UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q/A
Amendment No. 1

(Mark One)

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

For the quarterly period ended March 31, 2023

OR

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

For the transition period from _______ to _______

Commission File Number: 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:

Title of each class	Trading 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 Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

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

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

As of May 8, 2023, the registrant had 78,655,333 shares of common stock, $0.01 par value per share, outstanding.

EXPLANATORY NOTE

ADTRAN Holdings, Inc. (“ADTRAN,” the “Company,” “we,” “us” or “our”) is filing this Amendment No. 1 on Form 10-Q/A (this “Amendment No. 1”) to amend and restate certain portions of the Company’s Quarterly Report on Form 10-Q for the period ended March 31, 2023 filed with the U.S. Securities and Exchange Commission (the “SEC”) on May 10, 2023 (the “Original Filing”).

As previously disclosed in the Company’s Current Report on Form 8-K filed on August 10, 2023, subsequent to the Company’s second fiscal quarter earnings call on August 8, 2023 and during the preparation of its unaudited condensed consolidated financial statements to be included in the Company’s Form 10-Q for the second fiscal quarter ended June 30, 2023, the Company determined that the principal amount of indebtedness outstanding under the Company’s revolving credit facility with a syndicate of banks, including Wells Fargo Bank, National Association (“Wells Fargo”), should be classified as non-current liabilities on the Company’s condensed consolidated balance sheet. Therefore, the outstanding Wells Fargo revolving credit facility balances for the following prior periods were misclassified have been adjusted from current to noncurrent liabilities on the balance sheets as follows: $60.0 million as of September 30, 2022, $60.0 million as of December 31, 2022, and $180.0 million as of March 31, 2023.

On August 10, 2023, the Audit Committee of the Board of Directors (the “Audit Committee”) of the Company concluded, after considering the recommendations of management and discussing with the Company’s independent registered public accounting firm, PricewaterhouseCoopers LLP (“PwC”), that (i) the Company’s unaudited condensed consolidated financial statements as of and for the quarter and year-to-date period ended March 31, 2023 included in the Company’s Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2022, (ii) the Company’s audited consolidated financial statements as of and for the year ended December 31, 2022 included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2022, and (iii) the Company’s unaudited condensed consolidated financial statements as of and for the quarter ended March 31, 2023 included in the Original Filing, respectively (collectively, the “Non-Reliance Periods”), should not be relied upon. Additionally, the Audit Committee concluded that management's report on internal control over financial reporting as of December 31, 2022, the opinion of PwC on the Company's consolidated financial statements as of and for fiscal year ended December 31, 2022 and the opinion of PwC on the effectiveness of the Company's internal control over financial reporting as of December 31, 2022, should no longer be relied upon.

As a result of the above described misclassification and the identification of the material weakness (as described in Item 4), the Company is filing this Amendment No. 1 to (i) restate the disclosure on the effectiveness of the Company’s disclosure controls and procedures and restate management’s report on internal control over financial reporting in Part I, Item 4 of the Original Filing to reflect management’s conclusion that the Company’s internal control over financial reporting and disclosure controls and procedures were not effective at March 31, 2023, (ii) restate the Company’s condensed consolidated financial statements to reflect the adjustment as of March 31, 2023 of $180.0 million of short-term indebtedness to long-term indebtedness, (iii) add two additional risk factors related to the material weakness and restatement, (iv) restate the cash requirements table within Part I, Item 2, MD&A of the Original Filing reflect the adjustment as of March 31, 2023 of $180.0 million of short-term indebtedness to long-term indebtedness, and (v) amend Part II – Item 6 Exhibits of the Original Filing to include currently dated certifications from the Company’s Chief Executive Officer and Chief Financial Officer as required by Section 302 and 906 of the Sarbanes-Oxley Act of 2002.

Pursuant to Rule 12b-15 promulgated by the SEC under the Securities Exchange Act of 1934, as amended, the Company has included the entire text of Part I, Items 1, 2 and 4, as well as Part II, Items 1A and 6, of the Original Filing in this Amendment No. 1. There have been no changes to the text of Part I, Items 1, 2 and 4 or Part II, Items 1A and 6 other than the changes stated in the immediately preceding paragraph. Other than as described above and through the inclusion with this Amendment No. 1 of new certifications by management and amendments to the list of exhibits contained in Part II, Item 6 of the Original Filing, this Amendment No. 1 speaks only as of the date of the Original Filing and does not amend, supplement, or update any information contained in the Original Filing to give effect to any subsequent events (including with respect to the cover page of the Original Filing, which has been updated only to present this filing as Amendment No. 1). Accordingly, this Amendment No. 1 should be read in conjunction with the Original Filing and our reports (including any amendments thereto) filed with the SEC subsequent to the Original Filing.

ADTRAN Holdings, Inc.
Quarterly Report on Form 10-Q/A
For the three months ended March 31, 2023

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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 Securities and Exchange Commission (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 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 ADVA, which litigation may require us to pay a higher purchase price for additional ADVA shares than the amount provided for under the DPLTA.
- We have incurred and expect to continue to incur significant transaction fees and costs in connection with the Business Combination and post-closing integration 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 may be unable to successfully retain and motivate our personnel, including personnel at ADVA.
- The terms of our and ADVA's credit agreements restrict our current and future operations, particularly our ability to respond to changes or to take certain actions.
- Negative publicity related to post-closing integration measures may adversely affect us.

Risks related to our financial results and Company success

- Our revenue for a particular period can be difficult to predict, and a shortfall in revenue may harm our operating results.
- The lengthy sales and approval process required by Service Providers for new products could result in fluctuations in our revenue.
- 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 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 dependence on a limited number of suppliers for certain raw materials, key components and ODM products, combined with supply shortages, have 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 may include write-downs of excess or obsolete inventory.
- The continuing growth of our international operations could 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 the credit agreement governing our senior credit facility 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 will require a significant amount of cash to service our indebtedness, our payment obligations to ADVA shareholders under the DPLTA, and other obligations.
- We could be required to recognize impairment charges related to goodwill and other intangible assets.
- 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 COVID-19

- The ongoing COVID-19 pandemic has impacted and may continue to impact our business, results of operations, financial condition and cash flows, particularly our supply chain.

Risks related to our control environment

- Breaches of our information systems and cyber-attacks could compromise our intellectual property and cause significant damage to our business and reputation.
- We have had to restate our previously issued consolidated financial statements and, as part of that process, have 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 as described in the "Explanatory Note" within this Amendment No. 1 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 may fluctuate in future periods, which may 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.

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 the Company's Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC on March 1, 2023 (the "2022 Form 10-K"), as well as the risk factors set forth in Part II, Item 1A of this Amendment No. 1. 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)

	(As restated) March 31, 2023	December 31, 2022
ASSETS		
Current Assets		
Cash and cash equivalents	$ 136,457	$ 108,644
Short-term investments (includes $1,058 and $340 of available-for-sale securities as of March 31, 2023 and December 31, 2022, respectively, reported at fair value)	1,058	340
Accounts receivable, less allowance for credit losses of $53 and $49 as of March 31, 2023 and December 31, 2022, respectively	262,043	279,435
Other receivables	30,938	32,831
Inventory, net	416,291	427,531
Prepaid expenses and other current assets	37,021	33,577
Total Current Assets	**883,808**	**882,358**
Property, plant and equipment, net	111,969	110,699
Deferred tax assets	81,631	67,839
Goodwill	385,755	381,724
Intangibles, net	379,286	401,211
Other non-current assets	63,152	66,998
Long-term investments (includes $8,155 and $8,913 of available-for-sale securities as of March 31, 2023 and December 31, 2022, respectively, reported at fair value)	32,994	32,665
Total Assets	**$ 1,938,595**	**$ 1,943,494**
LIABILITIES, REDEEMABLE NON-CONTROLLING INTEREST AND EQUITY		
Current Liabilities		
Accounts payable	$ 198,596	$ 237,699
Revolving credit agreements outstanding	10,843	35,936
Notes payable	—	24,598
Unearned revenue	55,611	41,193
Accrued expenses and other liabilities	27,424	35,235
Accrued wages and benefits	30,333	44,882
Income tax payable, net	19,397	9,032
Total Current Liabilities	**342,204**	**428,575**
Non-current revolving credit agreement outstanding	180,000	60,000
Deferred tax liabilities	51,850	61,629
Non-current unearned revenue	24,907	19,239
Pension liability	10,698	10,624
Deferred compensation liability	28,674	26,668
Non-current lease obligations	21,446	22,807
Other non-current liabilities	15,986	10,339
Total Liabilities	**675,765**	**639,881**
Commitments and contingencies (see Note 20)		
Redeemable Non-Controlling Interest	**442,668**	—
Equity		
Common stock, par value $0.01 per share; 200,000 shares authorized; 78,655 shares issued and 78,361 outstanding as of March 31, 2023 and 78,088 shares issued and 77,889 shares outstanding as of December 31, 2022	787	781
Additional paid-in capital	762,035	895,834
Accumulated other comprehensive income	55,251	46,713
Retained earnings	8,006	55,338
Treasury stock at cost: 294 and 198 shares as of March 31, 2023 and December 31, 2022, respectively	(5,917)	(4,125)
Non-controlling interest	—	309,072
Total Equity	**820,162**	**1,303,613**
Total Liabilities, Redeemable Non-Controlling Interest and Equity	**$ 1,938,595**	**$ 1,943,494**

See accompanying notes to condensed consolidated financial statements.

ADTRAN Holdings, Inc.
CONDENSED CONSOLIDATED STATEMENTS OF LOSS
(Unaudited)
(In thousands, except per share amounts)

	Three Months Ended March 31, 2023	Three Months Ended March 31, 2022
Revenue		
Network Solutions	$ 282,418	$ 138,374
Services & Support	41,494	16,144
Total Revenue	**323,912**	**154,518**
Cost of Revenue		
Network Solutions	219,130	90,653
Services & Support	16,974	9,549
Total Cost of Revenue	**236,104**	**100,202**
Gross Profit	**87,808**	**54,316**
Selling, general and administrative expenses	67,397	27,893
Research and development expenses	70,143	26,491
Operating Loss	**(49,732)**	**(68)**
Interest and dividend income	304	204
Interest expense	(3,287)	(30)
Net investment gain (loss)	1,252	(3,415)
Other expense, net	(303)	(226)
Loss Before Income Taxes	**(51,766)**	**(3,535)**
Income tax benefit	11,313	2,408
Net Loss	**$ (40,453)**	**$ (1,127)**
Less: Net Loss attributable to non-controlling interest(1)	**(5,989)**	**—**
Net Loss attributable to ADTRAN Holdings, Inc.	**$ (34,464)**	**$ (1,127)**
Weighted average shares outstanding – basic	78,358	49,113
Weighted average shares outstanding – diluted	78,358	49,113
Loss per common share attributable to ADTRAN Holdings, Inc. – basic	$ (0.44)	$ (0.02)
Loss per common share attributable to ADTRAN Holdings, Inc. – diluted	$ (0.44)	$ (0.02)

(1) Includes $3.2 million of net loss attributable to non-controlling interests pre-DPLTA and $2.8 million of annual recurring compensation earned by redeemable non-controlling interests and accrued by the Company post-DPLTA.

See accompanying notes to condensed consolidated financial statements.

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

	Three Months Ended March 31,	
	2023	**2022**
Net Loss	$ (40,453)	$ (1,127)
Other Comprehensive Income (Loss), net of tax		
Net unrealized gain (loss) on available-for-sale securities	69	(724)
Defined benefit plan adjustments	35	(13)
Foreign currency translation gain (loss)	8,678	(905)
Other Comprehensive Income (Loss), net of tax	**8,782**	**(1,642)**
Less: Comprehensive Income attributable to non-controlling interest, net of tax	**244**	—
Comprehensive Loss attributable to ADTRAN Holdings, Inc., net of tax	**$ (31,915)**	**$ (2,769)**

See accompanying notes to condensed consolidated financial statements.

ADTRAN Holdings, Inc.
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(Unaudited)
(In thousands, except per share amounts)

	Common Shares	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income	Non-controlling interest	Total Equity
Balance as of December 31, 2022	**78,088**	**$ 781**	**$ 895,834**	**$ 55,338**	**$ (4,125)**	**$ 46,713**	**$ 309,072**	**$ 1,303,613**
Net loss	—	—	—	(37,274)	—	—	(3,179)	(40,453)
Reclassification and remeasurement from equity to mezzanine equity for non-controlling interests in ADVA	—	—	(137,620)	—	—	—	(306,137)	(443,757)
Other comprehensive income, net of tax	—	—	—	—	—	8,538	244	8,782
Dividend payments to ADTRAN Holdings, Inc. shareholders ($0.09 per share)	—	—	—	(7,076)	—	—	—	(7,076)
Deferred compensation adjustments, net of tax	—	—	—	—	(1,792)	—	—	(1,792)
ADTRAN RSUs and restricted stock vested	561	6	—	(144)	—	—	—	(138)
ADTRAN stock options exercised	6	—	—	58	—	—	—	58
ADTRAN stock-based compensation expense	—	—	3,812	—	—	—	—	3,812
Redemption of redeemable non-controlling interest	—	—	—	343	—	—	—	343
Foreign currency remeasurement of redeemable non-controlling interest	—	—	—	(430)	—	—	—	(430)
Annual recurring compensation earned	—	—	—	(2,809)	—	—	—	(2,809)
ADVA stock-based compensation expense	—	—	9	—	—	—	—	9
Balance as of March 31, 2023	**78,655**	**$ 787**	**$ 762,035**	**$ 8,006**	**$ (5,917)**	**$ 55,251**	**$ —**	**$ 820,162**

See accompanying notes to condensed consolidated financial statements.

ADTRAN Holdings, Inc.
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(Unaudited)
(In thousands, except per share amounts)

	Common Shares	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive 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 ($0.09 per share)	—	—	—	(4,438)	—	—	—	(4,438)
Dividends accrued on unvested RSUs	—	—	—	32	—	—	—	32
Deferred compensation adjustments, net of tax	—	—	—	—	(18)	—	—	(18)
PSUs, RSUs and restricted stock vested	—	—	—	(895)	841	—	—	(54)
Stock options exercised	—	—	—	(143)	711	—	—	568
Stock-based compensation expense	—	—	1,893	—	—	—	—	1,893
Balance as of March 31, 2022	**79,652**	**$ 797**	**$ 290,839**	**$ 734,249**	**$ (660,013)**	**$ (13,556)**	**$ —**	**$ 352,316**

See accompanying notes to condensed consolidated financial statements.

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

	March 31,	
	2023	2022
Cash flows from operating activities:		
Net loss	$ (40,453)	$ (1,127)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:		
Depreciation and amortization	33,402	3,661
Amortization of debt issuance cost	146	—
(Gain) loss on investments, net	(3,154)	3,304
Stock-based compensation expense	3,812	1,893
Deferred income taxes	(24,019)	—
Other, net	(1)	(62)
Inventory reserves	16,051	(1,754)
Changes in operating assets and liabilities:		
Accounts receivable, net	17,658	8,697
Other receivables	1,980	(6,205)
Inventory	(2,764)	(29,685)
Prepaid expenses, other current assets and other assets	1,118	(1,170)
Accounts payable	(40,367)	24,818
Accrued expenses and other liabilities	6,349	3,803
Income taxes payable, net	10,316	(1,304)
Net cash (used in) provided by operating activities	**(19,926)**	**4,869**
Cash flows from investing activities:		
Purchases of property, plant and equipment	(8,439)	(1,461)
Proceeds from sales and maturities of available-for-sale investments	930	10,265
Purchases of available-for-sale investments	(516)	(11,504)
Proceeds from beneficial interests in securitized accounts receivable	1,231	—
Net cash used in investing activities	**(6,794)**	**(2,700)**
Cash flows from financing activities:		
Tax withholdings related to stock-based compensation settlements	(6,258)	(54)
Proceeds from stock option exercises	58	568
Dividend payments	(7,076)	(4,438)
Proceeds from draw on revolving credit agreements	138,236	8,000
Repayment of revolving credit agreements	(43,464)	(8,000)
Non-controlling interest put option buyback	(1,176)	—
Repayment of notes payable	(24,692)	—
Net cash provided by (used in) financing activities	**55,628**	**(3,924)**
Net increase (decrease) in cash, cash equivalents and restricted cash	28,908	(1,755)
Effect of exchange rate changes	(1,095)	(1,032)
Cash and cash equivalents, beginning of period	**108,644**	**56,818**
Cash and cash equivalents, end of period	**$ 136,457**	**$ 54,031**

Supplemental disclosure of cash financing activities:		
Cash paid for interest	$ 1,610	$ 30
Cash used in operating activities related to operating leases	$ 4,057	$ 482
Supplemental disclosure of non-cash investing activities:		
Right-of-use assets obtained in exchange for lease obligations	$ 486	$ 332
Purchases of property, plant and equipment included in accounts payable	$ 4,354	$ 392

See accompanying notes to condensed consolidated financial statements.

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 Tier-1, -2 and -3 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.

In 2022, following the business combination (the "Business Combination") with ADVA Optical Networking SE ("ADVA"), which included the Merger, we became the sole owner of and successor to ADTRAN, Inc. and the majority shareholder of ADVA. ADTRAN, Inc. is a leading global provider of open, disaggregated networking and communications solutions that enable voice, data, video, and internet communications across any network infrastructure. Its award-winning end-to-end fiber broadband solutions portfolio spans from OLTs to in-home services and intelligent SaaS solutions. ADVA is a global provider of open networking solutions with over 25 years of experience in optical networking, carrier Ethernet access and network synchronization. ADVA has led the industry for over two decades with open and secure networking solutions that carefully balance space, power and cost. Together, we serve customers in a broad range of industries in over 100 countries.

Effectiveness of the Domination and Profit and Loss Transfer Agreement

The DPLTA between the Company, as the controlling company, and ADVA Optical Networking 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 ADVA (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 ADVA, (ii) ADVA 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 ADVA. The obligation of ADVA to transfer its annual profit to the Company applies for the first time to the profit generated subsequent to January 16, 2023.

Subject to certain limitations pursuant to applicable law and the specific terms of the DPLTA, the DPLTA provides that ADVA preferred shareholders be offered, at their election, (i) to put their ADVA shares to the Company in exchange for a compensation in cash of EUR 17.21 per share (the "Exit Compensation"), or (ii) to remain ADVA preferred shareholders and receive a recurring compensation in cash of EUR 0.59 (EUR 0.52 net under the current tax regime) per share for each full fiscal year of ADVA (the "Annual Recurring Compensation"). The Annual Recurring Compensation is due on the third banking day following the ordinary general shareholders' meeting of ADVA 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 ADVA in 2024. The Annual Recurring Compensation payment is similar to a cumulative dividend, which does not require Board of Director approval as it is guaranteed under the DPLTA, and is accrued as a dividend liability when it is earned.

The adequacy of both forms of compensation have been challenged by the preferred shareholders of ADVA 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 the ADVA preferred shareholders to tender ADVA preferred 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).

Board Approval Purchase of ADVA Common Stock

On October 18, 2022, the Company's Board of Directors authorized the Company to purchase additional shares of ADVA through open market purchases not to exceed 15,346,544 shares.

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 ADTRAN Holdings, Inc. Annual Report on Form 10-K/A 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. 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 March 31, 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.

Restatement of Previously Issued Financial Statements

During the second quarter of 2023, the Company determined that it overstated total current liabilities and understated non-current liabilities as of March 31, 2023 and December 31, 2022, due to a revolving credit agreement being classified as a current liability instead of a non-current liability. The total amount of liabilities remains unchanged. The Company restated the March 31, 2023 Condensed Consolidated Balance Sheet presented in this report by decreasing current revolving credit agreements outstanding by $180.0 million and increasing non-current revolving credit agreement outstanding by $180.0 million.

The following table reflects the impact of the restatement to the specific line items presented in the Company’s previously reported condensed consolidated financial statements as of March 31, 2023:

(In thousands)	**As Reported**	**Adjustment**	**As Restated**
Revolving credit agreements outstanding	$ 190,843	$ (180,000)	$ 10,843
Total current liabilities	$ 522,204	$ (180,000)	$ 342,204
Non-current revolving credit agreement outstanding	$ —	$ 180,000	$ 180,000

The accompanying applicable Notes have been updated to reflect the effects of the restatement as of March 31, 2023.

Redeemable Non-Controlling Interest

As of March 31, 2023 and December 31, 2022, the ADVA stockholders’ equity ownership percentage in ADVA was approximately 34.6% and 34.7%, respectively.

As a result of the effectiveness of the DPLTA on January 16, 2023, the ADVA shares, representing the equity interest in ADVA 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 ("RNCI") on January 16, 2023 and was remeasured to fair value based on the trading market price of the ADVA 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 redeemable noncontrolling interest. 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 redeemable non-controlling interest 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

ADVA Optical Networking SE

On August 30, 2021, ADTRAN and ADVA, 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 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. leaving ADTRAN, Inc. surviving the merger 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 ADVA for 0.8244 shares of Company Common Stock, par value $0.01 per share of the Company. The Exchange Offer was settled on Exchange Offer Settlement Date, on which date the Company acquired 33,957,538 bearer shares of ADVA, or 65.43% of ADVA’s 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, ADVA stock option holders were entitled to have their ADVA stock options assumed by ADTRAN Holdings, Inc. (applying the exchange ratio in the Business Combination Agreement), thereafter representing options to acquire stock of ADTRAN, Inc. The fair value of the ADVA stock options assumed by ADTRAN, Inc. was $12.8 million, estimated using the Monte Carlo method.

ADTRAN, Inc. and ADVA became subsidiaries of ADTRAN Holdings, Inc. as a result of the Business Combination. ADTRAN was determined to be the accounting acquirer of ADVA based on ADTRAN 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 ADVA 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 ADVA shares of common stock, which resulted in a 36% equity stake for ADVA stockholders and a 64% equity stake for ADTRAN stockholders in the post-closing combined company (calculated on a fully diluted basis and utilizing the tender of 65.43% of ADVA’s current issued and outstanding share capital) as of July 15, 2022. Therefore, ADTRAN shareholders continued to hold a majority interest in the combined company following the completion of the Business Combination. Additionally, the Board of Directors is comprised of six members from ADTRAN and three members from ADVA; the current ADTRAN chief executive officer acts as the chairman of the Board of Directors and the former ADVA chief executive officer as the vice chairman of the Board of Directors. Additionally, the current ADTRAN chief executive officer and ADTRAN 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 represents the accounting acquirer.

The following table summarizes the purchase price for the ADVA business combination:

(In thousands, except shares, share price and exchange ratio)		**Purchase Price**
ADVA 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 ADVA 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 purchase price allocation for each major class of assets acquired and liabilities assumed in the acquisition of ADVA (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 include accounts receivable of $114.7 million and other receivables of $1.5 million. The unpaid principal balance under these receivables is $118.5 million and $1.5 million, respectively. The difference between the fair value and the unpaid principal balance primarily represents amounts expected 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)]		**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 ADVA acquisition 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 ADVA acquisition 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 Amendment No. 1 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 ADVA shares will remain trading after the Business Combination, the non-controlling interest was calculated using 17,941,496 ADVA shares held by non-controlling interest multiplied by the ADVA 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 included the financial results of ADVA in its consolidated financial statements since July 15, 2022, the acquisition date. The net revenue and net loss from the ADVA business for the period January 1, 2023 to March 31, 2023, were $192.3 million and $25.4 million, respectively, which are included in the Company's Consolidated Statement of Loss. The net loss attributable to non-controlling interest from the ADVA business for the three months ended March 31, 2023 was $6.0 million.

As of March 31, 2023, the Company has incurred $26.1 million of transaction costs related to the Business Combination. During the three months ended March 31, 2023, we did not incur transaction costs related to the Business Combination. During the three months ended March 31, 2022, $1.5 million of transaction costs were incurred. These transaction costs are recorded in selling, general and administrative expense 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 and ADVA 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 may incur related to the acquisition as part of combining the operations of the companies.

(In thousands)	**Three Months Ended March 31, 2022**
Revenue	$ 345,844
Net loss	$ (73,489)

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 and Aggregation, and Optical Networking Solutions.

Services & Support Segment - Includes network design, implementation, maintenance and cloud-hosted services supporting the Company's Subscriber, Access and 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 ADVA 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 ADVA, we have recast these revenues such that ADTRAN's former Access & Aggregation revenue is combined with a portion of the applicable ADVA solutions to create Access & Aggregation Solutions, ADTRAN's former Subscriber Solutions & Experience revenue is combined with a portion of the applicable ADVA 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 ADVA's 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 table disaggregates 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					
	March 31, 2023			March 31, 2022		
(In thousands)	Network Solutions	Services & Support	Total	Network Solutions	Services & Support	Total
Subscriber Solutions	$ 70,287	$ 9,049	$ 79,336	$ 52,390	$ 4,332	$ 56,722
Access & Aggregation Solutions	84,554	12,266	96,820	85,984	11,812	97,796
Optical Networking Solutions	127,577	20,179	147,756	—	—	—
Total	**$ 282,418**	**$ 41,494**	**$ 323,912**	**$ 138,374**	**$ 16,144**	**$ 154,518**

The aggregate amount of transaction price allocated to remaining performance obligations that have not been satisfied as of March 31, 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 $389.0 million and $277.2 million, respectively. As of March 31, 2023, approximately 68% 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 March 31, 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:

(In thousands)	As of March 31, 2023	As of December 31, 2022
Accounts receivable, net	$ 262,043	$ 279,435
Contract assets(1)	$ 1,972	$ 1,852
Unearned revenue	$ 55,611	$ 41,193
Non-current unearned revenue	$ 24,907	$ 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"). As of March 31, 2023 and December 31, 2022, accounts receivable totaling $15.6 million and $14.9 million, respectively, were sold, of which $1.2 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 March 31, 2023 and December 31, 2022, the Company had an allowance for doubtful accounts related to factored accounts receivable totaling less than $0.1 million. The cost of receivables purchase agreement is included in interest expense in the Condensed Consolidated Statements of Loss and totaled $0.3 million for the three months ended March 31, 2023.

Of the outstanding unearned revenue balances as of December 31, 2022, $25.6 million was recognized as revenue during the three months ended March 31, 2023. Of the $17.7 million of outstanding unearned revenue balances as of December 31, 2021, $5.4 million was recognized as revenue during the three months ended March 31, 2022.

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 March 31, 2023 and December 31, 2022, the Company's outstanding accounts receivable balance was $262.0 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 $0.1 million and $49 thousand as of March 31, 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 March 31, 2023 and December 31, 2022, the Company's outstanding contract asset balance was $2.0 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 March 31, 2023 and 2022 related to contract assets.

4. INCOME TAXES

The Company's effective tax rate changed from a benefit of 68.1% of pre-tax income for the three months ended March 31, 2022, to a benefit of 21.9% of pre-tax income for the three months ended March 31, 2023. The change in the effective tax rate for the three months ended March 31, 2023, was driven primarily by a change in our estimated tax rate as a result of the closing of the Business Combination with ADVA during the third quarter of 2022, as well as the release of our domestic valuation allowance during the fourth quarter of 2022.

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 March 31, 2023, the Company had net deferred tax assets totaling $35.0 million, and a valuation allowance totaling $5.2 million against those deferred tax assets. The remaining $29.8 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 ADVA 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 March 31, 2023		
(In thousands)	Deferred Tax Assets (Liabilities)	Valuation Allowance	Deferred Tax Assets (Liabilities), net
Domestic	$ 75,432	$ (3,177)	$ 72,255
International	(40,450)	(2,024)	(42,474)
Total	**$ 34,982**	**$ (5,201)**	**$ 29,781**

	As of December 31, 2022		
(In thousands)	Deferred Tax Assets (Liabilities)	Valuation Allowance	Deferred 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 March 31, 2023 and 2022, stock-based compensation expense was $2.6 million and $1.9 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 March 31, 2023 and the changes that occurred during the three months ended March 31, 2023:

	Number of Shares (in thousands)	Weighted Avg. Grant Date Fair Value (per share)
Unvested RSUs and restricted stock outstanding, December 31, 2022	**1,086**	**$ 17.54**
RSUs and restricted stock granted	1,296	$ 17.60
RSUs and restricted stock vested	(12)	$ 20.51
RSUs and restricted stock forfeited	(10)	$ 15.32
Unvested RSUs and restricted stock outstanding, March 31, 2023	**2,360**	**$ 17.65**

During the three months ended March 31, 2023, the Company granted 0.7 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 a three-year period, subject to the grantee's continued employment, with the ability to earn shares in a range of 0% to 150% of the awarded number of PSUs based on the achievement of defined performance targets. Equity-based compensation expense 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.

During the three months ended March 31, 2023, the Company granted 0.1 million performance-based PSUs to its executive officers. 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 a two-year period, subject to the grantee's continued employment, with the ability to earn shares in a range of 0% to 100% of the awarded number of PSUs based on the achievement of defined performance targets. Equity-based compensation expense 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 March 31, 2023, total unrecognized compensation expense related to non-vested market-based RSUs and restricted stock was approximately $24.6 million, which will be recognized over the remaining weighted-average period of 2.6 years. There was $11.9 million of unrecognized compensation expense related to unvested 2023 performance-based PSUs, which will be recognized over the remaining requisite service period of 2.6 years if achievement of the performance obligation becomes probable. Unrecognized compensation expense will be adjusted for actual forfeitures.

As of March 31, 2023, 2.0 million shares were available for issuance under stockholder-approved equity plans.

Stock Options - ADTRAN Holdings, Inc.

The following table summarizes ADTRAN Holdings, Inc. stock options outstanding as of December 31, 2022 and March 31, 2023 and the changes that occurred during the three months ended March 31, 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 exercised	(6)	$ 9.82		
Stock options forfeited	(21)	$ 12.21		
Stock options expired	(7)	$ 19.00		
Stock options outstanding, March 31, 2023	**3,114**	**$ 14.38**	**3.17**	**$ 10,198**
Stock options exercisable, March 31, 2023	**1,698**	**$ 15.96**	**1.70**	**$ 4,436**

As of March 31, 2023, there was $7.3 million of unrecognized compensation expense related to stock options which will be recognized over the remaining weighted-average period of 2.2 years.

Pursuant to the Business Combination, which closed on July 15, 2022, ADVA stock option holders were entitled to have their ADVA 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 July 22, 2022. A total of 2.1 million shares of ADTRAN Holdings, Inc. stock could be subject to assumed ADVA 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 ADTRAN’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 March 31, 2023. The amount of aggregate intrinsic value was $10.2 million as of March 31, 2023 and will change based on the fair market value of ADTRAN’s stock. The total pre-tax intrinsic value of options exercised during the three months ended March 31, 2023 was $43 thousand.

Stock Options - ADVA Optical Networking SE

The following table summarizes ADVA Optical Networking SE stock options outstanding as of December 31, 2022 and March 31, 2023 and the changes that occurred during the three months ended March 31, 2023:

	Number of Options *(In thousands)*	Weighted Average Exercise Price *(Per share)*	Weighted Avg. Remaining Contractual Life in Years	Aggregate Intrinsic Value *(In thousands)*
Stock options outstanding, December 31, 2022	**81**	**$ 8.58**	**4.00**	**$ 1,222**
Stock options exercised	—	$ —		
Stock options forfeited	—	$ —		
Stock options outstanding, March 31, 2023	**81**	**$ 8.67**	**3.75**	**$ 1,198**
Stock options exercisable, March 31, 2023	**27**	**$ 7.45**	**2.14**	**$ 424**

As of March 31, 2023, there was $0.1 million of unrecognized compensation expense related to stock options which will be recognized over the remaining weighted-average period of 3.8 years.

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 ADVA'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 March 31, 2023. The amount of aggregate intrinsic value was $1.2 million as of March 31, 2023 and will change based on the fair market value of ADVA's stock.

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 March 31, 2023			
	Amortized	Gross Unrealized		Fair
(In thousands)	Cost	Gains	Losses	Value
Corporate bonds	$ 2,218	$ 4	$ (63)	$ 2,159
Municipal fixed-rate bonds	185	—	(4)	181
Asset-backed bonds	734	1	(20)	715
Mortgage/Agency-backed bonds	1,699	1	(82)	1,618
U.S. government bonds	4,299	5	(151)	4,153
Foreign government bonds	406	—	(19)	387
Available-for-sale debt securities held at fair value	**$ 9,541**	**$ 11**	**$ (339)**	**$ 9,213**

	As of December 31, 2022			
	Amortized	Gross Unrealized		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 contractual maturities related to debt securities and other investments were as follows:

	As of March 31, 2023					
(In thousands)	Corporate bonds	Municipal fixed-rate bonds	Asset-backed bonds	Mortgage/ Agency-backed bonds	U.S. government bonds	Foreign government bonds
Less than one year	$ 369	$ 181	$ —	$ —	$ 508	$ —
One to two years	966	—	169	166	3,174	387
Two to three years	824	—	49	600	348	—
Three to five years	—	—	337	242	123	—
Five to ten years	—	—	—	238	—	—
More than ten years	—	—	160	372	—	—
Total	**$ 2,159**	**$ 181**	**$ 715**	**$ 1,618**	**$ 4,153**	**$ 387**

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

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

	Three Months Ended March 31,	
(In thousands)	2023	2022
Gross realized gain on debt securities	$ 4	$ 12
Gross realized loss on debt securities	(11)	(40)
Total (loss) gain recognized, net	**$ (7)**	**$ (28)**

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 three months ended March 31, 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% 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 three months ended March 31, 2023.

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

(In thousands)	Three Months Ended March 31, 2023	2022
Realized (loss) gain on equity securities sold	$ 13	$ (25)
Unrealized (loss) gain on equity securities held	1,246	(3,362)
Total (loss) gain recognized, net	**$ 1,259**	**$ (3,387)**

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 March 31, 2023 Using		
(In thousands)	Fair Value	Quoted Prices in Active Market for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash equivalents				
US government securities	$ 175	$ 175	$ —	$ —
Money market funds	243	243	—	—
Available-for-sale debt securities				
Corporate bonds	2,159	—	2,159	—
Municipal fixed-rate bonds	181	—	181	—
Asset-backed bonds	715	—	715	—
Mortgage/Agency-backed bonds	1,618	—	1,618	—
U.S. government bonds	4,153	4,153	—	—
Foreign government securities	387	—	387	—
Marketable equity securities				
Marketable equity securities – various industries	821	821	—	—
Deferred compensation plan assets	24,013	24,013	—	—
Total	**$ 34,465**	**$ 29,405**	**$ 5,060**	**$ —**

(In thousands)	Fair Value	Fair Value Measurements as of December 31, 2022 Using Quoted Prices in Active Market for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash equivalents				
Money market funds	$ 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	804	804	—	—
Deferred compensation plan assets	22,942	22,942	—	—
Total	**$ 33,227**	**$ 27,659**	**$ 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)		As of March 31, 2023		As of December 31, 2022
Raw materials	$	167,086	$	186,346
Work in process		7,383		12,087
Finished goods		241,822		229,098
Total inventory, net	**$**	**416,291**	**$**	**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 March 31, 2023 and December 31, 2022, inventory reserves were $73.3 million and $57.0 million, respectively.

8. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consisted of the following:

(In thousands)		As of March 31, 2023		As of December 31, 2022
Engineering and other equipment	$	173,968	$	170,785
Building		83,287		82,932
Computer hardware and software		82,682		80,455
Building and land improvements		51,081		47,861
Furniture and fixtures		23,525		22,403
Land		5,367		5,364
Total property, plant and equipment		**419,910**		**409,800**
Less: accumulated depreciation		(307,941)		(299,101)
Total property, plant and equipment, net	**$**	**111,969**	**$**	**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. During the three months ended March 31, 2023 and 2022, no impairment charges were recognized.

Depreciation expense was $7.6 million and $2.8 million for the three months ended March 31, 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 three months ended March 31, 2023 are as follows:

(In thousands)		Network Solutions		Services & Support		Total
As of December 31, 2022	**$**	**298,280**	**$**	**83,444**	**$**	**381,724**
Foreign currency translation adjustments		3,139		892		4,031
As of March 31, 2023	**$**	**301,419**	**$**	**84,336**	**$**	**385,755**

Related to the Business Combination with ADVA the Company recognized $350.5 million of goodwill upon the merger on July 15, 2022. Goodwill represents the excess purchase price over the fair value of net assets acquired. We qualitatively assess the carrying value of goodwill each reporting period for events or circumstance changes that would more likely than not reduce the fair value of the reporting unit below its carrying amount. Based on its assessment of certain qualitative factors such as macro-economic conditions, industry and market considerations, costs factors and overall financial performance, management concluded that no such events or circumstance changes were identified that would suggest that the fair value of the goodwill was more likely than not greater than it's carrying amount as of March 31, 2023. No impairment of goodwill was recorded during the three months ended March 31, 2023 and 2022.

10. INTANGIBLE ASSETS

Intangible assets consisted of the following:

		As of March 31, 2023			As of December 31, 2022		
(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	$ 54,103	$ (12,180)	$ 41,923	$ 55,517	$ (12,772)	$ 42,745
Backlog	1.6	56,382	(35,348)	21,034	55,782	(22,725)	33,057
Developed technology	8.5	323,723	(31,604)	292,119	320,364	(21,856)	298,508
Licensed technology	9.0	5,900	(3,305)	2,595	5,900	(3,141)	2,759
Licensing agreements	8.5	560	(316)	244	560	(298)	262
Patents	7.3	500	(449)	51	500	(431)	69
Trade names	3.0	29,167	(7,847)	21,320	29,066	(5,255)	23,811
Total		**$ 470,335**	**$ (91,049)**	**$ 379,286**	**$ 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. As a result, no quantitative impairment test of long-lived assets was performed as of March 31, 2023 and 2022, and no impairment losses of intangible assets were recorded during the three months ended March 31, 2023 and 2022.

Amortization expense was $25.8 million and $0.9 million in the three months ended March 31, 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 was as follows:

(In thousands)	As of March 31, 2023
2023	$ 56,855
2024	58,129
2025	46,558
2026	43,292
2027	41,922
Thereafter	132,530
Total	**$ 379,286**

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 Income. 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 March 31, 2023, the Company had 53 forward rate contracts outstanding.

Foreign Currency Hedging Agreement

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 U.S. dollars for Euros 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, commencing in the fourth quarter of 2022. 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 Wells Fargo Bank, N.A. (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 U.S. dollars for Euros at a daily fixed forward rate of $1.085 per €1.00 in average. During the three months ended March 31, 2023, the Company settled one $20.0 million forward contract tranche and the remaining will be divided into seven quarterly tranches of $20.0 million. These new forward contracts transacted on March 21, 2023 (to sell EUR/buy USD) were entered into for the purpose of unwinding the previously transacted forward contracts (to buy EUR/sell USD), transacted in November 2022. The drawdown dates of the original ratchet forwards are set to the same date as the maturity of the new offsetting forward contracts.

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

(In thousands)	**Balance Sheet Location**	**March 31, 2023**	**December 31, 2022**
Derivatives Not Designated as Hedging Instruments (Level 2):			
Foreign exchange contracts – derivative assets	Other receivables	$ 11,831	$ 11,992
Foreign exchange contracts – derivative liabilities	Accounts payable	$ (351)	$ (633)
Total derivatives		**$ 11,480**	**$ 11,359**

The change in the fair values of the Company's derivative instruments recorded in the Condensed Consolidated Statements of Income during the three months ended March 31, 2023 and 2022 were as follows:

		Three Months Ended March 31,	
(In thousands)	**Income Statement Location**	**2023**	**2022**
Derivatives Not Designated as Hedging Instruments:			
Foreign exchange contracts	Other income (expense), net	$ (69)	$ —

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:

(In thousands)	(As restated) As of March 31, 2023	As of December 31, 2022
New Nord/LB revolving line of credit	$ 10,843	$ —
Nord/LB revolving line of credit	—	16,091
Syndicated credit agreement working capital line of credit	—	10,727
DZ bank revolving line of credit	—	9,118
Total current revolving credit agreements	**$ 10,843**	**$ 35,936**

(In thousands)	(As restated) As of March 31, 2023	As of December 31, 2022
Wells Fargo credit agreement	$ 180,000	$ 60,000
Total non-current revolving credit agreement	**$ 180,000**	**$ 60,000**

As of March 31, 2023, the weighted average interest rate on our revolving credit agreements was 6.2%.

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 allowed for borrowings of up to $100 million in aggregate principal amount, but the borrowings increased to up to $400 million in aggregate principal amount upon the DPLTA becoming effective on January 16, 2023.

The Credit Agreement replaced the Cadence Revolving Credit Agreement and the Wells Fargo Revolving Credit Agreement. In connection with the entry into the Credit Agreement, all outstanding borrowings under such credit agreements have been repaid and the agreements terminated.

As of March 31, 2023, ADTRAN, Inc.'s borrowings under the revolving line of credit were $180.0 million. In addition, we may issue up to $25.0 million in letters of credit against our $400.0 million total facility. As of March 31, 2023, we had a total of $3.4 million in letters of credit under ADTRAN, Inc. outstanding against our eligible borrowings, leaving a net amount of $216.6 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. The Credit Agreement matures in July 2027 but provides the Company with an option to request extensions subject to customary conditions.

All U.S. borrowings under the Credit Agreement (other than swingline loans, which will bear interest at the Base Rate (as defined below)) will 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%, (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%, plus (ii) the applicable rate, ranging from 0.5% to 1.25% (the "Base Rate"), or (B) the sum of the Adjusted Term SOFR (as defined in the Credit Agreement) plus the applicable rate, ranging from 1.4% to 2.15%, 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) will 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 1.5% to 2.25%, 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 2.00% 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 of 0.25% on the commitment amounts 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.

The Credit Agreement permits the Company to prepay any or all of the outstanding loans or to reduce the commitments under the Credit Agreement without incurring premiums or penalties (except breakage costs with respect to SOFR Loans and EURIBOR Loans). The Credit Agreement 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). Furthermore, the Credit Agreement requires that the consolidated total net leverage ratio (as defined in the Credit Agreement) of the Company and its subsidiaries tested on the last day of each fiscal quarter not exceed 3.25 to 1.0 through September 30, 2024 and 2.75 to 1.00 from December 31, 2024 and thereafter, subject to certain exceptions. The Credit Agreement also requires that the consolidated interest coverage ratio (as defined in the Credit Agreement) 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 March 31, 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 Credit Agreement 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 Credit Agreement pursuant to a Guaranty Agreement, dated as of July 18, 2022, by ADTRAN, Inc. and the Company in favor of the Administrative Agent.

New Nord/LB Revolving Line of Credit

On March 29, 2023, ADVA 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 March 31, 2023, ADVA borrowed $10.8 million under this facility.

Nord/LB Revolving Line of Credit

On August 8, 2022, ADVA 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 which matures 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, ADVA 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, ADVA 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:

(In thousands)	Fair Value as of March 31, 2023	Carrying Value as of March 31, 2023	Carrying Value as of December 31, 2022
Syndicated credit agreement notes payable	$ —	$ —	$ 24,598
Total Notes Payable	**$ —**	**$ —**	**$ 24,598**

Syndicated Credit Agreement Note Payable

In September 2018, ADVA 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

We maintain a defined benefit pension plan 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 totaled $10.7 million and $10.6 million as of March 31, 2023 and December 31, 2022, respectively.

The following table summarizes the components of net periodic pension cost related to a defined benefit pension plan covering employees in certain foreign countries:

	Three Months Ended March 31,	
(In thousands)	2023	2022
Service cost	$ 398	$ 257
Interest cost	(32)	222
Expected return on plan assets	58	(470)
Amortization of actuarial losses	6	89
Net periodic pension cost	**$ 430**	**$ 98**

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 $1.0 million and $0.5 million during the three months ending March 31, 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 $3.3 million.

15. EQUITY

Accumulated Other Comprehensive Income (Loss)

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

(In thousands)	Three Months Ended March 31, 2023 Unrealized (Losses) Gains on Available-for-Sale Securities	Defined Benefit Plan Adjustments	Foreign Currency Adjustments	ASU 2018-02 Adoption	Total
Balance as of December 31, 2022	**$ (836)**	**$ (1,016)**	**$ 48,180**	**$ 385**	**$ 46,713**
Other comprehensive income before reclassifications	83	—	8,678	—	8,761
Amounts reclassified from accumulated other comprehensive (loss) income	(14)	35	—	—	21
Net current period other comprehensive income	69	35	8,678	—	8,782
Less: Comprehensive income attributable to non-controlling interest, net of tax	—	—	244	—	244
Balance as of March 31, 2023	**$ (767)**	**$ (981)**	**$ 56,614**	**$ 385**	**$ 55,251**

(In thousands)	Three Months Ended March 31, 2022 Unrealized (Losses) Gains on Available-for-Sale Securities	Defined Benefit Plan Adjustments	Foreign Currency Adjustments	ASU 2018-02 Adoption	Total
Balance as of December 31, 2021	**$ (552)**	**$ (5,613)**	**$ (6,134)**	**$ 385**	**$ (11,914)**
Other comprehensive loss before reclassifications	(975)	—	(905)	—	(1,880)
Amounts reclassified from accumulated other comprehensive income (loss)	251	(13)	—	—	238
Net current period other comprehensive income (loss)	(724)	(13)	(905)	—	(1,642)
Balance as of March 31, 2022	**$ (1,276)**	**$ (5,626)**	**$ (7,039)**	**$ 385**	**$ (13,556)**

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

(In thousands)	Three Months Ended March 31, 2023 Amount Reclassified from Accumulated Other Comprehensive (Loss) Income	Affected Line Item in the Statement Where Net (Loss) Income Is Presented
Unrealized gain (loss) on available-for-sale securities:		
Net realized gain on sales of securities	$ 18	Net investment (loss) gain
Defined benefit plan adjustments – actuarial loss	(51)	[1]
Total reclassifications for the period, before tax	**(33)**	
Tax benefit	12	
Total reclassifications for the period, net of tax	**$ (21)**	

(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.

(In thousands)	Three Months Ended March 31, 2022	
	Amount Reclassified from Accumulated Other Comprehensive (Loss) Income	Affected Line Item in the Statement Where Net (Loss) Income Is Presented
Unrealized gain (loss) on available-for-sale securities:		
Net realized loss on sales of securities	$ (330)	Net investment (loss) gain
Defined benefit plan adjustments – actuarial gain	19	(1)
Total reclassifications for the period, before tax	**(311)**	
Tax benefit	73	
Total reclassifications for the period, net of tax	**$ (238)**	

(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 income (loss):

(In thousands)	Three Months Ended March 31, 2023			Three Months Ended March 31, 2022		
	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	$ 109	$ (26)	$ 83	$ (1,283)	$ 308	$ (975)
Reclassification adjustment for amounts related to available-for-sale investments included in net (loss) gain	(18)	4	(14)	330	(79)	251
Reclassification adjustment for amounts related to defined benefit plan adjustments included in net (loss) gain	51	(16)	35	(19)	6	(13)
Foreign currency translation adjustments	8,678	—	8,678	(905)	—	(905)
Total Other Comprehensive Income (Loss)	**$ 8,820**	**$ (38)**	**$ 8,782**	**$ (1,877)**	**$ 235**	**$ (1,642)**

16. REDEEMABLE NON-CONTROLLING INTEREST

The following table summarizes the redeemable non-controlling interest activity for the three months ended March 31, 2023:

(In thousands)	Three Months Ended March 31, 2023
Balance at beginning of period	**$ —**
Reclassification of non-controlling interests	443,757
Redemption of redeemable non-controlling interest	(1,519)
Net income attributable to redeemable non-controlling interests	2,809
Annual recurring compensation earned	(2,809)
Translation adjustment	430
Balance as of March 31, 2023	**$ 442,668**

Annual Recurring Compensation payable on untendered outstanding shares under the DPLTA must be recognized as it accrues. For the three months ended March 31, 2023, we have recognized $2.8 million representing the current quarter's portion of the annual dividend to the redeemable non-controlling shareholders, which will be paid annually after the ordinary general shareholders' meeting of ADVA beginning in 2024.

17. LOSS PER SHARE

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

(In thousands, except per share amounts)	Three Months Ended March 31, 2023	Three Months Ended March 31, 2022
Numerator		
Net loss attributable to ADTRAN Holdings, Inc.	$ (34,464)	$ (1,127)
Denominator		
Weighted average number of shares – basic	78,358	49,113
Effect of dilutive securities		
Stock options	—	—
PSUs, RSUs and restricted stock	—	—
Weighted average number of shares – diluted	78,358	49,113
Loss per share attributable to ADTRAN Holdings, Inc. – basic	$ (0.44)	$ (0.02)
Loss per share attributable to ADTRAN Holdings, Inc. – diluted	$ (0.44)	$ (0.02)

For the three months ended March 31, 2023 and 2022, 0.1 million and five 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 March 31, 2023 and 2022, 0.4 million and 0.1 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 and 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 and 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 (loss), net and income tax benefit (expense) 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 table presents information about the revenue and gross profit of its reportable segments:

	Three Months Ended			
	March 31, 2023		March 31, 2022	
(In thousands)	Revenue	Gross Profit	Revenue	Gross Profit
Network Solutions	$ 282,418	$ 63,288	$ 138,374	$ 47,721
Services & Support	41,494	24,520	16,144	6,595
Total	**$ 323,912**	**$ 87,808**	**$ 154,518**	**$ 54,316**

For the three months ended March 31, 2023 and 2022, $1.5 million and $0.2 million, respectively, of depreciation expense was included in gross profit for our Network Solutions segment. For the three months ended March 31, 2023 and 2022, $2 thousand and $3 thousand, respectively, of depreciation expense was included in gross profit for our Services & Support segment.

Revenue by Category

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 ADVA 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 ADVA, the Company has recast these revenues such that ADTRAN's former Access & Aggregation revenue is combined with a portion of the applicable ADVA solutions to create Access & Aggregation Solutions, ADTRAN's former Subscriber Solutions & Experience revenue is combined with a portion of the applicable ADVA 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 ADVA's 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 March 31,	
(In thousands)	**2023**	**2022**
Subscriber Solutions	$ 79,336	$ 56,722
Access & Aggregation Solutions	96,820	97,796
Optical Networking Solutions	147,756	—
Total	**$ 323,912**	**$ 154,518**

Revenue by Geographic Area

The following table presents revenue information by geographic area:

	Three Months Ended March 31,	
(In thousands)	**2023**	**2022**
United States	$ 131,466	$ 99,048
Germany	76,286	10,920
United Kingdom	57,397	30,388
Other international	58,763	14,162
Total	**$ 323,912**	**$ 154,518**

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 $7.2 million and $7.2 million as of March 31, 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 months ended March 31, 2023 and 2022 are summarized as follows:

	Three Months Ended March 31,	
(In thousands)	2023	2022
Balance at beginning of period	**$ 7,196**	**$ 5,403**
Plus: Amounts charged to cost and expenses	1,077	344
Plus: Foreign currency translation adjustments	26	—
Less: Deductions	(1,099)	(604)
Balance at end of period	**$ 7,200**	**$ 5,143**

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.

DPLTA Exit Costs

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. Assuming all of the minority holders of currently outstanding ADVA shares were to elect the second option, we are obligated to make aggregate Exit Compensation payments of approximately EUR 309.5 million or approximately $335.6 million, based on an exchange rate as of March 31, 2023. Shareholders electing the first option of Annual Recurring Compensation may later elect the second option. The opportunity for outside ADVA shareholders to tender ADVA 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 EUR 10.5 million or $11.3 million (based on the current exchange rate) per year assuming none of the minority ADVA 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 months ended March 31, 2023, we accrued $2.8 million in Annual Recurring Compensation, which was reflected as a reduction to retained earnings.

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 March 31, 2023 and December 31, 2022, we had commitments related to these bonds totaling $11.7 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 March 31, 2023, purchase commitments totaled $459.3 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 ADVA. 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.

In February 2019, the Company announced the restructuring of a certain portion of its workforce predominantly in Germany, which included the closure of the Company’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.

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

(In thousands)	**Three Months Ended March 31, 2023**
Balance at beginning of period	**$ 159**
Plus: Amounts charged to cost and expense	2,437
Less: Amounts paid	(1,574)
Balance as of March 31, 2023	**$ 1,022**

(In thousands)	**For the Year Ended December 31, 2022**
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) Income are for the three months ended March 31, 2023 and 2022:

	Three Months Ended March 31,	
(In thousands)	**2023**	**2022**
Network Solutions - Cost of revenue	$ 58	$ —
Services & Support - Cost of revenue	18	—
Cost of revenue	$ 76	$ —
Selling, general and administrative expenses [1]	2,180	2
Research and development expenses [1]	181	—
Total restructuring expenses	**$ 2,437**	**$ 2**

The following table represents the components of restructuring expense by geographic area for the three months ended March 31, 2023 and 2022:

	Three Months Ended March 31,			
(In thousands)	2023		2022	
United States	$	1,119	$	2
International		1,318		—
Total restructuring expenses	**$**	**2,437**	**$**	**2**

22. SUBSEQUENT EVENTS

Dividend Approval

On May 8, 2023, the Company announced that its Board of Directors declared a quarterly cash dividend of $0.09 per common share to be paid to the Company's stockholders of record as of the close of business on May 23, 2023. The payment date will be June 6, 2023 in the aggregate amount of approximately $7.1 million.

Appointment of Ulrich Dopfer as Principal Accounting Officer

As previously disclosed on the Company's Form 8-K filed on March 30, 2023, Michael Foliano, formerly Senior Vice President of Finance and Chief Financial Officer of the Company, notified the Company of his intent to retire, effective June 28, 2023. Mr. Foliano served in his role as Chief Financial Officer of the Company through April 30, 2023. In connection with his transition, the Board of Directors appointed Ulrich Dopfer as Senior Vice President and Chief Financial Officer of the Company, effective May 1, 2023; however, Mr. Foliano continued to serve as the Company's "principal accounting officer" within the meaning of the rules of the SEC under the Exchange Act (the "Principal Accounting Officer"), and as the Company's Treasurer and Secretary. On May 10, 2023, the Board of Directors removed Mr. Foliano from such roles, designated Mr. Dopfer as the Company's Principal Accounting Officer, and elected Mr. Dopfer as Treasurer and Secretary of the Company, effective as of such date.

ADVA Legal Matter

On May 8, 2023, ADVA and its U.S. subsidiary, ADVA Optical Networking North America Inc., filed a lawsuit in the U.S District Court for the Eastern District of Texas against Huawei Technologies Co. Ltd ("Huawei") seeking a declaration from the court that Huawei violated contractual commitments to negotiate in good faith and to license patents, to the extent any patents are practiced by ADVA, on Fair, Reasonable and Non-Discriminatory ("FRAND") terms and conditions. The case also seeks to obtain a ruling by the court that ADVA has complied with its own commitments and requests that the Court establish FRAND terms and conditions for obtaining a FRAND license on any standard essential patents that ADVA does in fact practice. The lawsuit also seeks to enjoin Huawei from enforcing certain of its patents against ADVA and its affiliates in other jurisdictions, and includes allegations by ADVA that it does not infringe five Huawei patents and that Huawei has infringed an ADVA patent. Huawei has not yet filed an answer in this matter. Given the current status of this matter, the Company is unable predict the outcome of or estimate the possible loss or range of loss, if any, associated with such legal matters.

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, Part I, Item 1, Business, and Item 1A, Risk Factors, included in our Annual Report on Form 10-K/A for the year ended December 31, 2022, filed with the SEC on August 14, 2023 (the "2022 Form 10-K/A), which is available free of charge on the SEC's website at http://www.sec.gov and on our website at www.adtran.com.

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 3 of this Amendment No. 1 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 Amendment No. 1.

Unless the context otherwise indicates or requires, references in this Amendment No. 1 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 ADVA prior to the closing of the Business Combination.

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 Tier-1, -2 and -3 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, administrative and research and development facilities in strategic global locations.

ADTRAN Holdings, Inc. solely owns ADTRAN, Inc. and is the majority shareholder of ADVA Optical Networking SE ("ADVA"). ADTRAN is a leading global provider of open, disaggregated networking and communications solutions. ADVA 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 ADVA 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 ADVA, we have recast these revenues such that ADTRAN's former Access & Aggregation revenue is combined with a portion of the applicable ADVA solutions to create Access & Aggregation Solutions, ADTRAN's former Subscriber Solutions & Experience revenue is combined with a portion of the applicable ADVA 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 ADVA's 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.

ADVA DOMINATION AND PROFIT AND LOSS TRANSFER AGREEMENT

The DPLTA between the Company, as the controlling company, and ADVA Optical Networking SE, 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 ADVA (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 ADVA, (ii) ADVA 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 ADVA. The obligation of ADVA to transfer its annual profit to the Company applies for the first time to the profit, if any, generated in the ADVA fiscal year 2023. The obligation of the Company to absorb ADVA's annual net loss applies for the first time to the loss, if any, generated in the ADVA fiscal year 2023.

Additionally, and subject to certain limitations pursuant to applicable law and the specific terms of the DPLTA, the DPLTA provides that ADVA shareholders (other than the Company) be offered, at their election, (i) to put their ADVA shares to the Company in exchange for compensation in cash of EUR 17.21 per share (the "Exit Compensation"), or (ii) to remain ADVA shareholders and receive a recurring compensation in cash of EUR 0.59 (EUR 0.52 net under the current tax regime) per share for each full fiscal year of ADVA (the "Annual Recurring Compensation"). The Annual Recurring Compensation is due on the third banking day following the ordinary general shareholders' meeting of ADVA 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 ADVA in 2024. The adequacy of both forms of compensation has been challenged by minority shareholders of ADVA 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 ADVA shareholders to tender ADVA 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 ADVA, representing 65.37% of ADVA's outstanding shares as of March 31, 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 filed with the SEC on March 1, 2023.

During the three months ended March 31, 2023, we did not incur transaction costs related to the Business Combination. During the three months ended March 31, 2022, we recognized $1.5 million of transaction costs relating to the Business Combination.

MULTI-YEAR INTEGRATION PROGRAM

During the fourth quarter of 2022, the Company initiated a multi-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 months ended March 31, 2023, we recognized $0.8 million of integration costs related to the Business Combination that are included in selling, general and administrative expenses in the Condensed Consolidated Statement of Loss. We expect to incur integration costs and costs associated with the implementation of the DPLTA during 2023 and such costs are expected to be material.

During the three months ended March 31, 2023, we recognized $2.4 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. *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 first quarter of 2023 with a year-over-year revenue increase of 109.6% as compared to the three months ended March 31, 2022, driven by increased volume of sales activity due to the Business Combination with ADVA and to Service Provider customers. During the first quarter of 2023, we had two 10% revenue customers, both of which were international Service Provider customers and our five largest customers comprised 40.0% of our revenue. Our year-over-year domestic revenue increased by 32.7%, driven by increased sales volume due to the Business Combination with ADVA, partially offset by decreases due to customer inventory corrections which impacted our Subscriber Solutions and Access & Aggregation product lines. Internationally, our revenue increased by 246.9% compared to the prior year period, primarily driven by increased volume of sales activity due to the Business Combination with ADVA, partially offset by decreases due to customer inventory corrections which primarily impacted our Subscriber Solutions product line.

Growing customer concerns over inventory stocking levels affected our first quarter Subscriber Solutions category. We believe that this over-supply of CPE products will continue into the second quarter of 2023. Revenue for our Access and Optical Networking products grew sequentially. Supply constraints, however, limited our flexibility to clear past-due backlog across all product categories. We believe that the inventory impact is transitory, and we expect to see some improvement to both the over-supply of CPE products and the backlog of products across all categories in the coming quarters. We plan to adjust operating expenditures in the near term to reflect current market conditions; however, we do not see any material changes to our near-term opportunities and our long-term growth catalysts as carriers around the world race to upgrade their networks to fiber. Although we expect our revenue growth and profitability in the near-term to continue to be negatively impacted by supply chain issues, our outlook continues to strengthen given the increased demand for our products and our expectation of an improving supply chain over the longer term.

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 continue to be adversely impacted by COVID-19 or as a result of policies relating to COVID-19.

Additionally, due to the 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, and those disruptions, delays and price increases may continue. For example, throughout 2022, our results of operations were negatively impacted by increased expenses resulting from supply chain disruptions. The current global supply chain and transportation constraints, including delays in supply chain deliveries and the related global semi-conductor chip shortage, may continue to have a material adverse effect on our operating results and could have a material adverse effect on customer relations and our financial condition. These supply chain challenges and their adverse impact on our industry began to ease during the first quarter of 2023. However, there can be no assurance that the ongoing disruptions due to COVID-19, the related global semiconductor chip shortage or other supply chain constraints or price increases will be resolved in the near term, which could continue to adversely affect our business, financial condition, and results of operations.

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, the Company's consolidation, purchase accounting, and integration with ADVA. 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. However, with the current global supply chain and limited availability of semiconductor chips and other components of our products, we have experienced and may continue to experience extended lead times, increased logistics intervals and costs, and lower volume of products deliveries, which have had and may continue to have a material adverse effect on our operating results and could have a material adverse effect on customer relations and our financial condition. We believe these supply chain challenges and their adverse impact on our industry will continue at least through fiscal 2023 and expect that the extended lead times and elevated supply chain costs experienced by our industry will persist for the reasonably foreseeable future. It is unclear when the supply environment will become less volatile and what impacts the supply environment will have on the industry in future periods. Operating expenses are relatively fixed in the short term; therefore, a shortfall in quarterly revenues could significantly impact our financial results in a given quarter.

Our operating results may also fluctuate as a result of a number of other factors, including a decline in general economic and market conditions, foreign currency exchange rate movements, 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. Specifically, we expect inflationary pressures on input costs, such as raw materials and labor, and distribution costs to increase. 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. Our attempts to offset these cost pressures, such as through increases in the selling prices of some of our products and services, may not be successful and could negatively affect our operating results. 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 income (loss) in some international markets have been and may continue to be affected by foreign currency fluctuations.

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 and Part II, Item 1A of this Amendment No. 1.

EFFECT OF RECENT ACCOUNTING PRONOUNCEMENTS

See Note 1 of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this Amendment No. 1 for a full description of recent accounting pronouncements, including the expected dates of adoption and estimated effects on results of operations and financial condition, which is incorporated herein by reference.

RESULTS OF OPERATIONS – THREE MONTHS ENDED MARCH 31, 2023 COMPARED TO THE THREE MONTHS ENDED MARCH 31, 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 Ended March 31, 2023	Three Months Ended March 31, 2022
Revenue		
Network Solutions	87.2 %	89.6 %
Services & Support	12.8	10.4
Total Revenue	**100.0**	**100.0**
Cost of Revenue		
Network Solutions	67.7	58.7
Services & Support	5.2	6.2
Total Cost of Revenue	**72.9**	**64.8**
Gross Profit	**27.1**	**35.2**
Selling, general and administrative expenses	20.8	18.1
Research and development expenses	21.7	17.1
Operating Loss	**(15.4)**	—
Interest and dividend income	0.1	0.1
Interest expense	(1.0)	—
Net investment gain (loss)	0.4	(2.2)
Other expense, net	(0.1)	(0.1)
Loss Before Income Taxes	**(16.0)**	**(2.3)**
Income tax benefit	3.5	1.6
Net Loss	**(12.5)** %	**(0.7)** %
Less: Net Loss attributable to non-controlling interest	**(1.8)**	—
Net Loss attributable to ADTRAN Holdings, Inc.	**(10.6)** %	**(0.7)** %

REVENUE

Our revenue increased 109.6% from $154.5 million for the three months ended March 31, 2022 to $323.9 million for the three months ended March 31, 2023. The increase in revenue for the three months ended March 31, 2023 is primarily attributable to a $192.3 million increase in volume of sales activity due to the Business Combination with ADVA partially offset by a $22.9 million decrease in volume of sales activity related to our ADTRAN, Inc. operations. The increase in revenue by category for the three months ended March 31, 2023 was primarily attributable to a $147.8 million increase in Optical Networking Solutions products due to the Business Combination with ADVA, and a $22.6 million increase in Subscriber Solutions products, partially offset by a $1.0 million decrease in Access & Aggregation Solutions revenue. Growing customer concerns over inventory stocking levels affected our first quarter Subscriber Solutions category. We believe that this over-supply of CPE products will continue into the second quarter of 2023. Revenue for our Access and Optical Networking products grew sequentially. Supply constraints, however, limited our flexibility to clear past-due backlog across all product categories. We believe that the inventory impact is transitory, and we expect to see some improvement to both the over-supply of CPE products and the backlog of products across all categories in the coming quarters. 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 increased 104.1% from $138.4 million for the three months ended March 31, 2022 to $282.4 million for the three months ended March 31, 2023. The increase in revenue for the three months ended March 31, 2023 was due primarily to the increase of $167.0 million in volume of sales activity due to the Business Combination with ADVA, partially offset by a decrease of $11.1 million and $11.8 million in Subscriber Solutions products and Access & Aggregation Solutions in our ADTRAN, Inc. operations, respectively.

Services & Support segment revenue increased 157.0% from $16.1 million for the three months ended March 31, 2022 to $41.5 million for the three months ended March 31, 2023. The increase in revenue for the three months ended March 31, 2023 was primarily attributable to the increase of $25.3 million in volume of sales activity from the Business Combination with ADVA and a $0.8 million increase in revenue for Subscriber Solutions services in our ADTRAN, Inc. operations, partially offset by a decrease of $0.7 million of Access & Aggregation Solutions services in our ADTRAN, Inc. operations.

Domestic revenue increased by 32.7% from $99.0 million for the three months ended March 31, 2022 to $131.5 million for the three months ended March 31, 2023, driven by increased volume of network termination and fiber CPE in our Network Solutions segment. In addition, such growth was a result of increased revenue to Tier-2 and Tier-3 customers with diversified businesses among our fiber access and CPE, Service Provider CPE and services.

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., increased by 246.9% from $55.5 million for the three months ended March 31, 2022 to $192.4 million for the three months ended March 31, 2023. International revenue, as a percentage of total revenue, increased from 35.9% for the three months ended March 31, 2022 to 59.4% for the three months ended March 31, 2023. This change was primarily attributable to the increase in volume of $130.4 million in sales activity from the Business Combination with ADVA and increased shipments to a Tier-1 network operator and multiple alternative network operators in Europe. While international revenue has increased to approximately 59% of total revenues for the three months ended March 31, 2023, the mix of our Network Solutions and Services & Support segments as a percentage of total international revenue remains relatively linear. For the three months ended March 31, 2023 as compared to the three months ended March 31, 2022, changes in foreign currencies relative to the U.S. dollar decreased our net revenue by approximately $10.1 million.

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 may result in pressure on revenue and operating income. Our ADVA 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, ADVA's 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 64.8% for the three months ended March 31, 2022 to 72.9% for the three months ended March 31, 2023. The increase was primarily attributable to $32.6 million 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 ADVA, acquisition related expenses, and to a lesser extent changes in customer and product mix and a regional revenue shift in our ADTRAN, Inc. operations. As the current inventory that was acquired in the Business Combination with ADVA is sold, we expect that our cost of revenue as a percentage of revenue will return to more normalized levels. For the three months ended March 31, 2023 as compared to the three months ended March 31, 2022, changes in foreign currencies relative to the U.S. dollar decreased our cost of revenue by approximately $2.0 million. 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 Amendment No. 1.

Network Solutions cost of revenue, as a percentage of that segment's revenue, increased from 65.5% for the three months ended March 31, 2022 to 77.6% for the three months ended March 31, 2023. The increase in cost of revenue as a percentage of revenue 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 ADVA and to a lesser extent changes in customer and product mix and a regional revenue shift in our ADTRAN, Inc. operations.

Services & Support cost of revenue, as a percentage of that segment's revenue, decreased from 59.1% for the three months ended March 31, 2022 to 40.9% for the three months ended March 31, 2023. The decrease in cost of revenue as a percentage of revenue was primarily attributable to customer mix and changes in Services & Support mix as a result of the Business Combination with ADVA.

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 35.2% for the three months ended March 31, 2022 to 27.1% for the three months ended March 31, 2023. The decrease was primarily attributable to increases in cost of revenue related to $32.6 million 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 ADVA, acquisition related expenses and a decrease in volume of sales activity related to our ADTRAN, Inc. operations partially offset by a decrease in cost of revenue.

As a percentage of that segment's revenue, Network Solutions gross profit decreased from 34.5% for the three months ended March 31, 2022 to 22.4% for the three months ended March 31, 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 ADVA and a decrease in volume of sales activity related to our ADTRAN, Inc. operations partially offset by an increase in volume of sales activity due to the Business Combination with ADVA.

As a percentage of that segment's revenue, Services & Support gross profit increased from 40.9% for the three months ended March 31, 2022 to 59.1% for the three months ended March 31, 2023. The increase was primarily attributable to an crease in volume of sales activity due to the Business Combination with ADVA, an increase in volume of sales activity related to our ADTRAN, Inc. and a decrease in cost of revenue attributable to customer mix and changes in Services & Support mix as a result of the Business Combination with ADVA.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

As a percentage of revenue, selling, general and administrative expenses increased from 18.1% for the three months ended March 31, 2022 to 20.8% for the three months ended March 31, 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 first quarter we saw a more significant increase due to increased expenses related to the Business Combination with ADVA 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 ADVA, which we expect will lower selling, general and administrative expense as a percentage of revenue over time.

Selling, general and administrative expenses increased 141.6% from $27.9 million for the three months ended March 31, 2022 to $67.4 million for the three months ended March 31, 2023. Although 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 increase in selling, general and administrative expenses was primarily attributable to increased expenses related to the Business Combination with ADVA 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, stock-based compensation expense and transactions costs. For the three months ended March 31, 2023 as compared to the three months ended March 31, 2022, changes in foreign currencies relative to the U.S dollar decreased our selling, general and administrative expenses by approximately $1.5 million.

RESEARCH AND DEVELOPMENT EXPENSES

As a percentage of revenue, research and development expenses increased from 17.1% for the three months ended March 31, 2022 to 21.7% for the three months ended March 31, 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 quarter we saw a more significant increase due to increased expenses related to the Business Combination with ADVA and other items described below.

Research and development expenses increased 164.8% from $26.5 million for the three months ended March 31, 2022 to $70.1 million for the three months ended March 31, 2023. The increase in research and development expenses was primarily attributable to increased expenses related to the Business Combination with ADVA such as employee-related costs due to an increase in the number of employees and expenses related to our multi-year integration program, amortization of intangible assets, depreciation of property, plant and equipment and stock-based compensation expense. For the three months ended March 31, 2023 as compared to the three months ended March 31, 2022, changes in foreign currencies relative to the U.S. dollar decreased our research and development expenses by approximately $2.2 million.

ADVA 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 months ended March 31, 2023, the Company recognized $0.6 million as a reduction of research and development expense.

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.

INTEREST AND DIVIDEND INCOME

Interest and dividend income increased from $0.2 million for the three months ended March 31, 2022 to $0.3 million for the three months ended March 31, 2023. Interest and dividend income was up due to increased income related to the Business Combination with ADVA for the three months ended March 31, 2023.

INTEREST EXPENSE

Interest expense increased from less than $0.1 million for the three months ended March 31, 2022 to $3.3 million for the three months ended March 31, 2023. The increase in interest expense during the three months ended March 31, 2023 was primarily related to an increase in the new Wells Fargo Credit Agreement and the assumed debt associated with the Business Combination with ADVA. *See Note 12 and Note 13 of the Notes to Condensed Consolidated Financial Statements, included in Part I, Item 1 of this Amendment No. 1*.

NET INVESTMENT (LOSS) GAIN

We recognized a net investment loss of $3.4 million and a gain of $1.3 million for the three months ended March 31, 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 Amendment No. 1, and "Investing Activities" in "Liquidity and Capital Resources" below for additional information.*

OTHER EXPENSE, NET

Other expense, net, which primarily consisted of gains and losses on foreign currency transactions and income from excess material sales, increased from an expense of $0.2 million for the three months ended March 31, 2022 to expense of $0.3 million for the three months ended March 31, 2023.

INCOME TAX BENEFIT

Our effective tax rate changed from a benefit of 68.1% of pre-tax income for the three months ended March 31, 2022, to a benefit of 21.9% of pre-tax income for the three months ended March 31, 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 months ended March 31, 2023, was driven primarily by a change in our estimated tax rate as a result of the closing of the Business Combination with ADVA during the third quarter of 2022 as well as the release of our domestic valuation allowance during the fourth quarter of 2022.

NET LOSS ATTRIBUTABLE TO ADTRAN HOLDINGS, INC.

As a result of the above factors, net loss attributable to ADTRAN Holdings, Inc. increased from $1.1 million for the three months ended March 31, 2022 to $34.5 million for the three months ended March 31, 2023. Upon the DPLTA becoming effective on January 16, 2023, the Company began absorbing all ADVA losses rather than just the loss related to the Company's ownership percentage in ADVA.

LIQUIDITY AND CAPITAL RESOURCES

Liquidity

We have historically financed our ongoing business with existing cash, investments and cash flow from operations. In the current supply environment we also expect 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. As of March 31, 2023, the Company has incurred a total of $26.1 million of transaction costs related to the Business Combination. We are also obligated to compensate any annual net loss of ADVA under the DPLTA. 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. Assuming all of the minority holders of currently outstanding ADVA shares were to elect the second option, we would be obligated to make aggregate Exit Compensation payments of approximately EUR 309.5 million or approximately $335.6 million, based on an exchange rate as of March 31, 2023. Shareholders electing the first option of Annual Recurring Compensation may later elect the second option. The opportunity for outside ADVA shareholders to tender ADVA 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 EUR 10.5 million or $11.3 million (based on the current exchange rate) per year assuming none of the minority ADVA 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 months ended March 31, 2023, we accrued $2.8 million in Annual Recurring Compensation, which was reflected as a reduction to retained earnings.

We believe that our cash and cash equivalents, investments, cash generated from operations and access to funds under the new Wells Fargo credit facility (described below) will be adequate to meet our operating and capital needs and our obligations under the Business Combination and the DPLTA for at least the next 12 months.

As of March 31, 2023, our cash on hand was $136.5 million and short-term investments were $1.0 million, which resulted in available short-term liquidity of $137.5 million, of which $112.5 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. There can be no assurances that we would be successful in effecting these actions on commercially reasonable terms or at all.

Operating Activities

Net cash used in operating activities of $19.9 million during the three months ended March 31, 2023 decreased by $24.8 million compared to net cash provided of $4.9 million during the three months ended March 31, 2022. This decrease was primarily due to the net loss for the period, for the reasons discussed above, as adjusted primarily for depreciation and deferred taxes, and net cash outflows from working capital, specifically, a decrease in the average number of days payable to our trade suppliers. Additional details related to our working capital and its drivers are discussed below.

Net accounts receivable decreased 6.2% from $279.4 million as of December 31, 2022 to $262.0 million as of March 31, 2023. There was an allowance for credit losses of $0.1 million as of March 31, 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 customer and geographical mix. Quarterly accounts receivable DSO increased from 72 days as of December 31, 2022 to 73 days as of March 31, 2023. The increase in DSO was due to customer and geographical mix associated with the Business Combination with ADVA and timing of sales within the quarter.

Other receivables decreased 5.8% from $32.8 million as of December 31, 2022 to $30.9 million as of March 31, 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 2.2 turns as of March 31, 2023. Inventory decreased 2.6% from $427.5 million as of December 31, 2022 to $416.3 million as of March 31, 2023. The decrease in inventory was due to a reduction in component purchases due to improved lead times as well as 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 16.5% from $237.7 million as of December 31, 2022 to $198.6 million as of March 31, 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 $8.4 million and $1.5 million for the three months ended March 31, 2023 and 2022, respectively. These expenditures were primarily used to purchase manufacturing and test equipment, software, computer hardware and building improvements.

Our combined short-term and long-term investments increased $1.1 million from $33.0 million as of December 31, 2022 to $34.1 million as of March 31, 2023. This increase reflects the impact of the net unrealized and realized gains and losses on our 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 Amendment No. 1 for additional information.*

As of March 31, 2023, our corporate bonds, municipal bonds, asset-backed bonds, mortgage/agency bonds, U.S. government bonds and other government bonds were classified as available-for-sale and had a combined duration of 1.43 years with an average Standard & Poor's credit rating of AA. Because our investment portfolio has a high-quality rating and contractual maturities of short duration, we are able to obtain prices for these bonds derived from observable market inputs, or for similar securities traded in an active market, on a daily basis.

Our long-term investments increased 1.0% from $32.7 million as of December 31, 2022 to $33.0 million as of March 31, 2023. Our investments include various marketable equity securities classified as long-term investments with a fair market value of $0.8 million as of March 31, 2023 and December 31, 2022. Long-term investments as of March 31, 2023 and December 31, 2022 also included $24.0 million and $22.9 million, respectively, related to our deferred compensation plans.

Financing Activities

Dividends

During the three month periods ended March 31, 2023 and 2022, we paid dividends totaling $7.1 million and $4.4 million, respectively. The continued payment of dividends is at the discretion of the Company's Board of Directors and is subject to general business conditions and ongoing financial results of the Company.

Stock Repurchase Program

There were no stock repurchases during the periods ended March 31, 2023 and 2022, and there currently is no authorized stock repurchase plan.

Stock Option Exercises

To accommodate employee stock option exercises, the Company issued 6 thousand and 33 thousand shares of common stock and treasury stock which resulted in proceeds of $58 thousand and $0.6 million during the three months ended March 31, 2023 and 2022, respectively.

Off-Balance Sheet Arrangements

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.

Cash Requirements

The following table (restated) summarizes the Company's material short- and long-term cash requirements from known obligations pursuant to certain contracts and commitments as of March 31, 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]	$ 180,000	$ —	$ —	$ —	$ —	$ 180,000	$ —
Nord/LB revolving line of credit[2]	10,843	10,843	—	—	—	—	—
Purchase obligations[3]	459,313	404,351	52,307	2,648	7	—	—
Operating lease obligations[4]	33,494	6,741	8,397	6,914	4,089	2,864	4,489
Totals	**$ 683,650**	**$ 421,935**	**$ 60,704**	**$ 9,562**	**$ 4,096**	**$ 182,864**	**$ 4,489**

(1) See description below.

(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 Amendment No. 1 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 month to 116 months as of March 31, 2023.

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 allowed for borrowings of up to $100 million in aggregate principal amount, but the borrowings increased to up to $400 million in aggregate principal amount upon the DPLTA becoming effective on January 16, 2023.

As of March 31, 2023, ADTRAN, Inc.'s borrowings under the revolving line of credit were $180.0 million. In addition, we may issue up to $25.0 million in letters of credit against our $400.0 million total facility. As of March 31, 2023, we had a total of $3.4 million in letters of credit under ADTRAN, Inc. outstanding against our eligible borrowings, leaving a net amount of $216.6 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 Exit Compensation consideration. The Credit Agreement matures in July 2027 but provides the Company with an option to request extensions subject to customary conditions.

All U.S. borrowings under the Credit Agreement (other than swingline loans, which will bear interest at the Base Rate (as defined below)) will 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%, (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%, plus (ii) the applicable rate, ranging from 0.5% to 1.25% (the "Base Rate"), or (B) the sum of the Adjusted Term SOFR (as defined in the Credit Agreement) plus the applicable rate, ranging from 1.4% to 2.15%, 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) will 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 1.5% to 2.25%, 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 2.00% 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 of 0.25% on the commitment amounts 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.

The Credit Agreement permits the Company to prepay any or all of the outstanding loans or to reduce the commitments under the Credit Agreement without incurring premiums or penalties (except breakage costs with respect to SOFR Loans and EURIBOR Loans). The Credit Agreement 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). Furthermore, the Credit Agreement requires that the Consolidated Total Net Leverage Ratio (as defined in the Credit Agreement) of the Company and its subsidiaries tested on the last day of each fiscal quarter not exceed 3.25 to 1.0 through September 30, 2024 and 2.75 to 1.00 from December 31, 2024 and thereafter, subject to certain exceptions. The Credit Agreement also requires that the Consolidated Interest Coverage Ratio (as defined in the Credit Agreement) of the Company and its subsidiaries tested on the last day of each fiscal quarter not fall below 3.00 to 1.00.

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 Credit Agreement 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 Credit Agreement pursuant to a Guaranty Agreement, dated as of July 18, 2022, by ADTRAN, Inc. and the Company in favor of the Administrative Agent.

New Nord/LB Revolving Line of Credit

On March 29, 2023, ADVA 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 March 31, 2023 ADVA borrowed $10.8 million under this facility.

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 U.S. dollars for Euros 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, commencing in the fourth quarter of 2022. 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 Wells Fargo Bank, N.A. (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 U.S. dollars for Euros at a daily fixed forward rate of $1.085 per €1.00 in average. During the three months ended March 31, 2023, the Company settled one $20.0 million forward contract tranche and the remaining will be divided into seven quarterly tranches of $20.0 million. These new forward contracts transacted on March 21, 2023 (to sell EUR/buy USD) were entered into for the purpose of unwinding the previously transacted forward contracts (to buy EUR/sell USD), transacted in November 2022. The drawdown dates of the original ratchet forwards are set to the same date as the maturity of the new offsetting forward contracts.

ADVA Domination and Profit and Loss Transfer Agreement

On December 1, 2022, we, as the controlling company, entered into the DPLTA with ADVA, 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 ADVA (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 ADVA, (ii) ADVA 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 ADVA. The obligation of ADVA to transfer its annual profit to us, as well as our obligation to absorb ADVA's annual net loss, applies for the first time to the profits or losses generated in the ADVA fiscal year 2023.

Additionally, and subject to certain limitations pursuant to applicable law and the specific terms of the DPLTA, the DPLTA provides that ADVA shareholders (other than us) be offered, at their election, (i) to put their ADVA shares to the Company in exchange for compensation in cash of EUR 17.21 per share (the "Exit Compensation"), or (ii) to remain ADVA shareholders and receive a recurring compensation in cash of EUR 0.59 (EUR 0.52 net under the current tax regime) per share for each full fiscal year of ADVA (the "Annual Recurring Compensation"). The Annual Recurring Compensation is due on the third banking day following the ordinary general shareholders' meeting of ADVA 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 ADVA in 2024. The adequacy of both forms of compensation have been challenged by minority shareholders of ADVA 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 ADVA shareholders to tender ADVA 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 ADVA, representing 65.38% of ADVA's outstanding shares as of March 31, 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.

During the three months ended March 31, 2023, we did not incur transaction costs related to the Business Combination. During the three months ended March 31, 2022, we recognized $1.5 million of transaction costs relating to the Business Combination.

During the three months ended March 31, 2023, we recognized $0.8 million of integration costs related to the Business Combination that are included in selling, general and administrative expenses in the Condensed Consolidated Statement of Loss. We expect to incur integration costs and costs associated with the implementation of the DPLTA during 2023 and such costs are expected to be material.

During the three months ended March 31, 2023, we recognized $2.4 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. *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 three months ended March 31, 2023, other than the Exit Compensation payments and Annual Recurring Compensation under the DPLTA, there have been no other material changes in cash requirements from those discussed in the 2022 Form 10-K/A.

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 March 31, 2023 and December 31, 2022, we had commitments related to these bonds totaling $11.7 million and $21.1 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

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 three months ended March 31, 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 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. At the time of the Original Filing, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of March 31, 2023. Subsequent to 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 March 31, 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, including the misstatements that required the filing of this Amendment No. 1.

Management's Remediation Efforts

To remediate the material weakness in the Company's internal control over financial reporting, the Company plans to initiate a remediation plan that includes implementing 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.

On July 15, 2022, the Company acquired 33,957,538 bearer shares of ADVA, or 65.43% of ADVA's outstanding bearer shares as of such date, as further described in Note 2 of the Notes to the Condensed Consolidated Financial Statements. On March 31, 2023, ADVA's assets represented approximately 43.0% of our consolidated assets. For the three months ended March 31, 2023, ADVA's revenues represented approximately 59.4% of our consolidated revenues and loss before income taxes represented approximately 69.1% of our consolidated loss before income taxes. As permitted by SEC guidance, we currently exclude ADVA in our evaluation of internal control over financial reporting and related disclosure controls and procedures for the first year after the Business Combination. However, we are in the process of extending our oversight and monitoring processes that support our internal control over financial reporting and disclosure controls and procedures to include ADVA's operations. There were no changes in the Company's internal control over financial reporting that occurred during the quarter ended March 31, 2023 that have materially affected, or are reasonably likely to materially affect, its internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1A. RISK FACTORS

A list of factors that could materially affect our business, financial condition or operating results is described in Part I, Item 1A, "Risk Factors" in the 2022 Form 10-K. 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 other than as described in the risk factors below.

Risks related to our financial results and Company success

Our revenue for a particular period can be difficult to predict, and a shortfall in revenue may harm our operating results.

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. Supply of semiconductor chips and other components of our products has become 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. As a result, our revenue and gross margin percentage declined in the first quarter of 2023. If supply chain constraints and transportation constraints continue, it could cause our net revenue and gross profit to decline or to grow at a slower rate than in previous quarters. 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. Currently, our revenue growth and profitability in the near-term are being impacted by supply chain constraint issues. While we are working closely with our suppliers and customers to address the near-term supply chain challenges facing the industry and believe these challenges will continue to lessen and will begin to normalize during 2023, there can be no assurance this will be the case.

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. These expenses and the impact of long-term commitments are relatively fixed in the short term. A shortfall in revenue could lead to operating results being below expectations because we may not be able 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 have impacted and may continue to materially impact demand in that category.

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), or outbreaks of disease, such as the COVID-19 pandemic, around the world;
- protracted negotiations regarding the U.S. federal debt ceiling or the U.S. government's failure to raise the debt ceiling; 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 quarter of 2023. However, there can be no assurance that the ongoing disruptions due to COVID-19, the related semiconductor chip shortage or other supply chain constraints or price increase will be resolved in the near term, which could continue to adversely affect our business, financial condition, and results of operations.

<u>Risks related to our control environment</u>

We have had to restate our previously issued consolidated financial statements and, as part of that process, have 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.

We may face litigation and other risks as a result of the restatement as described in the "Explanatory Note" within this Amendment No. 1 and material weakness in our internal control over financial reporting.

As part of the restatement as described in the "Explanatory Note" within this Amendment No. 1, we identified a material weakness in our internal control over financial reporting. 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

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, in May 2023, ADVA filed a lawsuit against Huawei Technologies Co. ("Huawei"), which seeks declaratory relief with respect to, among other items, ADVA North America's non-infringement of certain allegedly standard essential patents owned by Huawei and Huawei's violation of its contractual commitments to negotiate in good faith and to license patents on fair, reasonable and non-discriminatory terms and conditions. If a claim of intellectual property infringement against us is 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.

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.

ITEM 6. EXHIBITS

Exhibits.

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	Amended and Restated Bylaws of ADTRAN Holdings, Inc. (incorporated by reference to Exhibit 3.2 to the Company's Form 8-K filed July 8, 2022)
4.1	Description of Securities
10.1†	First Amendment to the CEO Employment Agreement dated March 29, 2023 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed April 3, 2023)
10.2†	Employment Agreement, dated September 29, 2006 and Amendment Nos. 1-16, by and between ADVA Optical Networking SE and Christoph Glingener (incorporated by reference to Exhibit 10.3 to the Company's Form 8-K filed April 3, 2023)
10.3†	Seventeenth Amendment, dated March 28, 2023, to Employment Agreement by and between ADVA Optical Networking SE and Christoph Glingener (incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed April 3, 2023)
10.4†	Employment Agreement, dated January 28, 2015, and Amendment Nos. 1-9, by and between ADVA Optical Networking SE and Ulrich Dopfer (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed March 30, 2023).
10.5†	Summary of Terms of Assumed Options (incorporated by reference to Exhibit 4.1 to the Company's Form S-8 filed July 11, 2022)
10.6†	Amended and Restated Variable Incentive Compensation Plan (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed January 26, 2023)
10.7†	Form of VICC Award Letter – Quarterly Bonus Program (incorporated by reference to Exhibit 10.2 of the Company's Form 8-K filed January 26, 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/A for the quarter ended March 31, 2023, formatted in Inline XBRL: (i) Condensed Consolidated Balance Sheets as of March 31, 2023 and December 31, 2022; (ii) Condensed Consolidated Statements of Loss for the three months ended March 31, 2023 and 2022; (iii) Condensed Consolidated Statements of Comprehensive Loss for the three months ended March 31, 2023 and 2022; (iv) Condensed Consolidated Statements of Changes in Stockholders' Equity for the three months ended March 31, 2023 and 2022; (v) Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 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.
† Represents a management compensation plan or arrangement

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: August 14, 2023

/s/ Ulrich Dopfer

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

Exhibit 31

CERTIFICATIONS

I, Thomas R. Stanton, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q/A 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: August 14, 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/A 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: August 14, 2023

/s/ Ulrich Dopfer

Ulrich Dopfer
Chief Financial Officer

Exhibit 32

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/A for the quarter ending March 31, 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
August 14, 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/A for the quarter ending March 31, 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
August 14, 2023