Branch German Business to borrow up to \$10.7 million as part of a working capital line of credit. On January 31, 2023, the Company

⁽²⁾ See description below.

⁽³⁾ We have purchase obligations related to open purchase orders to our contract manufacturers, ODMs, component suppliers, service partners and other vendors. The settlement of our purchase obligations will occur at various dates beginning in 2023 and going through 2026. See Note 20 of the Notes to Condensed Consolidated Financial Statements, included in Part I, Item 1 of this report for more information.

⁽⁴⁾ We have operating leases for office space, automobiles and various other equipment in the U.S. and in certain international locations. Our operating leases had remaining lease terms ranging from two months to 117 months as of September 30, 2023.

repaid the outstanding borrowings under the syndicated credit agreement working capital line of credit. No amounts are available for future borrowings.

DZ Bank Revolving Line of Credit

In the fourth quarter of 2022, Adtran Networks entered into a revolving line of credit with DZ Bank to borrow up to \$9.1 million. Interest on the line of credit reset monthly based on renewal of the loan and was 2.8% at the time the loan was repaid. On March 12, 2023, the Company repaid the outstanding borrowings under the DZ Bank revolving line of credit. No amounts are available for future borrowings.

Currency Hedging Arrangements

On November 3, 2022, the Company entered into a Euro/U.S. forward contract arrangement (the "Initial Forward") with Wells Fargo Bank, N.A. (the "Hedge Counterparty"). The Initial Forward, which is governed by the provisions of an ISDA Master Agreement (including schedules thereto and transaction confirmations that supplement such agreement) entered into between the Company and the Hedge Counterparty, enables the Company to convert a portion of its Euro denominated payment obligations under the DPLTA into U.S. Dollars. Under the Initial Forward, the Company agreed to exchange an aggregate notional amount of €160.0 million for U.S. dollars at a daily fixed forward rate ranging from \$0.98286 to \$1.03290. The aggregate amount of €160.0 million is divided into eight quarterly tranches of €20.0 million which commenced in the fourth quarter of 2022. During the nine months ended September 30, 2023, the Company settled three €20.0 million forward contract tranches and the remaining amount will be divided into five quarterly tranches of €20.0 million. The Company, at its sole discretion, may exchange all or part of each tranche on any given day within the applicable quarter; provided, however, that it must exchange the full tranche by the end of such quarter. The Initial Forward may be accelerated or terminated early for a number of reasons, including but not limited to (i) non-payment by the Company or the Hedge Counterparty, (ii) breach of representation or warranty or covenant by either party or (iii) insolvency or bankruptcy of either party.

On March 21, 2023, the Company entered into a Euro/U.S. dollar forward contract arrangement (the "Forward") with the Hedge Counterparty. Under the Forward, which is governed by the provisions of an ISDA Master Agreement (including schedules thereto and transaction confirmations that supplement such agreement) entered into between the Company and the Hedge Counterparty, the Company will exchange an aggregate notional amount of €160.0 million for U.S. dollars at a daily fixed forward rate of \$1.085 per €1.00 in average. During the nine months ended September 30, 2023, the Company settled three €20.0 million forward contract tranches, and the remaining amount will be divided into five quarterly tranches of €20.0 million. These forward contracts were executed on March 21, 2023 (to sell EUR/buy USD) and were entered into for the purpose of unwinding the Initial Forward (to buy EUR/sell USD). The drawdown dates of the Initial Forward are set to the same date as the maturity of the new offsetting Forward.

Adtran Networks Domination and Profit and Loss Transfer Agreement

On December 1, 2022, we, as the controlling company, entered into the DPLTA with Adtran Networks, as the controlled company. The DPLTA, which was executed on December 1, 2022, became effective on January 16, 2023, as a result of its registration with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) at the registered seat of Adtran Networks (Jena).

Under the DPLTA, subject to certain limitations pursuant to applicable law, (i) we are entitled to issue binding instructions to the management board of Adtran Networks, (ii) Adtran Networks will transfer all of its annual profits to us, subject to, among other things, the creation or dissolution of certain reserves, and (iii) we will generally absorb all annual losses incurred by Adtran Networks. The obligation of Adtran Networks to transfer its annual profit to us, as well as our obligation to absorb Adtran Networks annual net loss, applies for the first time to the profits or losses generated in the Adtran Networks fiscal year 2023.

Additionally, and subject to certain limitations pursuant to applicable law and the specific terms of the DPLTA, the DPLTA provides that Adtran Networks shareholders (other than us) be offered, at their election, (i) to put their Adtran Networks shares to the Company in exchange for compensation in cash of €17.21 per share plus guaranteed interest (the "Exit Compensation"), or (ii) to remain Adtran Networks shareholders and receive a recurring compensation in cash of €0.59 (€0.52 net under the current tax regime) per share for each full fiscal year of Adtran Networks (the "Annual Recurring Compensation"). The guaranteed interest component under the Exit Compensation is calculated from the effective date of the DPLTA to the date the shares are tendered, less any Annual Recurring Compensation paid. The guaranteed interest rate is 5.0% plus a variable component that was 3.12% as of September 30, 2023. The Annual Recurring Compensation is due on the third banking day following the ordinary general shareholders' meeting of Adtran Networks for the respective preceding fiscal year (but in any event within eight months following expiration of the fiscal year) and is first granted for the 2023 fiscal year, payable for the first time after the ordinary general shareholders' meeting of Adtran Networks in 2024. The adequacy of both forms of compensation have been challenged by minority shareholders of Adtran Networks via court-led appraisal proceedings under German law, and it is possible that the courts in such appraisal proceedings may adjudicate a higher Exit Compensation or Annual Recurring Compensation (in each case, including interest thereon) than agreed upon in the DPLTA. Our aggregate potential payment obligations under the DPLTA are discussed above under "Liquidity".

The opportunity for outside Adtran Networks shareholders to tender Adtran Networks shares in exchange for Exit Compensation had been scheduled to expire on March 16, 2023. However, due to the appraisal proceedings that have been initiated in accordance with applicable German law, this time period for tendering shares has been extended pursuant to the German Stock Corporation Act (*Aktiengesetz*) and will end two months after the date on which a final decision in such appraisal proceedings has been published in the Federal Gazette (*Bundesanzeiger*).

We currently hold 33,957,538 no-par value bearer shares of Adtran Networks, representing 65.36% of Adtran Networks outstanding shares as of September 30, 2023.

The foregoing description of the DPLTA does not purport to be complete and is qualified in its entirety by reference to the DPLTA, a non-binding English translation of which incorporated by reference to Exhibit 10.5 of the 2022 Form 10-K/A.

As of September 30, 2023, the Company has incurred \$26.2 million of transaction costs related to the Business Combination. During the three and nine months ended September 30, 2023, \$8 thousand and \$0.1 million of transaction costs were incurred, respectively. During the three and nine months ended September 30, 2022, \$10.6 million and \$13.3 million of transaction costs were incurred, respectively.

During the three and nine months ended September 30, 2023, we recognized \$1.7 million and \$3.1 million of integration costs related to the Business Combination, respectively, that are included in selling, general and administrative expenses in the Condensed Consolidated Statement of Loss. We expect to incur additional integration costs and costs associated with the implementation of the DPLTA during the remainder of 2023 and 2024 and such costs are expected to be material.

During the three and nine months ended September 30, 2023, we recognized \$24.9 million and \$33.2 million of restructuring costs relating to the Business Combination, respectively, that are included in cost of revenue, selling, general and administrative expenses and research and development expenses in the Condensed Consolidated Statement of Loss. See Note 21 of the Notes to Condensed Consolidated Financial Statements, included in Part I. Item 1 of this report for additional information.

Other Cash Requirements

During the nine months ended September 30, 2023, other than the Exit Compensation payments, Annual Recurring Compensation under the DPLTA, restructuring costs and increased debt service costs, there have been no other material changes in cash requirements from those discussed in the 2022 Form 10-K/A and our cash requirements table shown in Liquidity and Capital Resources above.

Performance Bonds

Certain contracts, customers and jurisdictions in which we do business require us to provide various guarantees of performance such as bid bonds, performance bonds and customs bonds. As of September 30, 2023 and December 31, 2022, we had commitments related to these bonds totaling \$11.8 million and \$22.0 million, respectively, which expire at various dates through April 2031. In general, we would only be liable for the amount of these guarantees in the event of default under each contract, the probability of which we believe is remote.

Critical Accounting Policies and Estimates

Goodwill

Goodwill represents the excess purchase price over the fair value of net assets acquired. The Company performed an impairment assessment as of September 30, 2023, prior to our October 1, 2023 annual measurement date. The quantitative goodwill impairment test is performed at the level of the reporting unit. The identification of our reporting units begins at the operating segment level and considers whether components one level below the operating segment levels should be identified as reporting units for the purpose of testing goodwill for impairment. For goodwill impairment testing purposes, we determined the Company's reporting units are generally the same as its operating segments, which are identified in Note 18 to the Condensed Consolidated Financial Statements. Our general policy is to qualitatively assess the carrying value of goodwill each reporting period for events or changes in circumstances that would more likely than not reduce the fair value of the reporting unit below its carrying amount. During the third quarter of 2023, qualitative factors such as a decrease in the Company's market capitalization and long-term projections, triggered a quantitative impairment assessment for our reporting units. The Company determined the fair value of each reporting unit using a combination of an income approach and a market based peer group analysis. It was determined that the decreases in projected future cash flows, discount rates, overall macroeconomic conditions, as well as the decrease in our market capitalization applied in the valuation were required to align with market-based assumptions and company-specific risk, which resulted in lower fair values of the Services & Support reporting unit. The Company determined upon its quantitative impairment assessment to recognized a \$37.9 million non-cash goodwill impairment charge for the Services & Support reporting unit. The Company does not expect the impairment charge for the Services & Support Unit to result in any future cash expenditures. There was no impairment for the Network Solutions reporting unit during the three and nine months ended September 30, 2023. The balance of our goodwill was \$339.1 million and \$381.7 million as of September 30, 2023 and December 31, 2022, respectively.

Accounting Policies

An accounting policy is deemed to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, if different estimates reasonably could have been used or if changes in the accounting estimate that are reasonably likely to occur could materially impact the results of financial operations. Several accounting policies, as described in Note 1 of Notes to the Consolidated Financial Statements included in Part I, Item 1 of this report, require material subjective or complex judgment and have a significant impact on our financial condition and results of operations, as applicable. We believe the critical accounting policies affect our more significant judgments and estimates used in the preparation of our Condensed Consolidated Financial Statements. During the nine months ended September 30, 2023, other than the change in accounting policy regarding non-controlling interests as outlined in Note 1 and Note 16 to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report, there were no significant changes to our critical accounting policies and estimates as described in the financial statements contained in the 2022 Form 10-K/A.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to financial market risks, including changes in foreign currency rates, prices of marketable equity and fixed-income securities. In addition, the ongoing global pandemic raises the possibility of an extended economic downturn and has caused volatility in financial markets. 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, fixed-rate bonds and municipal money market instruments denominated in U.S. dollars. Our investment policy provides limitations for issuer concentration, by restricting, at the time of purchase, the concentration in any one issuer to 5.0% of the market value of our total investment portfolio.

We maintain depository investments with certain financial institutions. As of September 30, 2023, \$112.0 million of our cash and cash equivalents, primarily foreign depository accounts, were in excess of government provided insured depository limits. Although these depository investments 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.

Interest Rate Risk

As of September 30, 2023, approximately \$6.5 million of our cash and investments may be directly affected by changes in interest rates. As of September 30, 2023, we held \$6.5 million of cash and variable-rate investments where a change in interest rates would impact our interest income. A hypothetical 50 basis point decline in interest rates as of September 30, 2023, assuming all other variables remain constant, would reduce annualized interest income on our cash and investments by less than \$0.1 million. As of September 30, 2023, the carrying amounts of our revolving credit agreements totaled \$210.6 million where a change in interest rates would impact our interest expense. A hypothetical 50 basis point increase in interest rates as of September 30, 2023, assuming all other variables remain constant, would increase our interest expense by \$1.1 million. The analyses cover our debt and investments. The analyses use actual or approximate maturities for the debt and investments. The discount rates used were based on the market interest rates in effect as of September 30, 2023.

Foreign Currency Exchange Rate Risk

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 rate movements are with the Euro and the British pound sterling. Our revenue is primarily denominated in the respective functional currency of the subsidiary and paid in that subsidiary's functional currency or certain other local currency. The majority of our global supply chain predominately makes payments in U.S. dollars; however, a substantial portion of our operating expenses are paid in certain local currencies (approximately 42.5% of total operating expense for the nine months ended September 30, 2023, respectively). Therefore, our revenue, gross margins, operating expenses and operating loss are all subject to foreign currency fluctuations. As a result, changes in currency exchange rates could cause variations in our operating loss.

We have certain customers and suppliers who are invoiced or pay in a non-functional currency. Changes in the monetary exchange rates used to invoice such customers versus the functional currency of the entity billing such customers may adversely affect our results of operations and financial condition. To manage the volatility relating to these typical business exposures, we may enter into various derivative transactions, when appropriate. 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 \$8.6 million if the U.S. dollar weakened or strengthened 10.0% against the billing currencies. All non-functional currencies invoiced by suppliers would result in a combined hypothetical gain or loss of \$10.1 million if the U.S. dollar weakened or strengthened 10.0% against the billing currencies. This change represents an increase in the amount of hypothetical gain or loss compared to prior periods and is mainly due to an increase in U.S. dollar denominated billings in a non-U.S. dollar denominated subsidiary.

As of September 30, 2023, we had certain material contracts subject to currency revaluation, including accounts receivable, accounts payable and lease liabilities denominated in foreign currencies. As of September 30, 2023, we had 49 forward contracts outstanding with a fair value of \$7.5 million. The objective of these foreign currency forward contracts is to reduce the impact of currency exchange rate movements on our operating results by offsetting gains and losses on the forward contracts with increases or decreases in foreign currency transactions. We do not use foreign currency contracts for speculative or trading purposes. Hedging of our currency exposures may not always be effective to protect us against currency exchange rate fluctuations. See Note 11 of Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report.

On November 3, 2022, the Company entered into a Euro/U.S. forward contract arrangement (the "Initial Forward") with Wells Fargo Bank, N.A. (the "Hedge Counterparty"). The Initial Forward, which is governed by the provisions of an ISDA Master Agreement (including schedules thereto and transaction confirmations that supplement such agreement) entered into between the Company and the Hedge Counterparty, enables the Company to convert a portion of its Euro denominated payment obligations under the DPLTA into U.S. Dollars. Under the Initial Forward, the Company agreed to exchange an aggregate notional amount of €160.0 million for U.S. dollars at a daily fixed forward rate ranging from \$0.98286 to \$1.03290. The aggregate amount of €160.0 million is divided into eight quarterly tranches of €20.0 million which commenced in the fourth quarter of 2022. During the nine months ended September 30, 2023, the Company settled three €20.0 million forward contract tranches, and the remaining amount will be divided into five quarterly tranches of €20.0 million. The Company, at its sole discretion, may exchange all or part of each tranche on any given day within the applicable quarter; provided, however, that it must exchange the full tranche by the end of such quarter. The Initial Forward may be accelerated or terminated early for a number of reasons, including but not limited to (i) non-payment by the Company or the Hedge Counterparty, (ii) breach of representation or warranty or covenant by either party or (iii) insolvency or bankruptcy of either party.

On March 21, 2023, the Company entered into a Euro/U.S. dollar forward contract arrangement (the "Forward") with the Hedge Counterparty. Under the Forward, which is governed by the provisions of an ISDA Master Agreement (including schedules thereto and transaction confirmations that supplement such agreement) entered into between the Company and the Hedge Counterparty, the Company will exchange an aggregate notional amount of €160.0 million for U.S. dollars at a daily fixed forward rate of \$1.085 per €1.00 in average. During the nine months ended September 30, 2023, the Company settled three €20.0 million forward contract tranches, and the remaining amount will be divided into five quarterly tranches of €20.0 million. These forward contracts were executed on March 21, 2023 (to sell EUR/buy USD) and were entered into for the purpose of unwinding the Initial Forward (to buy EUR/sell USD). The drawdown dates of the Initial Forward are set to the same date as the maturity of the new offsetting Forward.

For further information about the fair value of our investments as of September 30, 2023, see Note 6 of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that the information required to be disclosed by us in reports that we file or submit under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized and reported within the time periods specified in the rules and forms promulgated by the SEC, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

As of the end of the period covered by this report, an evaluation was carried out by management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e)) under the Exchange Act. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that due to the material weakness in our internal control over financial reporting described below, our disclosure controls and procedures were not effective as of September 30, 2023.

Material Weakness in Internal Control over Financial Reporting

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

We identified that we did not design and maintain effective controls over the presentation and disclosure of debt agreements, specifically to ensure the presentation and disclosure reflect the terms of the agreements. This material weakness resulted in the restatement of our consolidated financial statements for the year ended December 31, 2022, as well as the condensed consolidated financial statements for the three and nine months ended September 30, 2022 and for the three months ended March 31, 2023. Additionally, this material weakness could result in misstatements of the accounts or disclosures that would result in a material misstatement to the annual or interim consolidated financial statements that would not be prevented or detected.

Management's Remediation Efforts

To remediate the material weakness in our internal control over financial reporting, during the three months ended September 30, 2023, our management implemented a new control over the review of new or amendments to our agreements for terms and conditions that impact the presentation or disclosure of debt. We believe that the foregoing actions will support the improvement of the Company's internal control over financial reporting, and, through our efforts to identify, design, and implement the necessary control activities, will be effective in remediating the material weakness described above. We will continue to devote significant time and attention to these remediation efforts. As we continue to evaluate and work to improve our internal control over financial reporting, management may determine to take additional measures to address the material weakness or determine to modify the remediation plan described above. Until the remediation steps set forth above, including the efforts to implement the necessary control activities that we identify, are fully completed, and there has been time for us to conclude through testing that the control activities are operating effectively, the material weakness described above will not be considered remediated.

Changes in Internal Control over Financial Reporting.

Other than the extension of our oversight and monitoring processes to include Adtran Networks operations and the ongoing remediation efforts related to the material weakness described above, there were no other changes in the Company's internal control over financial reporting that occurred during the most recent fiscal quarter covered by this report that have materially affected, or are reasonably likely to materially affect, its internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time we are subject to or otherwise involved in various lawsuits, claims, investigations and legal proceedings that arise out of or are incidental to the conduct of our business (collectively, "Legal Matters"), including those relating to employment matters, patent rights, regulatory compliance matters, stockholder claims, and contractual and other commercial disputes. Such Legal Matters, even if not meritorious, could result in the expenditure of significant financial and managerial resources. Additionally, an unfavorable outcome in a Legal Matter, including in a patent dispute, could require the Company to pay damages, entitle claimants to other relief, such as royalties, or could prevent the Company from selling some of its products in certain jurisdictions. See Note 20 of the Notes to Condensed Consolidated Financial Statements included in Part 1 of this report for a description of our material legal proceedings, which is incorporated herein by reference. At this time, we are unable to predict the outcome of or estimate the possible loss or range of loss, if any, associated with these Legal Matters.

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 the 2022 Form 10-K/A. There have been no material changes to our risk factors from those disclosed in Part I, Item 1A, "Risk Factors" in the 2022 Form 10-K/A other than as described in the risk factors below.

Risks related to the Business Combination and DPLTA

We may fail to realize the anticipated strategic and financial benefits sought from the Business Combination.

We may not realize all of the anticipated benefits of the Business Combination. The success of the Business Combination will depend on, among other things, our ability to combine our business with Adtran Networks business in a manner that facilitates growth as a provider of fiber networking solutions and realizes anticipated cost savings. We believe that the Business Combination provides an opportunity for revenue growth in optical transport solutions, fiber access solutions and subscriber solutions.

Additionally, our ability to realize anticipated benefits of the Business Combination has been and may continue to be affected by a number of factors, including: the need for greater than expected cash or other financial resources or management time in order to integrate Adtran Networks; and increases in other expenses related to the Business Combination, including restructuring and other exit costs. In addition, our ability to realize anticipated benefits of the Business Combination may be affected by the following other factors in the future, including: the impact of appraisal proceedings in connection with the DPLTA, unanticipated liabilities associated with the Business Combination, difficulties in employee or management integration, the timing and impact of purchase accounting adjustments; and accounting for conversion of IFRS results to U.S. GAAP results. Any potential cost-saving opportunities may take several years following the Business Combination to implement, and any results of these actions may not be realized for several years thereafter, if at all. However, we are working to combine the business in a manner that permits these anticipated benefits to be realized.

In response to a decrease in our revenue and operating margins during 2023 as a result of customers' focus on reducing inventory levels and managing capital expense, we are realizing planned reductions in our operating expenses through the implementation of a business efficiency program; however, we may not be successful in fully realizing these reductions. If we are not able to effectively provide different solutions and successfully achieve the growth and cost savings objectives, the anticipated benefits of the Business Combination may not be realized fully, or at all, or may take longer to realize than expected.

We have incurred and expect to continue to incur significant costs in connection with the Business Combination and post-closing integration and restructuring efforts.

We have incurred and expect to continue to incur a number of significant non-recurring implementation and restructuring costs associated with combining the operations of ADTRAN and Adtran Networks. In addition, we have incurred significant banking, legal, accounting and other transaction fees and costs related to the Business Combination. As of September 30, 2023, we have incurred \$26.2 million of transaction costs related to the Business Combination.

We expect to incur additional restructuring costs and such costs are expected to be material. During the three and nine months ended September 30, 2023, we recognized \$24.9 million and \$33.2 million of restructuring costs relating to the Business Combination.

We expect to incur additional integration costs, as well costs associated with the implementation of the DPLTA and such costs are expected to be material. During the three and nine months ended September 30, 2023, we recognized \$1.7 million and \$3.1 million of integration costs related to the Business Combination, respectively.

To date cost savings and other efficiencies related to the integration of the businesses have not offset these transaction- and combination-related costs, and we may not be able to offset such costs in the near term, or at all. In addition, the timeline in which cost savings are expected to be realized is lengthy and may not be achieved. Failure to realize these synergies and cost reductions and other efficiencies in a timely manner or at all could have a material adverse effect on our business and cash flows, financial condition and results of operations.

We incurred a substantial amount of indebtedness in connection with the Business Combination and the DPLTA. Our failure to meet our debt service obligations could have a material adverse effect on our business, financial condition and results of operations.

Upon the DPLTA becoming effective on January 16, 2023, the available total borrowings under the Wells Fargo Credit Agreement increased from \$100.0 million to \$400.0 million. We further expanded our available borrowings under the credit facility to \$450.0 million effective August 9, 2023. On March 29, 2023, Adtran Networks entered into a \$16.1 million unsecured revolving line of credit with Norddeutsche Landesbark - Girozentrale (Nord/LB) and retired the outstanding borrowings under their revolving line of credit with DZ bank. As of September 30, 2023, the Company had incurred \$200.0 million of indebtedness under the Wells Fargo Credit Agreement and Adtran Networks had borrowings of \$10.6 million under the Nord/LB revolving line of credit. See "Cash Requirements" in Item 2 of this report for additional information.

Our increased indebtedness has and may continue to adversely affect our operations and liquidity. Our level of indebtedness:

- could make it more difficult for us to pay or refinance our debts as they become due during adverse economic and industry conditions because we may not have sufficient cash flows to make its scheduled debt payments;
- has caused us and may continue to cause us to use a larger portion of our cash flow to fund interest and principal
 payments, reducing the availability of cash to fund working capital, capital expenditures, research and development and
 other business activities;
- has contributed to our decision to suspend quarterly dividend payments to the Company's stockholders;
- could limit our ability to take advantage of significant business opportunities, such as acquisition opportunities, and to react to changes in market or industry conditions;
- could cause us to be more vulnerable to general adverse economic and industry conditions;
- could cause us to be disadvantaged compared to competitors with less leverage; and
- could limit our ability to borrow additional money in the future to fund working capital, capital expenditures, research and development and other general corporate purposes.

Our ability to satisfy our debt obligations and renew the credit facility is dependent upon our future performance and other risk factors discussed in this section. We cannot assure you that we will maintain a level of cash flows from operating activities sufficient to permit us to pay the principal, premium, if any, and interest on our indebtedness. If we fail to pay interest on, or repay, our borrowings under the Wells Fargo credit facility and Nord/LB revolving line of credit when required, we will be in default under the applicable loans, and may also suffer an event of default under the terms of other borrowing arrangements that we may enter into from time to time. We are implementing planned reductions in our operating expenses in order to fund our obligations, and we may be forced to further reduce or delay capital expenditures, sell assets or operations, seek additional capital or restructure or refinance our indebtedness. We cannot assure you that we would be able to take any of these actions, that these actions would be successful and permit us to meet our scheduled obligations or that these actions would be permitted under the terms of our future debt agreements. If we fail to implement these reductions or are unable to achieve sufficient operating results and resources, we could face substantial liquidity challenges and might be required to dispose of material assets or operations to meet our debt service and other obligations. We may not be able to consummate those dispositions or obtain sufficient proceeds from those dispositions to meet our debt service and other obligations when due. Any of these events could have a material adverse effect on our business, results of operations and financial condition. In addition, the credit agreement governing our indebtedness contains restrictive covenants that limit our ability to engage in activities that may be in our long-term best interest. Our failure to comply with those covenants could result in an event of default that, if not cured or waived, could result in the acceleration of all its debt.

We may also incur additional long-term debt and working capital lines of credit to meet future financing needs, which would increase our total indebtedness. Although the terms of its existing and future credit agreements and of the indentures governing its debt contain restrictions on the incurrence of additional debt, including secured debt, these restrictions are subject to a number of important exceptions and debt incurred in compliance with these restrictions could be substantial. If we or our restricted subsidiaries incur significant additional debt, the related risks that we face could intensify.

The terms of the DPLTA may have a material adverse effect on our financial results and condition.

The DPLTA between the Company, as the controlling company, and Adtran Networks, as the controlled company, which was executed on December 1, 2022, became effective on January 16, 2023, as a result of its registration with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) at the registered seat of Adtran Networks (Jena).

Under the DPLTA, subject to certain limitations pursuant to applicable law and the specific terms of the DPLTA, (i) the Company is entitled to issue binding instructions to the management board of Adtran Networks, (ii) Adtran Networks will transfer its annual profit to the Company, subject to, among other things, the creation or dissolution of certain reserves, and (iii) the Company will generally absorb the annual net loss incurred by Adtran Networks. The obligation of Adtran Networks to transfer its annual profit to the Company

applies for the first time to the profit, if any, generated in the Adtran Networks fiscal year 2023. The obligation of the Company to absorb Adtran Networks annual net loss applies for the first time to the loss, if any, generated in the Adtran Networks fiscal year 2023.

Additionally, and subject to certain limitations pursuant to applicable law and the specific terms of the DPLTA, the DPLTA provides that Adtran Networks shareholders (other than the Company) be offered, at their election, (i) to put their Adtran Networks shares to the Company in exchange for compensation in cash of €17.21 per share, plus guaranteed interest (the "Exit Compensation"), or (ii) to remain Adtran Networks shareholders and receive a recurring compensation in cash of €0.59 (€0.52 net under the current tax regime) per share for each full fiscal year of Adtran Networks (the "Annual Recurring Compensation"). The guaranteed interest under the Exit Compensation is calculated from the effective date of the DPLTA to the date the shares are tendered, less any Annual Recurring Compensation paid. The guaranteed interest rate is 5.0% plus a variable component, that is based on the interest rate according to the German Civil Code, which was 3.12% as of September 30, 2023. The Annual Recurring Compensation is due on the third banking day following the ordinary general shareholders' meeting of Adtran Networks for the respective preceding fiscal year (but in any event within eight months following expiration of the fiscal year) and is first granted for the 2023 fiscal year, payable for the first time after the ordinary general shareholders' meeting of Adtran Networks in 2024. The adequacy of both forms of compensation has been challenged by minority shareholders of Adtran Networks via court-led appraisal proceedings under German law and it is possible that the courts in such appraisal proceedings may adjudicate a higher Exit Compensation or Annual Recurring Compensation (in each case, including interest thereon) than agreed upon in the DPLTA. Our obligation to pay Annual Recurring Compensation under the DPLTA is a continuing payment obligation, which will amount to approximately €10.6 million or \$11.2 million (based on the current exchange rate) per year assuming none of the minority Adtran Networks shareholders were to elect Exit Compensation. The foregoing amounts do not reflect any potential increase in payment obligations that we may have depending on the outcome of ongoing appraisal proceedings in Germany. For the three and nine months ended September 30, 2023, a total of less than 1 thousand shares and 64 thousand shares, respectively, of Adtran Networks stock was tendered to the Company and Exit Compensation payments of approximately €8 thousand and €1.1 million, respectively, or approximately \$9 thousand and \$1.2 million, respectively, based on an exchange rate as of September 30, 2023, were paid to Adtran Networks shareholders. Assuming all the minority holders of currently outstanding Adtran Networks shares were to elect the first option, we would be obligated to make aggregate Exit Compensation payments, including guaranteed interest, of approximately €325.3 million or approximately \$344.2 million, based on an exchange rate as of September 30, 2023. In addition to our cash and cash equivalents and the credit facility, we may fund a portion or all of the Annual Recurring Compensation and Exit Compensation through the sale of securities or additional alternative funding sources, if available. There can be no assurances that we would be successful in effecting these actions on commercially reasonable terms or at all. If we cannot raise additional funds as needed, it could have a material adverse impact on our financial results and financial condition. Additionally, the payment of the Annual Recurring Compensation and Exit Compensation could have a material adverse impact on our financial results and financial condition. See "Liquidity and Capital Resources" in Item 2 of this report for additional information.

The opportunity for outside Adtran Networks shareholders to tender Adtran Networks shares in exchange for Exit Compensation had been scheduled to expire on March 16, 2023. However, due to the appraisal proceedings that have been initiated in accordance with applicable German law, this time period for tendering shares has been extended pursuant to the German Stock Corporation Act (*Aktiengesetz*) and will end two months after the date on which a final decision in such appraisal proceedings has been published in the Federal Gazette (*Bundesanzeiger*).

The amount of this Annual Recurring Compensation payment obligation pursuant to the DPLTA could exceed the amount of dividends that otherwise might be distributed by Adtran Networks to minority shareholders and would even have to be paid if Adtran Networks' incurs losses, which could have a material adverse impact on our financial results and financial condition.

Risks related to our financial results and Company success

We have experienced significant fluctuations in revenue and such fluctuations may continue. Fluctuations in revenue can cause our operating results in a given reporting period to be higher or lower than expected.

As a result of the many factors discussed in this report, our revenue for a particular quarter is difficult to predict and will fluctuate from quarter to quarter. Typically, our customers request product delivery within a short period following our receipt of an order. Consequently, we do not typically carry a significant order backlog and are dependent upon obtaining orders and completing delivery in accordance with shipping terms that are predominantly within each quarter to achieve our targeted revenue. In recent years, the supply of semiconductor chips and other components of our products became constrained resulting in extended lead times and increased costs. Transportation constraints, including shortages for both air and surface freight, as well as labor shortages in the transportation industry, have also affected the timing and the cost of obtaining raw materials and production supplies. However, supply chain constraints have eased somewhat, which has led to reductions in cost premiums on raw material costs and surface freight. If supply chain constraints and transportation constraints return, it could cause our net revenue and gross profit to decline or to grow at a slower rate. Our deployment/installation cycle can also vary depending on the customer's schedule, site readiness, network size and complexity and other factors, which can cause our revenue to fluctuate from period to period. Our ability to meet financial expectations could also be affected if the variable revenue patterns seen in prior quarters recur in future quarters. We have experienced periods of time during which manufacturing issues have delayed shipments, leading to variable shipping patterns. In addition, to the extent that manufacturing issues and any related component shortages continue to result in delayed shipments in the future, and particularly in quarters in which we and

our subcontractors are operating at higher levels of capacity, it is possible that revenue for a quarter could be adversely affected, and we may not be able to remediate the conditions within the same quarter.

In the past, under certain market conditions, long manufacturing lead times have caused our customers to place the same order multiple times. When multiple ordering occurs, along with other factors, it may cause difficulty in predicting our revenue and, as a result, could impair our ability to manage inventory effectively.

We plan our operating expense levels based primarily on forecasted revenue levels. On November 6, 2023, we implemented a comprehensive business efficiency program, which includes a significant cost efficiency program targeting a reduction of ongoing operating expenses, a capital efficiency program that includes a site consolidation plan that management expects to generate proceeds through the partial sale of owned real estate (including the potential sale of our headquarters), and the suspension of the quarterly dividend. Our ability to successfully implement the business efficiency program and the time it takes to do so may be affected by factors such as the need to ensure continuity in our operations, contracts, regulations and/or statutes governing employee/employer relationships, and other factors. We may not be able to successfully effectuate our business efficiency program or contain our expenses. Our estimates of the expenses necessary to achieve the cost savings we have identified may not prove accurate, and any increase in such expenses may affect our ability to achieve our anticipated cost savings within the period we have projected, or at all. In addition, our efforts to reduce our operating expenses may impact our ability to generate sufficient revenue. Furthermore, our expenses and the impact of long-term commitments are relatively fixed in the short term. A shortfall in revenue has led and could again in the future lead to operating results being below expectations, partially due to an inability to quickly reduce these fixed expenses in response to short-term business changes.

Our customers in the subscriber solutions & experience technology category are increasingly focusing on working capital optimization and depletion of overstocked inventories, which has impacted and may continue to materially impact demand in that category.

The lengthy sales and approval process required by service providers for new products has resulted in fluctuations in our revenue and may result in future revenue fluctuations.

In the industry in which we compete, sales and approval cycles are often lengthy. Selling efforts often involve a significant commitment of time and resources by us and our customers that may include extensive product testing, laboratory or network certification, or region-specific product certification and homologation requirements for deployment in networks. Additionally, a supplier must first obtain product approval from a major or other service provider to sell its products to these service providers. This process can last from six to eighteen months, or longer, depending on the technology, the service provider and the demand for the product from the service provider's subscribers. Consequently, we are involved in a constant process of submitting for approval succeeding generations of products, as well as products that deploy new technology or respond to new technology demands from a major or other service provider. We have been successful in the past in obtaining these approvals; however, we cannot be certain that we will obtain these approvals in the future or that sales of these products will continue to occur. Any attempt by a major or other service provider to seek out additional or alternative suppliers, or to undertake, as permitted under applicable regulations, the production of these products internally, could have a material adverse effect on our operating results. Furthermore, the delay in sales until the completion of the approval process, the length of which is difficult to predict, has and may continue to result in fluctuations of revenue and uneven operating results from quarter to quarter or year to year. For example, we have seen a decrease in volume of sales activity due to customers' focus on reducing inventory levels in our domestic ADTRAN, Inc. operations, which has impacted and may continue to materially impact demand in that category. Further, once customer approval or certifications are met, our supply chain customers typically do not guarantee us a minimum, or any, volume of sales.

We expect gross margins to continue to vary over time, and our levels of product and services gross margins may not be sustainable.

Our level of gross margins may not be sustainable and has been and may continue to be adversely affected by numerous factors, including:

- changes in customer, geographic or product or services mix, including software and the mix of configurations and professional services revenue within each product segment;
- mix of domestic versus international revenue;
- introduction of new products by competitors, including products with price-performance advantages;
- our ability to reduce product cost;
- increases in labor or material cost, including increases in material costs resulting from inflation or tariffs;
- foreign currency exchange rate movements;
- expediting costs incurred to meet customer delivery requirements;
- excess inventory and inventory holding charges;
- excess and obsolescence charges;
- changes in shipment volume;

- · our ability to absorb fixed manufacturing costs during short-term fluctuations in customer demand;
- loss of cost savings due to changes in component pricing or charges incurred due to inventory holding periods if parts
 ordering does not correctly anticipate product demand;
- lower than expected benefits from value engineering;
- increased price competition, including competitors from Asia, specifically China;
- changes in distribution channels;
- · increased warranty cost or quality issues;
- liquidated damages costs relating to customer contractual terms;
- our ability to manage the impact of foreign currency exchange rate fluctuations relating to our revenue or cost of revenue;
- slowdowns, recessions, economic instability (such as the instability in the financial services sector), political unrest, armed conflicts (such as the ongoing military conflict in Ukraine and in Israel and surrounding regions), or outbreaks of disease, such as the COVID-19 pandemic, around the world;
- an extended government shutdown resulting from budgetary decisions or other potential delays or changes in the government appropriations or other funding authorization processes; and
- Business Combination purchase price allocations.

For example, throughout 2022, we incurred increased expenses resulting from supply chain disruptions, including delays in supply chain deliveries and the related global semi-conductor chip shortage, which lowered our gross margins and decreased our profitability. These supply chain challenges and their adverse impact on our industry began to ease during the first nine months of 2023. However, there can be no assurance that the ongoing disruptions due to the semiconductor chip shortage or other supply chain constraints or price increases will be fully resolved in the near term, which could continue to adversely affect our business, financial condition, and results of operations.

Managing our inventory is complex and has included and may continue to include write downs of excess or obsolete inventory.

Managing our inventory of components and finished products is complicated by a number of factors, including the need to maintain a significant inventory of certain components that are in short supply, that have been discontinued by the component manufacturer, that must be purchased in bulk to obtain favorable pricing or that require long lead times. These issues have and may continue to result in our purchasing and maintaining significant amounts of inventory, which if not used or expected to be used based on anticipated production requirements, may become excess or obsolete. Any excess or obsolete inventory could also result in sales price reductions and/or inventory write- downs, which could adversely affect our business and results of operations. During the three and nine months ended September 30, 2023, we recognized a write down of inventory of \$21.0 million due to a restructuring discontinuation of certain product lines within our Network Solutions segment. Significant and unanticipated changes in our business could require additional charges for inventory write downs in a future period. Any future charges relating to such inventory write-downs could materially adversely affect our business, financial condition and results of operations in the periods recognized.

The continuing growth of our international operations has and may continue to expose us to additional risks, increase our costs and adversely affect our operating results, financial condition and cash flows.

We are expanding our presence in international markets, which represented 58.7% and 50.2% of our net revenue for the three months ended September 30, 2023 and 2022 and represented 59.3% and 43.9% of our net revenue for the nine months ended September 30, 2023 and 2022, respectively, and as a result, we have experienced increased revenue and operating costs in these markets. This international expansion has increased and may continue to increase our operational risks and impact our results of operations, including:

- exposure to unfavorable foreign currency exchange rate volatility;
- exposure to unfavorable commercial terms in certain countries;
- the time and cost to staff and manage foreign operations, including the time and cost to maintain good relationships with employee associations and work councils;
- the time and cost to ensure adequate business interruption controls, processes and facilities;
- the time and cost to manage and evolve financial reporting systems, maintain effective financial disclosure controls and procedures, and comply with corporate governance requirements in multiple jurisdictions;
- the cost to collect accounts receivable and extension of collection periods;
- the cost and potential disruption of facilities transitions required in some business acquisitions;

- risks as a result of less regulation of patents or other safeguards of intellectual property in certain countries;
- the potential impact of adverse tax, customs regulations and transfer-pricing issues;
- exposure to increased price competition from additional competitors in some countries;
- exposure to global social, political and economic instability, changes in economic conditions and foreign currency exchange rate movements;
- potential exposure to liability or damage of reputation resulting from a higher incidence of corruption or unethical business practices in some countries;
- potential regulations on data protection, regarding the collection, use, disclosure and security of data;
- potential trade protection measures, export compliance issues, domestic preference procurement requirements, qualification to transact business and additional regulatory requirements;
- potential exposure to natural disasters, epidemics and pandemics (and government regulations in response thereto) and acts of war or terrorism; and
- potential exposure to ongoing military conflicts, including the conflict in Ukraine and the conflict in Israel and its surrounding regions. The U.S. and certain other countries-imposed sanctions on Russia in connection with the conflict in Ukraine and could impose further sanctions against it, which could damage or disrupt international commerce and the global economy. Other potential consequences of such military conflicts include, but are not limited to, a heightened risk of cyber-warfare, biological warfare or nuclear warfare, growth in the number of popular uprisings in the affected regions, increased political discontent, especially in the regions most affected by the conflicts or economic sanctions, continued displacement of persons to regions close to the areas of conflict and an increase in the number of refugees, among other unforeseen social and humanitarian effects which could impact our business, customers, and suppliers.

The terms of our and Adtran Networks credit agreements restrict our current and future operations, particularly our ability to respond to changes or to take certain actions.

Our Credit Agreement and Adtran Networks revolving line of credit with Nord/LB contain a number of restrictive covenants that impose significant operating and financial restrictions on us and/or our subsidiaries and they have and may continue to limit our ability to engage in acts that may be in our long-term best interest. These restrictions include limitations on our and/or our subsidiaries' ability to:

- incur additional indebtedness and guarantee indebtedness;
- pay dividends or make other distributions or repurchase or redeem capital stock;
- prepay, redeem or repurchase certain debt;
- issue certain preferred stock or similar equity securities;
- make loans and investments;
- sell assets;
- incur liens:
- enter into transactions with affiliates;
- alter the businesses we conduct; and
- consolidate, merge or sell all or substantially all of our assets.

In addition, the restrictive covenants in such credit facilities require us and/or our subsidiaries to maintain specified financial ratios and satisfy other financial condition tests. Our ability to meet those financial ratios and tests can be affected by events beyond our control, and we may be unable to meet them.

A breach of the covenants or restrictions under such credit facilities could result in an event of default. Such a default may allow the creditors to accelerate the related debt and may result in the acceleration of any other debt to which a cross-acceleration or cross-default provision applies. In addition, an event of default under such credit facilities would permit the lenders to terminate all commitments to extend further credit under the applicable facility. Furthermore, if we were unable to repay the amounts due and payable under such credit facilities, those lenders could proceed against the collateral granted them to secure that indebtedness. In the event our lenders or note holders accelerate the repayment of our borrowings, we and our subsidiaries may not have sufficient assets to repay that indebtedness. As a result of these restrictions, we may be:

limited in how we conduct our business;

- unable to raise additional debt or equity financing to operate during general economic or business downturns; and
- unable to compete effectively or to take advantage of new business opportunities.

These restrictions may affect our ability to grow in accordance with our strategy. In addition, our financial results, our substantial indebtedness and our credit ratings could adversely affect the availability and terms of our financing.

We have recognized impairment charges related to goodwill and other intangible assets in the past and may be required to do so in the future.

The Business Combination added a significant amount of goodwill and other intangible assets to our consolidated balance sheets. In accordance with U.S. GAAP, management periodically assesses these assets to determine if they are impaired. Significant negative industry or economic trends, disruptions to our business, the inability to effectively integrate acquired businesses, the under performance of our business as compared to management's initial expectations, unexpected significant changes or planned changes in use of the assets, divestitures, and market capitalization declines may impair goodwill and other intangible assets. During the third quarter of 2023, qualitative factors such as a decrease in the Company's market capitalization and long-term projections, triggered a quantitative impairment assessment for our reporting units. The Company determined the fair value of each reporting unit using a combination of an income approach and a market based peer group analysis. It was determined that the decreases in projected future cash flows, discount rates, overall macroeconomic conditions, as well as the decrease in our market capitalization applied in the valuation, were required to align with market-based assumptions and company-specific risk, which resulted in lower fair values of the Services & Support reporting unit. The Company determined upon its quantitative impairment assessment to recognize a \$37.9 million non-cash goodwill impairment charge for the Services & Support reporting unit. The Company does not expect the impairment charge for the Services & Support Unit to result in any future cash expenditures. The Company did not recognize any impairment charges, for the Network Solutions reporting unit as of September 30, 2023. Any future charges relating to such impairments could have a material adverse effect our business, financial condition and results of operations in the periods recognized.

We require a significant amount of cash to service our indebtedness, our potential payment obligations to ADVA shareholders under the DPLTA, and other obligations.

Our ability to generate cash depends on many factors beyond our control and any failure to service our outstanding indebtedness could harm our business, financial condition and results of operations. Furthermore, we have entered into a DPLTA with ADVA. Additionally, pursuant to the terms of the DPLTA, each ADVA shareholder (other than the Company) has received an offer to elect either (1) to remain an ADVA shareholder and receive from us an Annual Recurring Compensation payment, or (2) to receive Exit Compensation. Any failure to satisfy our payment obligations under the DPLTA could harm our business, financial condition and results of operations. See "Risk Factors - The terms of the DPLTA may have a material adverse effect on our financial results and condition" in Part I, Item 1A of this report for additional information.

Our ability to make payments on and to refinance our indebtedness, to cover our payment obligations under the DPLTA, and to fund working capital needs and planned capital expenditures depends on our ability to generate cash in the future. This, to a certain extent, is subject to general economic, financial, competitive, business, legislative, regulatory and other factors that are beyond our control. We refinanced a portion of our indebtedness during the third quarter of 2023 in order to ensure our ability to cover our potential payment obligations under the DPLTA, suspended our dividend during the fourth quarter of 2023, and we are currently implementing planned reductions in our operating expenses. Nevertheless, if our business does not generate sufficient cash flow from operations, we do not sufficiently reduce costs in a timely manner, or our future borrowings are not available to us in an amount sufficient to enable us and our subsidiaries to pay our indebtedness or to fund our other liquidity needs, we may need to raise additional debt or equity capital, refinance all or a portion of our indebtedness, sell assets, reduce or delay capital investments, any of which could have a material adverse effect on us.

In addition, we may not be able to effect any of these actions, if necessary, on commercially reasonable terms or at all. Our ability to raise additional debt capital or to restructure or refinance our indebtedness will depend on the condition of the capital markets and our financial condition at such time. Any refinancing of our debt could be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our business operations. The terms of existing or future debt instruments or preferred stock may limit or prevent us from taking any of these actions. In addition, any failure to make scheduled payments of interest and principal on our outstanding indebtedness or dividend payments on any future outstanding shares of preferred stock would likely result in a reduction of our credit rating, which could harm our ability to incur additional indebtedness or otherwise raise capital on commercially reasonable terms or at all. Our inability to generate sufficient cash flow to satisfy our debt service, payment obligations to ADVA shareholders under the DPLTA, and other obligations, or to refinance or restructure our obligations on commercially reasonable terms or at all, would have an adverse effect, which could be material, on our business, financial condition and results of operations.

Furthermore, if we raise additional funds through the issuance of equity or securities convertible into equity, or undertake certain transactions intended to address our existing indebtedness, our existing stockholders could suffer dilution in their percentage ownership of the Company, or our leverage and outstanding indebtedness could increase. Current capital market conditions, including the impact of inflation, have increased borrowing rates and can be expected to significantly increase our cost of capital as compared to prior periods should we seek additional funding.

We may be unable to successfully and effectively manage and integrate acquisitions, divestitures and other significant transactions, which could harm our operating results, business and prospects.

As part of our business strategy, we frequently engage in discussions with third parties regarding possible investments, acquisitions, strategic alliances, joint ventures, divestitures and outsourcing arrangements, and we enter into agreements relating to such transactions

in order to further our business objectives. In order to pursue this strategy successfully, we must identify suitable candidates, successfully complete transactions, some of which may be large and complex, and manage post-closing issues such as the integration of acquired companies or employees and the divestiture of combined businesses, operations and employees. Integration, divestiture and other risks of these transactions can be more pronounced in larger and more complicated transactions, or if multiple transactions are pursued simultaneously. If we fail to identify and successfully complete transactions that further our strategic objectives, we may be required to expend resources to develop products and technology internally. This may put us at a competitive disadvantage and we may be adversely affected by negative market perceptions, any of which may have a material adverse effect on our revenue, gross margin and profitability.

Integration and divestiture issues are complex, time-consuming and expensive and, without proper planning and implementation, could significantly disrupt our business. The challenges involved in integrating and divesting include:

- combining service and product offerings and entering into new markets in which we are not experienced;
- convincing customers and distributors that any such transaction will not diminish client service standards or business
 focus, preventing customers and distributors from deferring purchasing decisions or switching to other suppliers or service
 providers (which could result in additional obligations to address customer uncertainty), and coordinating service, sales,
 marketing and distribution efforts;
- consolidating and rationalizing corporate information technology infrastructure, which may include multiple legacy systems from various acquisitions and integrating software code;
- minimizing the diversion of management attention from ongoing business concerns;
- persuading employees that business cultures are compatible, maintaining employee morale and retaining key employees, integrating employees into our company, correctly estimating employee benefit costs and implementing restructuring programs;
- coordinating and combining administrative, service, manufacturing, research and development and other operations, subsidiaries, facilities and relationships with third parties in accordance with local laws and other obligations while maintaining adequate standards, controls and procedures;
- our responsibility for the liabilities of the businesses we acquire, some of which we may not anticipate, including costs of third-party advisors to resolve disputes;
- · achieving savings from supply chain and administration integration; and
- efficiently divesting combined business operations which may cause increased costs as divested businesses are deintegrated from embedded systems and operations.

We evaluate and enter into these types of transactions on an ongoing basis. We may not fully realize all of the anticipated benefits of any transaction and the time frame for achieving benefits of a transaction may depend partially upon the actions of employees, suppliers or other third parties. In addition, the pricing and other terms of our contracts for these transactions require us to make estimates and assumptions at the time we enter into these contracts, and, during the course of our due diligence, we may not identify all of the factors necessary to estimate costs accurately. Any increased or unexpected costs, unanticipated delays or failure to achieve contractual obligations could make these agreements less profitable or unprofitable.

Managing these types of transactions requires varying levels of management resources, which may divert our attention from other business operations. These transactions could result in significant costs and expenses and charges to earnings, including those related to severance pay, early retirement costs, employee benefit costs, asset impairment charges, charges from the elimination of duplicative facilities and contracts, in-process research and development charges, inventory adjustments, assumed litigation, regulatory compliance and other liabilities, legal, accounting and financial advisory fees and required payments to executive officers and key employees under retention plans. In the Business Combination with Adtran Networks, we have has incurred significant restructuring and integration costs and we expect to incur additional restructuring and integration costs and such costs are expected to be material. Moreover, we could incur additional depreciation and amortization expense over the useful lives of certain assets acquired in connection with these transactions, and, to the extent that the value of goodwill or intangible assets with indefinite lives acquired in connection with a transaction becomes impaired, we may be required to incur additional material charges relating to the impairment of those assets. For example, during the third quarter of 2023, we recognized a \$37.9 million non-cash goodwill impairment charge related to the Business Combination with Adtran Networks. In order to complete an acquisition, we may issue common shares, potentially creating dilution for existing shareholders, or borrow funds, which could affect our financial condition, results of operations and potentially our credit ratings. Any prior or future downgrades in our credit rating associated with a transaction could adversely affect our ability to borrow and our borrowing cost, and result in more restrictive borrowing terms. In addition, our effective tax rate on an ongoing basis is uncertain, and such transactions could impact our effective tax rate. We also may experience risks relating to the challenges and costs of closing a transaction and the risk that an announced transaction may not close. As a result, any completed, pending or future transactions may contribute to financial results that differ materially from the investment community's expectations.

Risks related to our control environment

Breaches of our information systems and cyberattacks could compromise our intellectual property and cause significant damage to our business and reputation.

We maintain sensitive data on our information systems and the networks of third-party providers, including intellectual property, financial data and proprietary or confidential business information relating to our business, customers, suppliers, and business partners. We also produce networking equipment solutions and software used by network operators to ensure security and reliability in their management and transmission of data. Our customers, particularly those in regulated industries, are increasingly focused on the security features of our technology solutions. Maintaining the security of information sensitive to us and our business partners is critical to our business and reputation. We rely upon several internal business processes and information systems to support key operations and financial functions, and the efficient operation of these processes and systems is critical. Companies are increasingly subjected to cyberattacks and other attempts to gain unauthorized access. We have a comprehensive approach to cybersecurity, which includes prevention, detection, containment, and response. Our layered defense approach encompasses proactive security monitoring of our global infrastructure by both internal solutions and multiple third-party Security Operation Centers. Additionally, we routinely perform patch management, vulnerability scans, penetration tests and continuous monitoring across our entire enterprise. Our security policy framework includes meaningful and enforceable Information Security policies and procedures. The cybersecurity program is aligned with our mission and business objectives, reviewed periodically for improvements, and is supported by experienced and certified security professionals. This is supplemented by an information security awareness program that spans our global workforce. Despite this, our network and storage applications and those systems and applications maintained by our third-party providers may be targeted by cyberattacks or potentially breached due to operator error, fraudulent activity, or other system disruptions. For example, a vulnerability named "Log4Shell" was reported for the widely used Java logging library, Apache Log4j 2 ("Log4j"), in December of 2021. Although we did not identify indicators of compromise in response to the Log4j vulnerability, we cannot assure that future vulnerabilities or malware attacks will not be successful in breaching our system and in turn, have a material impact our business. Furthermore, we, our employees and some of our third-party service providers have been, and anticipate continuing to be, the targets of various cyberthreats. These include hacking attacks, social engineering schemes such as "phishing," and Business Email Compromise (BEC) attacks, wherein attackers impersonate company executives or colleagues in emails to trick employees into transferring funds or revealing sensitive information. These events have not had a significant effect on our financial condition or operational results to date; however, we cannot ensure that future cyberthreats will not have a material impact on our business. Unauthorized access or disclosure of our information could compromise our intellectual property and expose sensitive business information. Our information systems are designed to appropriate industry standards and resiliently engineered to reduce downtime in the event of power outages, weather or climate events and cybersecurity issues. These risks, as well as the number and frequency of cybersecurity events globally, may also be heightened during times of geopolitical tension or instability between countries, including, for example, the ongoing military conflict in Ukraine and in Israel and its surrounding regions, from which a number of recent cybersecurity events have been alleged to have originated. We carry cybersecurity insurance policies meant to limit our risk and exposure should one of these cybersecurity issues occur. However, a significant failure of our systems due to these issues could result in significant remediation costs, disrupt business operations, and divert management attention, which could result in harm to our business reputation, operating results, financial condition, and cash flows.

As part of our due diligence and integration planning process, the Company's cybersecurity team has conducted a review of Adtran Networks' cybersecurity program. Additionally, prior to integration of facilities, networks, or systems, the Company also engaged CrowdStrike, a global cybersecurity leader to conduct an enterprise-wide compromise assessment to determine if there were any targeted compromises by nation-state actors of the Adtran Networks information technology landscape. The results from the CrowdStrike Compromise assessment indicated that there was no indication of compromise of the Adtran Networks information technology environment. As part of the integration plan, the Company intends to expand its current cybersecurity program to cover all Adtran Networks' global infrastructure and adopt any mature cybersecurity practices already in place. A significant failure of our review and integration of Adtran Networks' cybersecurity program could expose us to penalties for failing to comply with the EU's GDPR requirements, as well as result in significant remediation costs and a disruption to our operations.

We previously had to restate our previously issued consolidated financial statements and, as part of that process, we identified a material weakness in our internal control over financial reporting commencing September 30, 2022 and continuing as of the date hereof. If we are unable to develop and maintain effective internal control over financial reporting, we may not be able to accurately report our financial results in a timely manner, which may adversely affect investor confidence in us and may adversely affect our business, financial condition and results of operations.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. Effective internal control over financial reporting is necessary for us to provide reliable financial reporting and prevent fraud. We continue to evaluate steps to remediate the material weakness. These remediation measures may be time consuming and costly, and there is no assurance that these initiatives will ultimately have the intended effects. Any failure to maintain effective internal control over financial reporting could adversely impact our ability to report our financial position and results from operations on a timely and accurate basis. If our financial statements are not accurate, investors may not have a complete understanding of our operations. Likewise, if our financial statements are not filed on a timely basis, we could be subject to sanctions or investigations by the stock exchange on which our common stock is listed, the SEC or other regulatory authorities. In either case, there could be an adverse effect

on our business, financial condition and results of operations. Ineffective internal control over financial reporting could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock.

We can provide no assurance that the measures we are taking and plan to take in the future will remediate the material weakness identified or that any additional material weaknesses or restatements of financial results will not arise in the future due to a failure to implement and maintain adequate internal control over financial reporting or circumvention of these controls. In addition, even if we are successful in strengthening our controls and procedures, in the future those controls and procedures may not be adequate to prevent or identify irregularities or errors or to facilitate the fair presentation of our consolidated financial statements.

Furthermore, as a public company, we are required to comply with U.S. GAAP, the Sarbanes-Oxley Act of 2002 ("SOX"), the Dodd-Frank Act and the rules and regulations subsequently implemented by the SEC and the Public Company Accounting Oversight Board. As such, Adtran Networks, as a subsidiary of a public company, has established and is required to maintain effective disclosure controls as well as internal control over financial reporting under U.S. GAAP. Current and ongoing compliance efforts have and may continue to be costly and require the attention of management. There are a large number of processes, policies, procedures and functions that have been integrated, or enhanced at Adtran Networks, particularly those related to the implementation of internal controls for SOX compliance. The maintenance of these plans may lead to additional unanticipated costs and time delays. These incremental costs may exceed the savings we expect to achieve from the realization of efficiencies related to the combination of the businesses, particularly in the near term and in the event there are material unanticipated costs.

We may face litigation and other risks as a result of the restatement of our previously issued consolidated financial statements and material weakness in our internal control over financial reporting.

We previously had to restate our previously issued consolidated financial statements and, as part of that process, we identified a material weakness in our internal control over financial reporting commencing September 30, 2022 and continuing through as of the date hereof. As a result of such material weakness, the restatement and other matters raised or that may in the future be raised by the SEC, we face potential for litigation or other disputes which may include, among others, claims invoking the federal and state securities laws, contractual claims or other claims arising from the restatement and the material weakness in our internal control over financial reporting and the preparation of our financial statements. As of the date of this report, we have no knowledge of any such litigation or dispute. However, we can provide no assurance that such litigation or dispute will not arise in the future. Any such litigation or dispute, whether successful or not, could adversely affect our business, financial condition and results of operations.

Risks related to the telecommunications industry

We must continue to update and improve our products and develop new products to compete and to keep pace with improvements in communications technology.

The markets for our products are characterized by rapidly changing technology, evolving industry standards and continuing improvements in the communications service offerings of service providers. If technologies or standards applicable to our products, or service provider offerings based on our products, become obsolete or fail to gain widespread commercial acceptance, our existing products or products under development may become obsolete or unmarketable, which can result in the discontinuation of products and write off of related inventory. For example, during the quarter ended September 30, 2023, management determined that there would be a discontinuation of product lines in the Network solutions segment. See Item 5, "Other Information" in Part II of this report for additional information. Moreover, the introduction of products embodying new technologies, the emergence of new industry standards, or changes in service provider offerings could adversely affect our ability to sell our products. For instance, we offer a large number of products that apply primarily to the delivery of high-speed digital communications over the local loop utilizing copper wire. We compete favorably with our competitors by developing a high-performance line of these products. We market products that apply to fiber optic transport in the local loop. We expect, however, that use of coaxial cable and fixed and mobile wireless access in place of local loop access will increase. Also, MSOs are increasing their presence in the local loop. To meet the requirements of these new delivery systems and to maintain our market position, we expect to continue to develop new products and/or modify existing products. We expect that the addition of fiber-based products focused on the cable MSO operators, using EPON and fixed wireless access solutions will better position us to benefit from spending in these adjacent markets.

Our revenue and profitability in the past have, to a significant extent, resulted from our ability to anticipate changes in technology, industry standards and service provider offerings, and to develop and introduce new and enhanced products. Our continued ability to adapt will be a significant factor in maintaining or improving our competitive position and our prospects for growth. We cannot assure that we will be able to respond effectively to changes in technology, industry standards, service provider offerings or new product announcements by our competitors. We also cannot assure that we will be able to successfully develop and market new products or product enhancements, or that these products or enhancements will achieve market acceptance. Any failure by us to continue to anticipate or respond in a cost-effective and timely manner to changes in technology, industry standards, service provider offerings or new product announcements by our competitors, or any significant delays in product development or introduction, could have a material adverse effect on our ability to competitively market our products and on our revenue, results of operations, financial condition and cash flows.

Our failure to maintain rights to intellectual property used in our business could adversely affect the development, functionality and commercial value of our products.

Our future success depends in part upon our proprietary technology. Although we attempt to protect our proprietary technology by contract, trademark, copyright and patent registration and internal security, including trade secret protection, these protections may not be adequate. Furthermore, our competitors can develop similar technology independently without violating our proprietary rights. From time to time, we receive and may continue to receive notices of claims alleging that we are infringing upon patents or other intellectual property. Any of these claims, whether with or without merit, could result in significant legal fees, divert our management's time, attention and resources, delay our product shipments or require us to enter into royalty or licensing agreements. We cannot predict whether we will prevail in any claims or litigation over alleged infringements, or whether we will be able to license any valid and infringed patents, or other intellectual property, on commercially reasonable terms. For example, on May 8, 2023, Adtran Networks SE and its subsidiary, ADVA Optical Networking North America, Inc. (together, "Adtran Networks"), filed a lawsuit in the U.S District Court for the Eastern District of Texas ("EDTX") against Huawei Technologies Co. Ltd ("Huawei") seeking a declaration from the court that Huawei violated its commitments to negotiate in good faith and to license standard essential patents ("SEPs"), to the extent any SEPs are practiced by Adtran Networks, on Fair, Reasonable and Non-Discriminatory ("FRAND") terms and conditions. The case also sought to obtain a ruling by the EDTX that Adtran Networks has complied with its own commitments and requested that the Court establish FRAND terms and conditions for obtaining a FRAND license on any SEPs to the extent they are practiced by Adtran Networks. The lawsuit further sought to enjoin Huawei from enforcing certain Huawei patents that Adtran Networks considers invalid and/or not practiced, and Adtran Networks alleged that Huawei had infringed upon an Adtran Networks patent. On July 20, 2023, Adtran Networks SE was served with a complaint filed by Huawei against Adtran Networks SE in the District Court München I, Germany, alleging that certain of its products infringe upon one of Huawei's patents. On August 22, 2023, Adtran Networks entered into a settlement agreement with Huawei pursuant to which the parties agreed to, among other things, dismiss the lawsuits described above. If further claims of intellectual property infringement against us are successful and we fail to obtain a license or develop or license non-infringing technology, our business, operating results, financial condition and cash flows could be materially adversely affected.

We may incur liabilities or become subject to litigation that would have a material effect on our business.

In the ordinary course of business, we accept purchase orders, and enter into sales and other related contracts, for the marketing, sale, manufacture, distribution or use of our products and services. We may incur liabilities relating to our performance under such agreements, or which result from damage claims arising from certain events as outlined within the particular contract. While we attempt to include reasonable limitations of liability and other protective measures to all agreements, such agreements may not always contain, or be subject to, maximum loss clauses and liabilities arising from them may result in significant adverse changes to our results of operations, financial condition and cash flows.

In the ordinary course of business, we are 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 monetary recovery, or other relief, including damages such as royalty payments related to patents, lost profits or injunctive relief, which, if granted, could require significant expenditures. For example, on May 8, 2023, Adtran Networks SE and its subsidiary, ADVA Optical Networking North America, Inc. (together, "Adtran Networks"), filed a lawsuit in the U.S District Court for the Eastern District of Texas ("EDTX") against Huawei Technologies Co. Ltd ("Huawei") seeking a declaration from the court that Huawei violated its commitments to negotiate in good faith and to license standard essential patents ("SEPs"), to the extent any SEPs are practiced by Adtran Networks, on Fair, Reasonable and Non-Discriminatory ("FRAND") terms and conditions. The case also sought to obtain a ruling by the EDTX that Adtran Networks has complied with its own commitments and requested that the Court establish FRAND terms and conditions for obtaining a FRAND license on any SEPs to the extend they are practiced by Adtran Networks. The lawsuit further sought to enjoin Huawei from enforcing certain Huawei patents that Adtran Networks considers invalid and/or not practiced, and Adtran Networks alleged that Huawei had infringed upon an Adtran Networks patent. On July 20, 2023, Adtran Networks SE was served with a complaint filed by Huawei against Adtran Networks SE in the District Court München I, Germany, alleging that certain of its products infringe upon one of Huawei's patents. On August 22, 2023, Adtran Networks entered into a settlement agreement with Huawei pursuant to which the parties agreed to, among other things, dismiss the lawsuits described above.

Any such disputes may be resolved before trial, or if tried, may be resolved in our favor; however, the cost of claims sustained in litigation, and costs associated with the litigation process, may not be covered by our insurance. Such costs, and the demands on management time during such an event, could harm our business, reputation and have a material adverse effect on our liquidity, results of operations, financial condition and cash flows.

Risks related to the Company's stock price

Our operating results historically have fluctuated and are likely to continue to fluctuate in future periods. Such fluctuations can adversely affect our stock price.

Our operating results have been, and will continue to be, subject to quarterly and annual fluctuations as a result of numerous factors. These factors include, but are not limited to:

 fluctuations in demand for our products and services, especially with respect to significant network expansion projects undertaken by service providers;

- continued growth of communications network traffic and the adoption of communication services and applications by enterprise and consumer end users;
- changes in sales and implementation cycles for our products and reduced visibility into our customers' spending plans and
 associated revenue, especially should a slowdown in communications industry spending occur due to economic
 downturns, tight capital markets, or declining liquidity trends;
- reductions in demand for our traditional products as new technologies gain acceptance;
- our ability, and that of our distributors, to maintain appropriate inventory levels and related purchase commitments;
- price and product competition in the communications and networking industries, which can change rapidly due to technological innovation;
- the overall movement toward industry consolidation among both our competitors and our customers;
- our dependence on sales of our products by channel partners and the timing of their replenishment orders. Specifically, our sales volume in 2023 has been negatively impacted due to our channel partners focus on reducing inventory levels;
- the potential for conflicts and competition involving our channel partners and large end-user customers and the potential for consolidation among our channel partners;
- variations in sales channels, product cost or mix of products and services sold;
- delays in receiving acceptance, as defined under contract, from certain customers for shipments or services performed near the end of a reporting period;
- our ability to maintain high levels of product support and professional services;
- manufacturing and customer order lead times, and potential restrictions in the supply of key components;
- fluctuations in our gross margin and the factors that contribute to this (as described above);
- our ability to achieve cost reductions;
- the ability of our customers, channel partners and suppliers to obtain financing or to fund capital expenditures;
- our ability to execute on our strategy and operating plans;
- benefits anticipated from our investments in engineering, sales and marketing activities;
- the effects of climate change and other natural events;
- the effect of political or economic conditions, including the effect of tariffs or so-called "trade wars" on us and our supply chain, acts of war, terrorist attacks or other unrest in certain international markets;
- the effect of escalating tensions between Israel and groups based in surrounding regions, as well as the military conflict in Ukraine. The U.S. and certain other countries imposed sanctions on Russia and could impose further sanctions against it, which could damage or disrupt international commerce and the global economy; and
- changes in tax laws and regulations or accounting pronouncements.

Risks related to the regulatory environments in which we do business

Central Banks' monetary policy actions could increase our costs of borrowing money and negatively impact our financial condition and future operations.

Market interest rates are rising and are expected to continue to rise across the yield curve. Depending on future inflation levels, the rise of nominal interest rates may produce a rise in real interest rates. Higher interest rates resulting from tightening monetary policy are expected to increase credit costs and decrease credit availability. Increases in interest rates could increase our costs of borrowing money under certain of our debt facilities with variable interest rates, which would negatively impact our financial condition and future operations.

We see an increased risk to our liquidity due to the current instability in the financial services industry which could negatively impact our financial condition and future operations. This includes risk relating to our liquidity balances and investments, as well as risk relating to the financial stability of our customers and suppliers. We seek to only enter into transactions with creditworthy banks and financial institutions. To assess the creditworthiness of banks, we utilize current credit ratings from rating agencies, such as S&P, Moody's and Fitch, as well as current default rates (credit default swaps). We are also in frequent dialogue with customers and suppliers to assess counterparty risks. Nevertheless, many of these transactions expose us to credit risk in the event of our counterparty's default. Any such losses could be material and could materially and adversely affect our business, financial condition and results of operations.

Further downgrades of the U.S. credit rating, impending automatic spending cuts or a government shutdown could negatively impact our liquidity, financial condition and earnings.

U.S. debt ceiling and budget deficit concerns have increased the possibility of additional credit-rating downgrades and economic slowdowns, or a recession in the United States. Although U.S. lawmakers passed legislation to raise the federal debt ceiling on multiple occasions, including a suspension of the federal debt ceiling in June 2023, ratings agencies have lowered or threatened to lower the long-term sovereign credit rating on the United States.

The impact of this or any further downgrades to the U.S. government's sovereign credit rating or its perceived creditworthiness could adversely affect the U.S. and global financial markets and economic conditions. Absent further quantitative easing by the Federal Reserve, these developments could cause interest rates and borrowing costs to rise, which may negatively impact our ability to access the debt markets on favorable terms. In addition, disagreement over the federal budget has caused the U.S. federal government to shut down for periods of time. Continued adverse political and economic conditions could have a material adverse effect on our business, financial condition and results of operations.

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

During the nine months ended September 30, 2023, we did not repurchase any shares of our common stock. As of September 30, 2023, there is no current authorization to repurchase common stock.

ITEM 5. OTHER INFORMATION

(a) Costs Associated with Exit or Disposal Activities

On November 6, 2023, due to the uncertainty around the current macroeconomic environment and its impact on customer spending levels, the Company's management determined to implement a comprehensive business efficiency program (the "Business Efficiency Program"), which includes (i) a cost efficiency program targeting the reduction of ongoing operating expenses, and (ii) a capital efficiency program, which includes a site consolidation plan exploring the partial sale of owned real estate and the suspension of the quarterly dividend. The Business Efficiency Program expands upon other recently implemented restructuring efforts following the Business Combination. For instance, on August 17, 2023, the Company's management determined to discontinue its copper-based Digital Subscriber Line broadband access technology products and its fixed wireless access products in its Network Solutions segment. Furthermore, on September 29, 2023, the Company's management determined to exit the internet of things ("IoT") gateway market (indoor and outdoor), a subset of the broader IoT market (together with the other product discontinuations, the "Discontinuations"). As a result of the Discontinuations, the Company recognized a write down of inventory of \$21.0 million during the third quarter of 2023. The Discontinuations are expected to be substantially completed in 2024. Additionally, on October 25, 2023, all employees of Adtran Holdings were informed of certain personnel measures, which included the reduction of salary for select management, a reduction of approximately 5% of the workforce, and a hiring freeze.

We expect the cost of the Business Efficiency Program to be in the range of \$35.5 million to \$45.5 million over the life of the program. Management expects these planned costs to include severance costs ranging from \$11.7 million to \$18.0 million in connection with the personnel measures discussed above; inventory write-offs of \$21.0 million relating to the aforementioned Discontinuations; leased asset impairments totaling \$0.4 million, site consolidation transaction expenses (primarily brokers fees) ranging from \$2.4 million to \$6.0 million; and potential recurring leaseback expenses of up to \$12.0 million annually. Future cash payments include: severance costs that are anticipated to be in the range of \$6.6 million to \$6.7 million, payments relating to the site consolidation transaction expenses that are anticipated to be in the range of \$2.4 million to \$6.0 million, and potential future cash payments of up to \$12.0 million annually relating to the possible leaseback expense. We may also incur other charges or cash expenditures not currently contemplated due to events that may occur as a result of, or associated with, the Business Efficiency Program, including potential impairment charges related to the discontinuance of additional product lines and regulatory requirements related to personnel measures. However, we are not able to estimate the amount or range of amounts of such potential incremental charges as of the date of this filing. If required, we will amend this disclosure at such time as management is able in good faith to estimate the amount, or range of amounts, of these charges.

The Business Efficiency Program is expected to be substantially completed in 2024.

Departure of Directors or Certain Officers

On November 3, 2023, Ronald D. Centis, Senior Vice President of Services, and the Company jointly agreed on Mr. Centis' departure without cause, effective December 15, 2023. The Company intends for Mr. Centis' responsibilities to be assumed by Jay Wilson, the Company's Chief Revenue Officer.

- (b) Not applicable
- (c) Insider Trading Arrangements

During the fiscal quarter ended September 30, 2023, none of the Company's directors or executive officers adopted or terminated any contract, instruction or written plan for the purchase or sale of Company securities that was intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) or any "non-Rule 10b5-1 trading arrangement."

ITEM 6. EXHIBITS

Exhibits.

Effective June 8, 2023, ADVA Optical Networking SE, a subsidiary of the Company ("ADVA"), changed its name to Adtran Networks SE. By operation of law, any reference to ADVA Optical Networking SE in these exhibits should be read as Adtran Networks SE as set forth in the Exhibit List below.

Exhibit No.	Description
3.1	Amended and Restated Certificate of Incorporation of ADTRAN Holdings, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed July 8, 2022)
3.2	Second Amended and Restated Bylaws of ADTRAN Holdings, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed October 24, 2023)
4.1	Description of Securities (incorporated by reference to Exhibit 4.1 to the Company's Form 10-Q filed May 10, 2023)
10.1	First Amendment to Credit Agreement, dated August 9, 2023, by and between ADTRAN Holdings, Inc. and Wells Fargo Bank, National Association (incorporated by reference to Exhibit 10.7 to the Company's Form 10-Q filed August 14, 2023).
10.2	ADTRAN Holdings, Inc. Policy for the Recovery of Erroneously Awarded Incentive Based Compensation (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed October 24, 2023)
10.3	ADTRAN Holdings, Inc. Amended and Restated Clawback Policy (incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed October 24, 2023)
31*	Rule 13a-14(a)/15d-14(a) Certifications
32*	Section 1350 Certifications
101	The following financial statements from the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2023, formatted in Inline XBRL: (i) Condensed Consolidated Balance Sheets as of September 30, 2023 and December 31, 2022; (ii) Condensed Consolidated Statements of Loss for the three and nine months ended September 30, 2023 and 2022; (iii) Condensed Consolidated Statements of Comprehensive Loss for the three and nine months ended September 30, 2023 and 2022; (iv) Condensed Consolidated Statements of Changes in Stockholders' Equity for the three and nine months ended September 30, 2023 and 2022; (v) Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2023 and 2022; and (vi) Notes to Condensed Consolidated Financial Statements
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

^{*} Filed herewith.

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 Holdings, Inc. (Registrant)

Date: November 9, 2023 /s/ Ulrich Dopfer

Ulrich Dopfer Chief Financial Officer (Duly Authorized Officer and Principal Financial Officer)

CERTIFICATIONS

I, Thomas R. Stanton, certify that:

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

Date: November 9, 2023

/s/ Thomas R. Stanton

Thomas R. Stanton

Chief Executive Officer and Chairman of the Board

CERTIFICATIONS

I, Ulrich Dopfer, certify that:

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

Date: November 9, 2023

/s/ Ulrich Dopfer
Ulrich Dopfer
Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of ADTRAN Holdings, Inc. (the "Company") on Form 10-Q for the quarter ending September 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Thomas R. Stanton, Chief Executive Officer and Chairman of the Board of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

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

/s/ Thomas R. Stanton

Thomas R. Stanton Chief Executive Officer and Chairman of the Board November 9, 2023

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of ADTRAN Holdings, Inc. (the "Company") on Form 10-Q for the quarter ending September 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Ulrich Dopfer, Senior Vice President of Finance and Chief Financial Officer, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

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

/s/ Ulrich Dopfer
Ulrich Dopfer
Chief Financial Officer

November 9, 2023