

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549**

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2020

OR

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

For the transition period from

Commission File Number: 001-38952

CAMBIUM NETWORKS CORPORATION

(Exact Name of Registrant as Specified in its Charter)

Cayman Islands

(State or other jurisdiction of
incorporation or organization)

**3800 Golf Road, Suite 360
Rolling Meadows, Illinois 60008**

(Address of principal executive offices, including zip code)

Not Applicable

(I.R.S. Employer
Identification No.)

(345) 943-3100

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Ordinary shares, \$0.0001 par value	CMBM	Nasdaq Global 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, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input checked="" type="checkbox"/>		

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

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

As of May 8, 2020 the registrant had 25,684,049 shares of ordinary shares, \$0.0001 par value per share, outstanding.

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Note regarding forward-looking statements

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of the federal securities laws. All statements other than statements of historical fact contained in this Quarterly Report on Form 10-Q, including statements regarding our future results of operations and financial position, business strategy and plans and objectives of management for future operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, forward-looking statements may be identified by terms such as “may,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “target,” “projects,” “contemplates,” “believes,” “estimates,” “predicts,” “potential” or “continue” or the negative of these terms or other similar expressions. The forward-looking statements in this Quarterly Report on Form 10-Q are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this prospectus and are subject to a number of risks, uncertainties and assumptions. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, they should not be relied upon as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Some of the key factors that could cause actual results to differ from our expectations include:

- the unpredictability of our operating results;
- our inability to predict and respond to emerging technological trends and network operators’ changing needs;
- the impact of actual or threatened health epidemics and other outbreaks;
- our reliance on third-party manufacturers, which subjects us to risks of product delivery delays and reduced control over product costs and quality;
- our reliance on distributors and value-added resellers for the substantial majority of our sales;
- the inability of our third-party logistics and warehousing providers to deliver products to our channel partners and network operators in a timely manner;
- the quality of our support and services offerings;
- our expectations regarding outstanding litigation;
- our or our distributors’ and channel partners’ inability to attract new network operators or sell additional products to network operators that currently use our products;
- the difficulty of comparing or forecasting our financial results on a quarter-by-quarter basis due to the seasonality of our business;
- our limited or sole source suppliers’ inability to produce third-party components to build our products;
- the technological complexity of our products, which may contain undetected hardware defects or software bugs;
- our channel partners’ inability to effectively manage inventory of our products, timely resell our products or estimate expected future demand;
- credit risk of our channel partners, which could adversely affect their ability to purchase or pay for our products;
- our inability to manage our growth and expand our operations;
- unpredictability of sales and revenues due to lengthy sales cycles;
- our inability to maintain an effective system of internal controls, produce timely and accurate financial statements or comply with applicable regulations;
- our reliance on the availability of third-party licenses;
- risks associated with international sales and operations;
- current or future unfavorable economic conditions, both domestically and in foreign markets; and
- our inability to obtain intellectual property protections for our products.

We caution you that the foregoing list may not contain all of the forward-looking statements made in this Quarterly Report on Form 10-Q.

Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events or otherwise.

Item 1. Financial Statements

Cambium Networks Corporation
Condensed Consolidated Balance Sheets
(in thousands, except for share and per share data)

	December 31, 2019	March 31, 2020 (unaudited)
ASSETS		
Current assets		
Cash	\$ 19,346	\$ 24,493
Receivables, net of allowances	58,628	61,606
Inventories, net	41,670	32,499
Recoverable income taxes	—	46
Prepaid expenses	5,323	4,078
Other current assets	4,350	4,944
Total current assets	129,317	127,666
Noncurrent assets		
Property and equipment, net	8,314	8,264
Software, net	3,395	3,185
Operating lease assets	6,872	6,443
Intangible assets, net	15,100	14,548
Goodwill	8,552	9,493
Deferred tax assets, net	929	815
Other noncurrent assets	—	417
TOTAL ASSETS	\$ 172,479	\$ 170,831
LIABILITIES AND EQUITY		
Current liabilities		
Accounts payable	\$ 25,214	\$ 16,528
Accrued liabilities	15,034	15,017
Employee compensation	4,652	5,097
Current portion of long-term external debt, net	9,454	9,454
Deferred revenues	7,430	6,331
Other current liabilities	6,084	7,400
Total current liabilities	67,868	59,827
Noncurrent liabilities		
Long-term external debt, net	54,158	61,795
Deferred revenues	4,852	4,337
Noncurrent operating lease liabilities	5,335	4,724
Deferred tax liabilities, net	337	61
Other noncurrent liabilities	—	520
Total liabilities	132,550	131,264
Shareholders' equity		
Share capital; \$0.0001 par value; 500,000,000 shares authorized at December 31, 2019 and March 31, 2020; 25,753,603 shares issued and 25,672,983 outstanding at December 31, 2019 and 25,768,757 shares issued and 25,680,205 outstanding at March 31, 2020	3	3
Additional paid in capital	104,773	105,584
Treasury shares, at cost, 80,620 shares at December 31, 2019 and 88,552 shares at March 31, 2020	(1,094)	(1,041)
Accumulated deficit	(63,374)	(64,212)
Accumulated other comprehensive loss	(379)	(767)
Total shareholders' equity	39,929	39,567
TOTAL LIABILITIES AND EQUITY	\$ 172,479	\$ 170,831

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

Cambium Networks Corporation
Condensed Consolidated Statements of Operations
(in thousands, except for share and per share data)
(unaudited)

	Three Months Ended March 31,	
	2019	2020
Revenues	\$ 68,112	\$ 60,429
Cost of revenues	36,322	29,797
Gross profit	31,790	30,632
Operating expenses		
Research and development	10,482	11,814
Sales and marketing	10,218	10,304
General and administrative	5,130	6,446
Depreciation and amortization	1,281	1,695
Total operating expenses	27,111	30,259
Operating income	4,679	373
Interest expense, net	2,268	1,345
Other expense (income), net	134	(216)
Income (loss) before income taxes	2,277	(756)
Provision for income taxes	415	82
Net income (loss)	\$ 1,862	\$ (838)
Earnings (loss) per share		
Basic and diluted	\$ 0.14	\$ (0.03)
Weighted-average number of shares outstanding to compute net income (loss) per share		
Basic and diluted	13,600,411	25,677,179
Share-based compensation included in costs and expenses:		
Cost of revenues	\$ —	\$ 17
Research and development	—	368
Sales and marketing	—	232
General and administrative	—	194
Total share-based compensation	\$ —	\$ 811

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

Cambium Networks Corporation
Condensed Consolidated Statements of Comprehensive Income (Loss)
(in thousands)
(unaudited)

	Three Months Ended March 31,	
	2019	2020
Net income (loss)	\$ 1,862	\$ (838)
Other comprehensive loss		
Foreign currency translation adjustment	(2)	(388)
Comprehensive income (loss)	<u>1,860</u>	<u>(1,226)</u>

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

Cambium Networks Corporation
Condensed Consolidated Statements of Shareholders' (Deficit) Equity
(in thousands)
(unaudited)

Three Months Ended March 31, 2019								
Share Capital								
	Shares	Amount	Additional paid in capital	Capital contribution	Treasury shares	Accumulated deficit	Accumulated other comprehensive loss	Total shareholders' (deficit)
Balance at December 31, 2018	77	\$ —	\$ 772	\$ 24,651	\$ —	\$ (45,773)	\$ (221)	\$ (20,571)
Net income	—	—	—	—	—	1,862	—	1,862
Foreign currency translation	—	—	—	—	—	—	(2)	(2)
Balance at March 31, 2019	<u>77</u>	<u>\$ —</u>	<u>\$ 772</u>	<u>\$ 24,651</u>	<u>\$ —</u>	<u>\$ (43,911)</u>	<u>\$ (223)</u>	<u>\$ (18,711)</u>

Three Months Ended March 31, 2020								
Share Capital								
	Shares	Amount	Additional paid in capital	Capital contribution	Treasury shares	Accumulated deficit	Accumulated other comprehensive loss	Total shareholders' equity
Balance at December 31, 2019	25,673	\$ 3	\$ 104,773	\$ —	\$ (1,094)	\$ (63,374)	\$ (379)	\$ 39,929
Net loss	—	—	—	—	—	(838)	—	(838)
Share-based compensation	—	—	811	—	—	—	—	811
Issuance of vested shares	15	—	—	—	—	—	—	—
Treasury shares withheld for net settlement	(8)	—	—	—	53	—	—	53
Foreign currency translation	—	—	—	—	—	—	(388)	(388)
Balance at March 31, 2020	<u>25,680</u>	<u>\$ 3</u>	<u>\$ 105,584</u>	<u>\$ —</u>	<u>\$ (1,041)</u>	<u>\$ (64,212)</u>	<u>\$ (767)</u>	<u>\$ 39,567</u>

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

Cambium Networks Corporation
Condensed Consolidated Statements of Cash Flows
(in thousands)
(unaudited)

	Three Months Ended March 31,	
	2019	2020
Cash flows from operating activities:		
Net income (loss)	\$ 1,862	\$ (838)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Depreciation	882	955
Amortization of software and intangible assets	478	890
Amortization of debt issuance costs	165	137
Share-based compensation	—	811
Deferred income taxes	310	(162)
Other	866	522
Change in assets and liabilities:		
Receivables	(3,487)	(2,172)
Inventories	(2,651)	8,698
Accounts payable	1,830	(8,546)
Accrued employee compensation	1,391	547
Accrued liabilities	1,542	(585)
Accrued Sponsor interest and payables	43	—
Other assets and liabilities	24	(1,048)
Net cash provided by (used in) operating activities	<u>3,255</u>	<u>(791)</u>
Cash flows from investing activities:		
Purchase of property and equipment	(1,128)	(1,053)
Purchase of software	(383)	(157)
Cash paid for acquisition	—	(334)
Net cash used in investing activities	<u>(1,511)</u>	<u>(1,544)</u>
Cash flows from financing activities:		
Proceeds from issuance of revolver debt	—	10,000
Repayment of term loan	(2,375)	(2,500)
Taxes paid related to net share settlement of equity awards	—	52
Net cash (used in) provided by financing activities	<u>(2,375)</u>	<u>7,552</u>
Effect of exchange rate on cash	(9)	(70)
Net (decrease) increase in cash	(640)	5,147
Cash, beginning of period	4,441	19,346
Cash, end of period	<u>\$ 3,801</u>	<u>\$ 24,493</u>
Supplemental disclosure of cash flow information:		
Income taxes paid	\$ 201	\$ 149
Interest paid	\$ 1,950	\$ 1,117

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

Cambium Networks Corporation
Notes to Unaudited Condensed Consolidated Financial Statements

Note 1. Business and significant accounting policies

Business

Cambium Networks Corporation (“Cambium” or the “Company”), incorporated under the laws of the Cayman Islands, is a holding company whose principal operating entities are Cambium Networks, Ltd. (UK), Cambium Networks, Inc. (USA), and Cambium Networks Private Limited (India). On October 28, 2011, Cambium acquired the point-to-point (“PTP”) and point-to-multi-point (“PMP”) businesses from Motorola Solutions, Inc. The acquisition was funded by investment funds affiliated with Vector Capital (“Sponsor”) and Cambium became the renamed entity subsequent to the acquisition.

Cambium Networks Corporation and its wholly owned subsidiaries provide wireless broadband networking solutions for network operators, including medium-sized wireless internet service providers, enterprises and government agencies.

Basis of Presentation

The unaudited condensed consolidated financial statements include the accounts of Cambium Networks Corporation and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated. The condensed consolidated financial statements as of March 31, 2020, and for the three-month periods ended March 31, 2019 and 2020, and the related notes are unaudited. The unaudited condensed consolidated financial statements have been prepared on the same basis as the annual audited consolidated financial statements, and, in the opinion of management, reflect all adjustments, which comprise only normal recurring adjustments necessary to state fairly the Company’s financial position as of March 31, 2020 and results of operations for the three-month periods ended March 31, 2019 and 2020 and cash flows for the three-month periods ended March 31, 2019 and 2020. The condensed consolidated balance sheet as of December 31, 2019 has been derived from the audited financial statements at that date.

Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principals generally accepted in the United States (“U.S. GAAP”) have been condensed or omitted. The condensed consolidated financial statements contained herein should be read in conjunction with the consolidated financial statements and related notes thereto for the year ended December 31, 2019 included in the Company’s annual report on Form 10-K and filed with the SEC on March 23, 2020. The results of operations for the three-month period ended March 31, 2020 are not necessarily indicative of the operating results to be expected for the full year.

Update to Significant Accounting Policies

Other than the recently implemented accounting policy related to the allowances for credit losses per the Financial Accounting Standards Board (“FASB”) Accounting Standards Update (“ASU”) 2016-03 (see below and Note 4 to the condensed consolidated financial statements), there have been no material changes to the Company’s significant accounting policies disclosed in the 2019 Form 10-K, Part II, Item 8.

Receivables and concentration of credit risk

Trade accounts receivable are recorded at invoiced amounts, net of the allowance for credit losses. The Company considers the credit risk of all customers and regularly monitors credit risk exposure in its trade receivables. The Company’s standard credit terms with its customers are generally net 30 to 60 days. The Company had one customer representing more than 10% of trade receivables at December 31, 2019 and one customer at March 31, 2020. The Company had four customers representing more than 10% of revenues for the three-month period ended March 31, 2019 and two customers for the three-month period ended March 31, 2020.

The Company establishes an allowance for credit losses to present the net amount of accounts receivable expected to be collected. The allowance is determined by using the loss-rate method, which requires an estimation of loss rates based upon historical loss experience adjusted for factors that are relevant to determining the expected collectability of accounts receivables. Some of these factors include macroeconomic conditions that correlate with historical loss experience, delinquency trends, aging behavior of receivables, and credit and liquidity indicators for individual customers.

Recently adopted accounting pronouncements

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments*, and subsequent amendments to the initial guidance: ASUs 2018-19, 2019-04, 2019-05, 2019-11, and 2020-02 (collectively, “Topic 326”). Topic 326 sets forth an expected credit loss model which requires the measurement of expected credit losses for financial instruments based on historical experience, current conditions and reasonable and supportable forecasts. This replaces the existing incurred loss model and is applicable to the measurement of credit losses on financial assets measured at amortized cost, including trade accounts receivable, and certain off-balance sheet credit exposures. The Company adopted Topic 326 on January 1, 2020 using the modified retrospective transition method for all financial assets measured at amortized costs, which is primarily trade accounts receivable. Results for reporting periods beginning after January 1, 2020 are presented under Topic 326 while prior period amounts continue to be reported in accordance with previously applicable U.S. GAAP. The adoption of Topic 326 did not have a material impact on the condensed consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, *Intangibles – Goodwill and Other Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Implementation Costs incurred in a Cloud Computing Arrangement That is a Service Contract*. The amendments in this update align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The accounting for the service element of a hosting arrangement that is a service contract is not affected by the amendments in this update. The Company adopted this ASU effective January 1, 2020 applying the changes prospectively to all implementation costs incurred after this date. The adoption of ASU 2018-15 will not have a material impact on the condensed consolidated financial statements as there are no large implementations planned for 2020.

Recently issued accounting pronouncements not yet adopted

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, as part of its Simplification Initiative to reduce the cost and complexity in accounting for income taxes. ASU 2019-12 removes certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period, and the recognition of deferred tax liabilities for outside basis differences. ASU 2019-12 also amends other aspects of the guidance to help simplify and promote consistent application of GAAP. The guidance is effective for interim and annual periods beginning after December 15, 2020, with early adoption permitted. The Company is assessing the impact of adopting this standard on its condensed consolidated financial statements.

In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*. This update provides optional expedients and exceptions for applying generally accepted accounting principles to certain contract modification and hedging relationships that reference London Inter-bank Offered Rate (LIBOR) or another reference rate expected to be discontinued. The guidance is effective upon issuance and generally can be applied through December 31, 2022. The Company is currently evaluating the potential impact of this ASU on its condensed consolidated financial statements.

Note 2. Business Combinations

In August 2019, the Company acquired select assets and assumed select liabilities of the Xirus Wi-Fi products and cloud services business from Riverbed Technology, Inc. Xirus has a portfolio of high performance enterprise Wi-Fi access points and subscription services. The Company paid \$2.0 million upon closing and through February 2020, paid the entire \$3.0 million of the expected contingent consideration that was subject to attaining certain booking targets related to sales of Xirus products, which were met by December 31, 2019. This acquisition will enhance and accelerate the Company’s existing network service application capabilities.

The Company accounts for business combinations in accordance with ASC 805, *Business Combinations*. The Company recorded the acquisition using the acquisition method of accounting and recognized assets and liabilities at their fair value as of the date of acquisition. The Company based the preliminary allocation of the purchase price on estimates and assumptions that are subject to change within the purchase price allocation period, which is generally one year from the acquisition date. During the three-month period ended March 31, 2020, the Company made adjustments to the preliminary purchase price allocation for inventory and accrued warranty. The purchase accounting is not yet complete and as such the final allocation may be subject to future adjustments, including, but not limited to, inventory, intangibles, accrued warranty, deferred revenue, and certain income tax matters. The Company determined the estimated fair value of identifiable intangible assets acquired primarily using an income approach.

The following table summarizes the preliminary allocation of the purchase price as of March 31, 2020 (in thousands):

Goodwill	\$	1,433
Customer relationships		7,670
Unpatented technology		540
Deferred revenue		(7,460)
Other net assets acquired		2,817
Total purchase price	\$	<u>5,000</u>

The results from this acquisition have been included in the Company's condensed consolidated financial statements since the closing of the acquisition.

Note 3. Fair value

The fair value of the Company's external debt under its Credit Agreement approximates its carrying value because the terms and conditions approximate the terms and conditions of current market debt available to the Company. Due to the floating interest rate the debt is classified as Level 2 of the fair value hierarchy. The external debt was estimated based on the current rates offered to the Company for debt with the same remaining maturities. The fair value of the Company's Credit Agreement was \$65.3 million and \$72.8 million as of December 31, 2019 and March 31, 2020, respectively.

The fair value of cash approximates its carrying value (Level 1 of the fair value hierarchy).

The Company's Level 3 liability for contingent consideration of \$3.0 million that was added during the three-month period ended September 30, 2019 was fully paid as of February 2020. The entire \$3.0 million was earned as of December 31, 2019 and the Company made a payment of \$2.7 million in November 2019 and paid the remaining \$0.3 million in February 2020.

Note 4. Balance sheet components

Accounts Receivable, net

The Company's accounts receivable arise from sales on credit to customers. The Company establishes an allowance for credit losses to present the net amount of accounts receivable expected to be collected. With the adoption of ASC 326 on January 1, 2020, the allowance is determined by using the loss-rate method, which requires an estimation of loss rates based upon historical loss experience adjusted for factors that are relevant to determining the expected collectability of accounts receivables. Some of these factors include macroeconomic conditions that correlate with historical loss experience, delinquency trends, aging behavior of receivables and credit and liquidity indicators for individual customers. Prior to the adoption, the Company established the allowance under an incurred loss mode, considering the aging of the accounts receivable, the credit worthiness of each distributor based on payment history, and general economic factors, among other factors.

The components of accounts receivable, net are as follows (in thousands):

	December 31, 2019	March 31, 2020 (unaudited)
Trade accounts receivable	\$ 58,774	\$ 62,000
Other receivables	434	296
Total receivables	<u>59,208</u>	<u>62,296</u>
Less: Allowance for credit losses	(580)	(690)
Receivables, net	<u>\$ 58,628</u>	<u>\$ 61,606</u>

The allowance for credit losses activity was as follows (in thousands):

	Year ended December 31, 2019	Three months ended March 31, 2020 (unaudited)
Beginning balance	\$ 503	\$ 580
Increase, charged to expense	333	125
Recoveries	(204)	(15)
Amounts written-off	(52)	—
Ending balance	<u>\$ 580</u>	<u>\$ 690</u>

Inventories, net

Inventories, net consisted of the following (in thousands):

	December 31, 2019	March 31, 2020 (unaudited)
Finished goods	\$ 42,402	\$ 31,659
Raw materials	4,227	4,886
Gross inventory	<u>46,629</u>	<u>36,545</u>
Less: Excess and obsolete provision	(4,959)	(4,046)
Inventories, net	<u>\$ 41,670</u>	<u>\$ 32,499</u>

The following table reflects the activity in the Company's inventory excess and obsolete provision (in thousands):

	Year ended December 31, 2019	Three months ended March 31, 2020 (unaudited)
Beginning balance	\$ 3,950	\$ 4,959
Inventory written off	(149)	(1,290)
Increase in excess and obsolete provision	1,158	377
Ending balance	<u>\$ 4,959</u>	<u>\$ 4,046</u>

Accrued liabilities

Accrued liabilities consisted of the following (in thousands):

	December 31, 2019	March 31, 2020 (unaudited)
Accrued goods and services	\$ 8,364	\$ 8,113
Accrued inventory purchases	3,094	2,417
Accrued customer rebates	3,569	4,479
Other	7	8
Accrued liabilities	<u>\$ 15,034</u>	<u>\$ 15,017</u>

Accrued warranty

Provisions for warranty claims are primarily related to our hardware products and are recorded at the time products are sold. As per Note 2 – Business Combinations, during the three-month period ended March 31, 2020, the Company recorded an adjustment to the amount associated with the assumed warranty provision related to the Xirrus acquisition. The change to accrued warranty was as follows (in thousands):

	Year ended December 31, 2019	Three months ended March 31, 2020 (unaudited)
Beginning balance	\$ 488	\$ 706
Warranties assumed due to acquisition	180	825
Fulfillment of assumed acquisition warranty	—	(164)
Provision increase, net	38	55
Ending balance	<u>\$ 706</u>	<u>\$ 1,422</u>

At December 31, 2019, \$0.7 million is included in Other current liabilities on the Company's condensed consolidated balance sheet. At March 31, 2020, \$0.9 million is included in Other current liabilities and \$0.5 million is included in Other noncurrent liabilities on the Company's condensed consolidated balance sheet.

Note 5. Property and equipment

Property and equipment, net consisted of the following (in thousands):

	Useful Life	December 31, 2019	March 31, 2020 (unaudited)
Equipment and tooling	3 to 5 years	\$ 22,150	\$ 22,614
Computer equipment	3 to 5 years	2,888	2,892
Furniture and fixtures	10 years	749	737
Leasehold improvements	2 to 3 years	—	282
Total cost		<u>25,787</u>	<u>26,525</u>
Less: Accumulated depreciation		<u>(17,473)</u>	<u>(18,261)</u>
Property and equipment, net		<u>\$ 8,314</u>	<u>\$ 8,264</u>

Total depreciation expense was \$0.9 million and \$1.0 million for the three-month periods ended March 31, 2019 and 2020, respectively.

Note 6. Software

Software consisted of the following (in thousands):

	Useful Life	December 31, 2019			March 31, 2020 (unaudited)		
		Gross carrying amount	Accumulated amortization	Net balance	Gross carrying amount	Accumulated amortization	Net balance
Acquired and Software for internal use	3 to 7 years	\$ 15,870	\$ (13,471)	\$ 2,399	\$ 15,884	\$ (13,650)	\$ 2,234
Software marketed for external sale	3 years	1,805	(809)	996	1,911	(960)	951
Total		<u>\$ 17,675</u>	<u>\$ (14,280)</u>	<u>\$ 3,395</u>	<u>\$ 17,795</u>	<u>\$ (14,610)</u>	<u>\$ 3,185</u>

Amortization of acquired and internal use software is computed using the straight-line method over an estimated useful life of generally three to seven years. Amortization expense recognized on acquired and internal use software is reflected in depreciation and amortization in the condensed consolidated statements of operations. Amortization expense was \$0.1 million and \$0.2 million for the three-month periods ended March 31, 2019 and 2020, respectively.

Amortization expense recognized on software to be sold or marketed externally was \$0.1 million and \$0.2 million for the three-month periods ended March 31, 2019 and 2020, respectively, and is included in cost of revenues on the condensed consolidated statements of operations.

Based on capitalized software assets at March 31, 2020, estimated amortization expense in future fiscal years is as follows (unaudited and in thousands):

Year ending December 31,	Acquired and internal use software	Software marketed for external use	Total
2020 (April - December)	\$ 550	\$ 462	\$ 1,012
2021	698	330	1,028
2022	449	140	589
2023	209	19	228
2024	115	—	115
Thereafter	213	—	213
Total amortization	<u>\$ 2,234</u>	<u>\$ 951</u>	<u>\$ 3,185</u>

Note 7. Goodwill and Intangible Assets

When the Company acquired the trade assets of Motorola Solutions, Inc.'s wireless point-to-point and point-to-multi-point businesses, the transaction generated goodwill and certain intangible assets. The goodwill associated with this transaction was recorded by Cambium Networks Corporation and allocated to Cambium Networks, Ltd. and Cambium Networks, Inc. using a revenue and asset allocation method. Although goodwill has been allocated to two operating subsidiaries, as noted in Note 16 – Segment information and revenues by geography, the Company operates as one operating segment and one reporting unit and therefore, goodwill is reported, and impairment testing performed, at the Cambium Networks Corporation consolidated level.

See Note 2 – Business combinations for further information regarding the acquisition completed during 2019.

The change in the carrying amount of goodwill for the year ended and three-month period ended was as follows (in thousands):

	December 31, 2019	March 31, 2020 (unaudited)
Beginning balance	\$ 8,060	\$ 8,552
Additions attributable to acquisition	492	941
Ending balance	<u>\$ 8,552</u>	<u>\$ 9,493</u>

The Company tests goodwill and intangible assets for impairment annually on December 31 and more frequently if impairment indicators exist. Accordingly, the Company performs quarterly qualitative assessment of significant events and circumstances such as a reporting unit's historical and current results, assumptions regarding future performance, strategic initiatives and overall economic factors, including the current global outbreak of the Coronavirus (or COVID-19) and macro-economic developments, to determine the existence of potential indicators of impairment and assess if it is more likely than not that the fair value of the reporting unit or intangible asset is less than their carrying value. If indicators of impairment are identified, a quantitative impairment test is performed.

Qualitative tests for the quarter did not indicate the existence of impairment indicators. Based on the operating results for the three-month period ended March 31, 2020 and other considerations, the Company believes that it is more likely than not that the enterprise value for its one reporting unit and the fair value of intangibles is still greater than their carrying values. Accordingly, no goodwill impairment indicators were present at March 31, 2020 that would necessitate an interim impairment assessment. The Company will continue to monitor business performance and economic conditions, particularly the impact of the COVID-19 pandemic, throughout 2020 to determine if an interim evaluation should be conducted.

The useful life, gross carrying value, accumulated amortization, and net balance for each major class of definite-lived intangible assets at each balance sheet date were as follows (in thousands):

	Useful Life	December 31, 2019			March 31, 2020		
		Gross carrying amount	Accumulated amortization	Net balance	Gross carrying amount	Accumulated amortization (unaudited)	Net balance
Unpatented technology	3 - 7 years	\$ 14,660	\$ (14,195)	\$ 465	\$ 14,660	\$ (14,240)	\$ 420
Customer relationships	5 - 18 years	19,300	(5,631)	13,669	19,300	(6,006)	13,294
Patents	7 years	11,300	(11,300)	—	11,300	(11,300)	—
Trademarks	10 years	5,270	(4,304)	966	5,270	(4,436)	834
Total		\$ 50,530	\$ (35,430)	\$ 15,100	\$ 50,530	\$ (35,982)	\$ 14,548

Intangible assets are amortized over their expected useful life and none are expected to have a significant residual value at the end of their useful life. Intangible assets amortization expense was \$0.3 million and \$0.6 million for the three-month periods ended March 31, 2019 and 2020, respectively (unaudited).

Based on capitalized intangible assets as of March 31, 2020, estimated amortization expense amounts in future fiscal years are as follows (unaudited and in thousands):

Year ending December 31,	Amortization
2020 (April - December)	\$ 1,654
2021	2,118
2022	1,603
2023	1,498
2024	1,498
Thereafter	6,177
Total amortization	\$ 14,548

Note 8. Debt

As of March 31, 2020, the Company had \$62.8 million outstanding under its current term loan facility and \$10.0 million in borrowings under its revolving credit facility (unaudited).

During the three-month period ended March 31, 2020, the Company entered into the following financing transaction:

- In March 2020, the Company received \$10.0 million after fully drawing down on its revolving credit facility as a proactive measure to increase its cash position and preserve financial flexibility in light of current uncertainty in the global markets resulting from the COVID-19 pandemic.

The following table reflects the current and noncurrent portions of the external debt facilities at December 31, 2019 and March 31, 2020 (in thousands):

	December 31, 2019	March 31, 2020 (unaudited)
Term loan facility	\$ 65,250	\$ 62,750
Revolving credit facility	—	10,000
Less debt issuance costs	(1,638)	(1,501)
Total debt	63,612	71,249
Less current portion of term facility	(10,000)	(10,000)
Current portion of debt issuance costs	546	546
Total long-term external debt	\$ 54,158	\$ 61,795

Secured credit agreement

Both the term loan facility and the revolving credit facility mature on December 22, 2022. Following the completion of the Third Amendment (“Third Amendment”) to the December 21, 2017 credit agreement (as amended and restated, the “Credit Agreement”) entered into on June 28, 2019, the total term loan commitment was reduced to \$70.0 million and the revolving agreement had an available commitment of \$10.0 million.

Interest accrues on the outstanding principal amount of the term loan on a quarterly basis and is equal to the three-month USD LIBOR rate plus a base rate of 4.75%, 4.25%, or 4.00%. The rate on the term loan at December 31, 2019 was 6.85% and was reduced to 6.0% on March 31, 2020 as a result of resetting the LIBOR rate applicable to the loan. The interest rate set on the revolving credit facility drawn on March 31, 2020 was 6.0%. In addition to paying interest on the outstanding principal under the term loan facility, the Company is required to pay a commitment fee in respect of the unutilized commitments under the revolving credit facility, payable quarterly in arrears. The Company is also required to pay letter of credit fees on the maximum amount available to be drawn under all outstanding letters of credit in an amount equal to the applicable margin on LIBOR based borrowings under the revolving credit facility on a per annum basis, payable in arrears, as well as customer fronting fees for the issuance of letters of credit and agency fees.

The Company is permitted to voluntarily reduce the unutilized portion of the commitment amount and repay outstanding loans under the Credit Agreement at any time without premium or penalty, other than customary breakage costs with respect to LIBOR based loans.

Maturities on the external debt outstanding at March 31, 2020 is as follows (unaudited and in thousands):

Year ending December 31,	
2020 (April - December)	\$ 7,500
2021	10,000
2022	55,250
Total	<u>\$ 72,750</u>

Borrowings under the Credit Agreement are secured by a first-priority lien on substantially all of the Company’s assets, the equity interests in the Company’s subsidiaries, and any intercompany debt. The Credit Agreement contains certain customary affirmative and negative covenants that are usual and customary for companies with similar credit ratings. As of March 31, 2020, the Company was in compliance with all affirmative and negative covenants (unaudited).

The Company’s current debt covenant requirements for the next four quarters reflect the following limits, based on the time period noted, for compliance with the covenant.:

Covenant	Criteria	Quarter ending			
		June 30, 2020	September 30, 2020	December 31, 2020	March 31, 2020
Monthly minimum adjusted quick ratio	Min ratio	Non quarter-end months 1.00:1.00		Quarter-end months 1.15:1.00	
Quarterly consolidated fixed charge coverage ratio	Min ratio	1.25:1.00	1.25:1.00	1.25:1.00	1.25:1.00
Quarterly consolidated fixed charge coverage ratio	Time period	Trailing twelve-month			
Quarterly consolidated leverage ratio	Max ratio	2.75:1.00	2.50:1.00	2.50:1.00	2.25:1.00
Quarterly consolidated leverage ratio	Time period	Trailing twelve-month			

Interest expense, including bank charges and amortization of debt issuance costs on the external debt, was \$2.3 million and \$1.3 million for the three-months ended March 31, 2019 and 2020, respectively (unaudited).

Note 9. Employee benefit plans

The Company’s employee benefit plans currently consist of a defined contribution plan in the United States and a separate defined contribution plan in the UK. The Company does not offer any other postretirement benefit plans, such as retiree medical and dental benefits or deferred compensation agreements to its employees or officers.

U.S. plan

U.S. regular, full-time employees are eligible to participate in the Cambium Networks, Inc. 401(k) Plan, which is a qualified defined contribution plan under section 401(k) of the Internal Revenue Service Code. Under the Cambium Networks, Inc. 401(k) Plan, the Company contributes a dollar-for-dollar match of the first 4% an employee contributes to the plan. Employees are eligible to participate on the first day of the month following their date of hire and begin receiving company contributions three-months after they become eligible to participate in the plan. Company matching contributions are made each pay period, but the funds do not vest until the employee's second anniversary of employment with the Company. Employees are always fully vested in their own contributions. All contributions, including the Company match, are made in cash and invested in accordance with the participants' investment elections. Contributions made by the Company under the Cambium Networks, Inc. 401(k) Plan were \$0.2 million and \$0.2 million for the three-month periods ended March 31, 2019 and 2020, respectively (unaudited).

UK plan

Regular, full-time UK employees are eligible to participate in the Cambium Networks Ltd. Stakeholder Pension Scheme, which is a qualified defined contribution plan. Employees are eligible to participate on the first of the month following receipt of their enrollment form, and eligible employees are automatically enrolled in the plan at a default employee contribution rate of 3% and a company contribution rate of 5% of the employee's basic salary. The Company contribution rate increases by 1% for each additional 1% that the employee contributes up to a maximum of 7%. Company matching contributions vest immediately and employees are always vested in their own contributions. All contributions, including the Company match, are made in cash and deposited in the participant's account each pay period. The total contributed by the Company under this plan was \$0.1 million and \$0.1 million for the three-month periods ended March 31, 2019 and 2020, respectively (unaudited).

Note 10. Other expense (income)

Other expense (income) was \$0.1 million and \$(0.2) million for the three-month periods ended March 31, 2019 and 2020, respectively, and represents foreign exchange gains and losses (unaudited).

Note 11. Share-based compensation

2019 Share incentive plan

In June 2019, the Company's Board of Directors adopted, and its shareholders approved, the 2019 Share Incentive Plan ("2019 Plan"). The 2019 Plan provides for the grant of incentive share options, nonqualified share options, share appreciation rights, restricted share awards ("RSAs"), restricted share units ("RSUs"), other share-based awards and performance awards. The number of shares that were issued under the 2019 Plan was 3,400,000, in addition to the 240,037 RSAs and RSUs the Company granted in substitution for unvested Class B Units or phantom units in connection with the Company's IPO based on a price of \$12.00 ("Recapitalization Awards"). The share reserve under the 2019 Plan will be automatically increased on the first day of each fiscal year, beginning with the fiscal year ending December 31, 2020 and continue until, and including, the fiscal year ending December 31, 2029. The number of shares added annually will be equal to the lowest of 1,320,000 shares, 5% of the number of the Company's shares outstanding on the first day of such fiscal year, or an amount determined by the Board of Directors. On March 24, 2020, the Company registered 1,283,649 additional shares that may be issued under the 2019 Plan.

The Company's employees, officers, directors, consultants, and advisors are eligible to receive awards under the 2019 Plan. Incentive share options, however, may only be granted to its employees. Participants in the 2019 Plan will also consist of persons to whom restricted share awards and restricted share units are granted in substitution for Class B Units in VCH, L.P. in connection with the Company's IPO.

The following table summarizes changes in the number of shares available for grant under the Company's equity incentive plans during the three-month period ended March 31, 2020:

	<u>Number of shares</u>
Available for grant at December 31, 2019	426,022
2019 Share Incentive Plan	1,283,649
RSUs granted	(470,000)
Shares withheld in settlement of taxes	7,932
Forfeitures	155,000
Available for grant at March 31, 2020	<u>1,402,603</u>

Share-based compensation

The following table shows total share-based compensation expense for the three-month periods ended March 31, 2019 and 2020 (unaudited and in thousands):

	Three Months Ended March 31,	
	2019	2020 (unaudited)
Cost of revenues	\$ —	\$ 17
Research and development	—	368
Sales and marketing	—	232
General and administrative	—	194
Total share-based compensation expense	\$ —	\$ 811

The Company began recognizing share-based compensation expense during the three-month period ended June 30, 2019, the period in which the triggering event associated with transactions completed in connection with the Company's initial public offering occurred.

As of March 31, 2020, the Company estimates the pre-tax unrecognized compensation expense of \$12.7 million related to all unvested share-based awards, including share options, restricted share units and restricted share awards will be recognized through the fourth quarter of 2023. The Company expects to satisfy the exercise of share options and future distributions of shares for restricted share units and restricted share awards by issuing new ordinary shares which have been reserved under the 2019 Plan.

The Company utilized a forfeiture rate of 5% during the three-month period ended March 31, 2020 for estimating the forfeitures of share options and restricted share units granted.

Share options

The following is a summary of option activity for the Company's share incentive plans for the three-month period ended March 31, 2020 (unaudited):

	Options	Weighted average exercise price	Weighted Average remaining contractual term (years)	Aggregate intrinsic value
Outstanding at December 31, 2019	2,920,500	\$ 10.40	9.6	\$ 1,932,000
Options forfeited	(155,000)	\$ 10.72	—	\$ —
Outstanding at March 31, 2020	2,765,500	\$ 10.38	9.4	\$ —
Options exercisable at March 31, 2020	165,000	\$ 12.00	9.2	\$ —
Options vested and expected to vest at March 31, 2020	2,578,105	\$ 10.42	9.4	\$ —

Share options typically have a contractual term of ten years from grant date.

At March 31, 2020, the aggregate intrinsic value of options exercisable under the Company's share incentive plans was \$0.00. The Company had 0 options exercised during the three-month period ended March 31, 2020.

At March 31, 2020, there was \$8.9 million in unrecognized pre-tax share-based compensation expense, net of estimated forfeitures, related to unvested share option awards. The unrecognized share-based compensation expense is expected to be recognized through the fourth quarter of 2023.

The fair value of options granted during the three months ended March 31, 2020 were estimated on the date of grant using the Black-Scholes option pricing model. The fair value of share options is being amortized on a straight-line basis over the requisite service period of the awards. The fair value of share options are estimated using the following weighted-average assumptions (unaudited):

	Three Months Ended March 31, 2020
Expected dividend yield	—
Risk-free interest rate	1.80%
Weighted-average expected volatility	40.8%
Expected term (in years)	6.1
Weighted average grant-date fair value per share of options granted	\$ 4.34

Restricted shares

The following is a summary of restricted shares activity for the Company's share incentive plans for the three-month period ended March 31, 2020 (unaudited):

	Units	Weighted average grant date fair value
RSU and RSA balance at December 31, 2019	257,119	\$ 12.00
RSUs and RSAs granted	470,000	\$ 4.50
RSUs and RSAs vested	(8,704)	\$ 12.00
RSUs and RSAs forfeited	(5,078)	\$ 12.00
RSU and RSA balance at March 31, 2020	<u>713,337</u>	<u>\$ 7.06</u>
RSUs and RSAs expected to vest at March 31, 2020	<u>713,337</u>	<u>\$ 7.06</u>

During the three-month period ended March 31, 2020, 470,000 RSUs were granted under the Company's 2019 Share Incentive Plan and 8,704 RSUs vested. The Company withheld 1,480 of those shares to pay the employees' portion of the minimum payroll withholding taxes.

As of March 31, 2020, there was \$3.8 million in unrecognized pre-tax compensation expense, net of estimated forfeitures, related to unvested share awards. The unrecognized compensation expense is expected to be recognized through the second quarter of 2020.

Employee share purchase plan

In June 2019, the Company's Board of Directors adopted, and its shareholders approved, the Employee Share Purchase Plan ("ESPP"). The ESPP was effective on June 25, 2019; however, no offering period or purchase period under the ESPP has begun as of March 31, 2020 and will begin when determined by the Company's Board of Directors. During 2019, a total of 550,000 shares were made available under the ESPP. Per the ESPP, the number of shares that will be available for sale also includes an annual increase on the first day of each fiscal year beginning in 2020, equal to the lesser of: 275,000 shares; 1% of the outstanding shares as of the last day of the immediately preceding fiscal year, or such other amount as the administrator may determine. The purchase price of the shares will be 85% of the lower of the fair market value of our shares on the first trading day of each offering period or on the purchase date. On March 24, 2020, the Company registered 256,730 additional shares for the year ending December 31, 2020 that may be issued under the ESPP.

Note 12. Share capital - shares

The following table reflects the share capital activity:

	Number of shares	Value (in thousands)
Balance at December 31, 2019	25,672,983	\$ 3
Shares withheld for net settlement of shares issued	(7,932)	—
Issuance of vested shares	15,154	—
Balance at March 31, 2020	<u>25,680,205</u>	<u>\$ 3</u>

As of March 31, 2020, no dividends have been declared or paid.

Note 13. Earnings per share

Basic net earnings (loss) per share is computed by dividing net income (loss) by the weighted-average number of shares outstanding during the period. Diluted net earnings per share is computed by giving effect to all potentially dilutive ordinary share equivalents outstanding for the period. For purposes of this calculation, share options, RSUs, and RSAs are considered to be ordinary share equivalents but are excluded from the calculation of diluted earnings (loss) per share when including them would have an anti-dilutive effect. The following table sets forth the computation of basic and diluted net earnings (loss) per share (unaudited and in thousands, except for share and per share data):

	Three Months Ended March 31,	
	2019	2020
Numerator:		
Net income (loss)	\$ 1,862	\$ (838)
Denominator:		
Weighted average shares outstanding used in computing net income (loss), basic and diluted	13,600,411	25,677,179
Net income (loss) per share, basic and diluted	<u>\$ 0.14</u>	<u>\$ (0.03)</u>

The following outstanding shares of ordinary share equivalents were excluded from the computation of diluted net loss per share for the periods presented because including them would have had an anti-dilutive effect (unaudited and in thousands):

	Three Months Ended March 31,	
	2019	2020 (unaudited)
Share options	—	2,766
Restricted shares (RSUs and RSAs)	—	713
Total	<u>—</u>	<u>3,479</u>

Note 14. Income taxes

The Company's provision for income taxes is based upon estimated annual tax rates for the year applied to federal, state and foreign income. The Company recorded a provision for income taxes of \$0.4 million and \$0.1 million for the three-month periods ended March 31, 2019 and 2020, with an effective tax rate of 18.2% and (10.8) %, respectively. The reduction of the effective tax rate from 18.2% for the three-month period ended March 31, 2019 to (10.8)% for the three-month period ended March 31, 2020 was primarily driven by an increase in losses in a foreign jurisdiction that is excluded in calculating the quarterly income tax provision and overall lower earnings resulting from lower revenues. For the three-month period ended March 31, 2020, the Company's effective tax rate of (10.8)% was different from the statutory rate of 21.0% primarily due to expected losses in a foreign jurisdiction for which no tax benefit will be recognized.

On March 27, 2020, the Coronavirus Aid, Relief and Economic Security (“CARES”) Act was enacted and signed into U.S. law to provide emergency aid and health care for individuals and businesses affected by the COVID-19 pandemic, generally supporting the U.S. economy. The CARES Act, among other things, includes provisions related to deferral of the employer portion of social security payments, refundable payroll tax credits, net operating loss carryback limitations, modifications to the net interest deduction thresholds, and technical corrections to tax depreciation methods for qualified improvement property. While the Company is still assessing the impact of the CARES Act, it does not currently expect it to have a material impact on its consolidated financial condition or results of operations.

Note 15. Commitments and contingencies

In accordance with ASC 460, *Guarantees*, the Company recognizes the fair value for guarantee and indemnification arrangements it issues or modifies, if these arrangements are within the scope of the interpretation. In addition, the Company must continue to monitor the conditions that are subject to the guarantees and indemnifications in order to identify if a loss has incurred. If the Company determines it is probable that a loss has occurred, then any such estimated loss would be recognized under those guarantees and indemnifications and would be recognized in the Company’s condensed consolidated statements of operations and corresponding condensed consolidated balance sheets during that period.

Indemnification

The Company generally indemnifies its distributors, value added reseller and network operators against claims brought by a third party to the extent any such claim alleges that the Company’s product infringes a patent, copyright or trademark or violates any other proprietary rights of that third party. Although the Company generally tries to limit the maximum amount of potential future liability under its indemnification obligations, in certain agreements this liability may be unlimited. The maximum potential amount of future payments the Company may be required to make under these indemnification agreements is not estimable.

The Company indemnifies its directors and officers and select key employees, including key employees serving as directors or officers of the Company’s subsidiaries, for certain events or occurrences, subject to certain limits, while the director or officer is or was serving at the Company’s request in such capacity. The term of the indemnification period is for the director’s or officer’s term of service. The Company may terminate the indemnification agreements with its directors, officers or key employees upon the termination of their services as directors or officers of the Company or its subsidiaries, or the termination of activities for which indemnification has been provided, but termination will not affect claims for indemnification related to events occurring prior to the effective date of termination. The maximum amount of potential future indemnification is unlimited; however, the Company has a director and officer insurance policy that limits its exposure. The Company believes the fair value of these indemnification agreements is minimal.

Warranties

The Company offers a standard warranty on its products, with the term depending on the product, and records a liability for the estimated future costs associated with potential warranty claims. The Company’s responsibility under its standard warranty is the repair or replacement of in-warranty defective product, or to credit the purchase price of the defective product, at its discretion, without charge to the customer. The Company’s estimate of future warranty costs is largely based on historical experience factors including product failure rates, material usage, and service delivery cost incurred in correcting product failures. The standard warranty is included in either Other current liabilities or Other noncurrent liabilities on its condensed consolidated balance sheets, depending on the time period covered by the warranty. The Company also offers an extended warranty for purchase that represents a future performance obligation for the Company. The extended warranty is included in deferred revenues (both current and noncurrent) on the condensed consolidated balance sheets and recognized on a straight-line basis over the term of the extended warranty. The warranty costs are reflected in the Company’s condensed consolidated statements of operations within cost of revenues.

Legal proceedings

Third parties may from time to time assert legal claims against the Company. Except as set forth below, there is no pending or threatened legal proceedings to which the Company is a party to, and in the Company’s opinion, is likely to have a material adverse effect on its financial condition or results of operations.

On August 7, 2018, Ubiquiti Networks, Inc. filed a lawsuit in the United States District Court, Northern District of Illinois, against the Company, two of its employees, one of its distributors and one of its end users. The complaint alleged that the Company’s development of and sales and promotion of its Elevate software as downloaded on a Ubiquiti device violates the Computer Fraud and Abuse Act and Illinois Computer Crimes Prevention Law, the Digital Millennium Copyright Act and the Copyright Act and constitutes misrepresentation and false advertising and false designation of origin in violation of the Lanham Act and state competition laws, breach of contract, tortious interference with contract and unfair competition, and trademark infringement and common law misappropriation. The complaint also asserted additional claims against all defendants alleging that the development and sales of Elevate violated the Racketeer Influenced and Corrupt Organizations Act. On May 22, 2019, the Court issued its order dismissing

Ubiquiti's complaint without prejudice. On June 18, 2019, Ubiquiti filed its First Amended Complaint (FAC). The FAC made substantially the same claims against the same parties with the exception that the FAC does not include claims for violation of the Illinois Computer Crime Prevention Law, Infringement of Registered Trademarks, False Designation of Origin, and Common Law Trademark Misappropriation that were included in the initial complaint. The Company filed a motion to dismiss the FAC on July 10, 2019. On November 14, 2019 the Court issued an order denying its motion to dismiss. The Court ordered that fact discovery will close on August 18, 2020 and that dispositive motions must be filed prior to December 22, 2020. The Court referred the case to a magistrate judge for a potential settlement conference, the timing of which is currently unknown as a result of the closure of courts due to the applicable regional shutdowns implemented in response to the COVID-19 pandemic. The Company believes Ubiquiti's claims are without merit and plans to vigorously defend against these claims; however, there can be no assurance that it will prevail in the lawsuit. The Company cannot currently estimate the possible loss or range of losses, if any, that it may experience in connection with this litigation.

Note 16. Segment information and revenues by geography

The Company's chief operating decision maker ("CODM") is its Chief Executive Officer. The Company's CODM reviews financial information presented on a consolidated basis for purposes of allocating resources and evaluating financial performance. Accordingly, the Company determined that it operates as one operating segment and one reporting unit.

Revenues by product were as follows (unaudited and in thousands, except percentages):

	Three Months Ended March 31,			
	2019		2020	
Point-to-Multi-Point	\$ 42,327	62%	\$ 34,867	58%
Point-to-Point	19,634	29%	13,110	22%
Wi-Fi	5,586	8%	11,481	19%
Other	565	1%	971	1%
Total Revenues	\$ 68,112	100%	\$ 60,429	100%

The Company's products are predominately distributed through a third-party logistics provider in the United States, Netherlands and China. The Company has determined the geographical distribution of product revenues based upon the ship-to destinations.

Revenues by geography were as follows (unaudited and in thousands, except percentages):

	Three Months Ended March 31,			
	2019		2020	
North America	\$ 34,364	50%	\$ 31,035	51%
Europe, Middle East and Africa	21,970	32%	18,744	31%
Caribbean and Latin America	7,099	10%	5,230	9%
Asia Pacific	4,679	8%	5,420	9%
Total Revenues	\$ 68,112	100%	\$ 60,429	100%

Note 17. Revenues from contracts with customers

Revenues consist primarily of revenues from the sale of hardware products with essential embedded software. Revenues also include limited amounts for software products and extended warranty on hardware products. Substantially all products are sold through distributors and other channel partners, such as resellers and systems integrators.

In accordance with ASC 606, *Revenue From Contracts with Customers*, the Company recognizes revenue to reflect the transfer of control of promised products or services to a customer in an amount that reflects the consideration to which the Company expects to be entitled in exchange for products or services. Refer to Note 16 - Segment Information, for further details, including disaggregation of revenue based on product line and geographic location.

The Company accounts for a contract when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of consideration is probable.

The Company identifies its distinct performance obligations under each contract. A performance obligation is a promise in a contract to transfer a distinct product or service to the customer. Hardware products with essential embedded software, software products, and purchased extended warranty on hardware products have been identified as separate and distinct performance obligations.

The transaction price is the amount of consideration to which the Company expects to be entitled in exchange for transferring products or services to a customer. Exchanges made as part of the Company's stock rotation program meet the definition of a right of return under ASC 606. An adjustment to revenue is made to adjust the transaction price to exclude the consideration related to products expected to be returned. The Company records an asset at the carrying amount of the estimated stock returns and a liability for the estimated amount expected to be refunded to the customer. The transaction price also excludes other forms of consideration provided to the customer, such as volume-based rebates and cooperative marketing allowances.

The Company recognizes revenue when, or as, it satisfies a performance obligation by transferring control of a promised product or service to a customer. Revenue from hardware products with embedded software transferred at a point in time is recognized when obligations under the terms of the contract are satisfied. Generally, this occurs when control of the asset is transferred, which is at the time of shipment. Software revenue is from perpetual license software and is recognized at the point in time that the customer is able to use or benefit from the software. Extended warranty on hardware products is a performance obligation that is satisfied over time, beginning on the effective date of the warranty period and ending on the expiration of the warranty period. The Company recognizes revenue on extended warranties on a straight-line basis over the warranty period.

The Company enters into revenue arrangements that may consist of multiple performance obligations, such as hardware with embedded essential software and extended warranty. The Company allocates the transaction price to each performance obligation on a relative standalone selling price basis for each distinct product or service in the contract. The best evidence of standalone selling price is the observable price of a product or service when the Company sells that product or service separately in similar circumstances and to similar customers. If a standalone selling price is not directly observable, the Company estimates the transaction price allocated to each performance obligation using the expected costs plus a margin approach.

Contract Balances

The following table summarizes contract balances as of December 31, 2019 and March 31, 2020 (in thousands):

	<u>December 31, 2019</u>	<u>March 31, 2020</u> (unaudited)
Trade accounts receivable, net of allowance for credit losses	\$ 58,254	\$ 61,370
Deferred revenue - current	7,430	6,331
Deferred revenue - noncurrent	4,852	4,337
Refund liability	\$ 2,223	\$ 3,052

Trade accounts receivable include amounts billed and currently due from customers. Amounts are billed in accordance with contractual terms and are recorded at face amount less an allowance for credit losses.

The Company had one customer representing more than 10% of trade receivables at December 31, 2019 and one customer representing more than 10% of trade receivables as of March 31, 2020.

Deferred revenue consists of amounts due or received from customers in advance of the Company satisfying performance obligations under contractual arrangements and generally relates to extended warranty on hardware products. Deferred revenue is classified as current or noncurrent based on the timing of when revenue will be recognized. The changes in deferred revenue were due to normal timing differences between the Company's performance and the customers' payment.

The refund liability is the estimated amount expected to be refunded to customers in relation to product exchanges made as part of the Company's stock rotation program and returns that have been authorized, but not yet received by the Company. It is included within Other current liabilities in the Condensed Consolidated Balance Sheets.

Remaining performance obligations

Remaining performance obligations represent the revenue that is expected to be recognized in future periods related to performance obligations included in a contract that are unsatisfied, or partially satisfied, as of the end of a period. As of December 31, 2019, deferred revenue (current and noncurrent) of \$12.3 million represents the Company's remaining performance obligations, of which \$7.4 million is expected to be recognized within one year, with the remainder to be recognized thereafter. As of March 31, 2020, deferred revenue (current and noncurrent) of \$10.7 million represents the Company's remaining performance obligations, of which \$6.3 million is expected to be recognized within one year, with the remainder to be recognized thereafter (unaudited).

Revenue recognized during the three-month period ended March 31, 2020 which was previously included in deferred revenues as of December 31, 2019 was \$2.7 million compared to \$1.3 million of revenue recognized during the three-month period ended March 31, 2019 which was previously included in deferred revenues as of December 31, 2018 (unaudited). The increase is driven by the addition of deferred revenue related to the Xirrus acquisition (See Note 2 – Business Combinations).

Cost to obtain a contract

Sales commissions are incremental costs of obtaining a contract. The Company has elected to recognize these expenses as incurred due to the amortization period of these costs being one year or less.

Note 18. Leases

Right-of-use ("ROU") assets and operating lease liabilities are recognized based on the present value of the future minimum lease payments over the lease term at the commencement date. The Company's lease payments are typically fixed or contain fixed escalators. The Company's leases typically include certain lock-in periods and renewal options to extend the leases, but does not consider options to extend the lease it is not reasonably certain to exercise. The Company elected the practical expedient to not separate the lease and non-lease components of its leases and currently has no leases with options to purchase the leased property.

The components of lease expense were as follows and are included in general and administrative expense (in thousands):

	Three Months Ended March 31, 2019	Three Months Ended March 31, 2020
	(unaudited)	(unaudited)
Operating lease cost	\$ 586	\$ 644
Short-term lease cost	59	27
Variable lease costs	61	109
Total lease expense	<u>\$ 706</u>	<u>\$ 780</u>

Supplemental balance sheet information related to leases were as follows (in thousands, except lease term and discount rate):

	Balance Sheet Caption	December 31, 2019	March 31, 2020
Operating leases:			
Operating lease assets	Operating lease assets	\$ 6,872	\$ 6,443
Current lease liabilities	Other current liabilities	\$ 2,125	\$ 2,208
Noncurrent lease liabilities	Noncurrent operating lease liabilities	\$ 5,335	\$ 4,724
Weighted average remaining lease term (years):			
Operating leases		3.98	3.75
Weighted average discount rate:			
Operating leases		8.50%	8.50%

Supplemental cash flow information related to leases were as follows (in thousands):

	Three months ended March 31, 2019	Three months ended March 31, 2020
Supplemental cash flow information:		
Cash paid for amounts included in the measurement of lease liabilities	\$ 610	\$ 747

The Company's lease terms range from one to seven years and may include options to extend the lease by one to four years.

Remaining maturities on lease liabilities as of March 31, 2020 is as follows (unaudited and in thousands):

	<u>Operating leases</u>
2020 (excludes the three months ended March 31, 2020)	\$ 2,038
2021	2,471
2022	1,349
2023	1,292
2024	537
Thereafter	448
Total lease payments	<u>8,135</u>
Less: interest	1,203
Present value of lease liabilities	<u>\$ 6,932</u>

As of March 31, 2020, the Company does not have any additional leases for new office facilities that have not yet commenced.

Note 19. Related party transactions

The Company follows ASC 850, *Related Party Disclosures*, for the identification of related parties and disclosure of related party transactions. A party is considered to be related to the Company if the party directly or indirectly or through one or more intermediaries, controls, is controlled by, or is under common control with the Company. Related parties also include principal owners of the Company, its management, members of the immediate families of principal owners of the Company and its management and other parties with which the Company may deal.

For the three-month periods ended March 31, 2019 and 2020, Vector Capital Management, LP, an entity related to Holdings, charged \$0.1 million and \$0.0 million, respectively, for management and oversight fees. In connection with the IPO in June 2019, and the payment all outstanding management and oversight fees, the Vector Capital Management Agreement was terminated, and no further management and oversight fees are payable by the Company.

Note 20. Restructuring

On November 7, 2019, the Company announced a corporate restructuring to better align Cambium's cost structure with current economic conditions and position the Company to achieve long-term targets and operating growth. The restructuring only affected personnel, including contract employees, and was completed in 2019. The Company incurred restructuring charges of approximately \$0.7 million, of which \$0.1 million was included in Accrued liabilities at December 31, 2019 in the condensed consolidated balance sheets. The \$0.1 million was paid in the first quarter of 2020.

On February 10, 2020, the Company announced it was taking additional steps in connection with the abovementioned restructuring. The additional restructuring also only affects personnel, including contract employees, and is expected to be complete by the end of 2020. In the three months ended March 31, 2020, the Company recorded restructuring charges of approximately \$1.2 million, consisting of involuntary employee termination costs, and is included in all operating expense lines in the Company's condensed consolidated statements of operations. As of March 31, 2020, the Company paid approximately \$1.1 million of this amount, leaving a restructuring liability of \$0.1 million included in Accrued liabilities in the condensed consolidated balance sheets. The remaining amount is expected to be paid in the second quarter of 2020.

The following table reflects the restructuring liability activity for the three-month period ended March 31, 2020 (unaudited and in thousands):

Restructuring liability at December 31, 2019	\$	138
Restructuring charges		1,152
Cost paid		(1,150)
Restructuring liability at March 31, 2020	\$	<u>140</u>

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

The following discussion and analysis of financial condition and results of operation should be read in conjunction with the consolidated financial statements and related notes thereto of Cambium Networks Corporation (“Cambium”, “we”, “our”, or “us”) included elsewhere in this Quarterly Report on Form 10-Q and with the financial statements and related notes and Management’s Discussion and Analysis in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed March 23, 2020. Results for the three months ended March 31, 2020 are not necessarily indicative of the results that may be expected for any period in the future.

Overview

We provide wireless broadband networking infrastructure solutions for network operators, including medium-sized wireless Internet service providers, enterprises, and government agencies. Our scalable, reliable and high-performance solutions create a purpose-built wireless fabric that connects people, places and things across distances ranging from two meters to more than 100 kilometers, indoors and outdoors, using licensed and unlicensed spectrum at attractive economics. Our embedded proprietary RF technology and software enables automated optimization of data flow at the outermost points in the network, which we refer to as the “intelligent edge.”

We were formed in 2011 when Cambium Networks acquired the PTP and PMP businesses from Motorola Solutions. Prior to the acquisition by Cambium Networks, Motorola Solutions had invested over a decade in developing the technology and intellectual property assets that formed the foundation for our business, having launched the Canopy PMP business in 1999 and having acquired the Orthogon Systems PTP business in 2006. Following the acquisition, we renamed the business Cambium Networks Corporation and leveraged the technology to continue to develop and offer an extensive portfolio of reliable, scalable and secure enterprise-grade fixed wireless broadband and PTP and PMP platforms, Wi-Fi and IIoT solutions.

We offer our wireless broadband solutions in three categories:

- **PTP:** Our PTP backhaul portfolio is comprised of products operating in unlicensed spectrum below 6 GHz, and those operating in licensed spectrum between 6 and 38 GHz. The mainstay of our backhaul offering is the PTP 670 for commercial applications and PTP 700 for defense and national security applications. In addition, our PTP 820 series offers carrier-grade microwave backhaul in licensed spectrum, and our PTP 550 offers price-performance leadership in spectral efficiency in sub-6GHz unlicensed spectrum.
- **PMP:** Our PMP portfolio ranges from our top-of-the-line PMP 450 series to our ePMP solutions for network operators that need to optimize for both price and performance to our cnReach family of narrow-bandwidth connectivity products for industrial communications. The PMP 450 series is optimized for performance in high-density and demanding physical environments, and includes the PMP 450m with integrated cnMedusa massive multi-user multiple input/ multiple output, or MU-MIMO, technology. For less demanding environments, ePMP provides a high-quality platform at a more affordable price. The ePMP 3000 supports 4x4 MU-MIMO and is complemented by a broad portfolio of ePMP Force 300 subscriber radios. cnReach products enables IIoT applications, such as supervisory control and data acquisition, or SCADA, processes in the oil and gas, electric utility, water, railroad and other industrial settings.
- **Wi-Fi:** Our Wi-Fi portfolio includes our cnPilot cloud-managed Wi-Fi solutions, our cnMatrix cloud-managed wireless-aware switching solution, and our Xirrus Wi-Fi solutions. cnPilot is for indoor and outdoor enterprise, small business and home applications and offers a range of access points and RF technology that enable network optimization based on desired geographic coverage and user density. cnMatrix provides the intelligent interface between wireless and wired networks. cnMatrix’s policy-based configuration accelerates network deployment, mitigates human error, increases security, and improves reliability. Xirrus has a portfolio of high performance enterprise Wi-Fi access points and cloud based subscription services.

We generate a substantial majority of our sales through our global channel distribution network, including, as of March 31, 2020, approximately 160 distributors that we sell to directly, together with over 7,200 value added resellers and system integrators supplied by these distributors, for further sales to end users. Our channel partners provide lead generation, pre-sales support and product fulfillment, along with professional services for network design, installation, commissioning and on-going field support. Although we fulfill sales almost exclusively through our channel partners, through our global sales team we engage directly with network operators in our key vertical markets including service providers, enterprises, industrials, defense and national security entities, and state and local governments. Our sales team responds to bids or requests for quotes, typically in collaboration with a channel partner. Our distributors carry inventory of our products for resale, and generally have stock rotation rights only if they simultaneously place an off-setting order for product. As such, we generally recognize revenue from sales to distributors on a sell-in basis, and manage our finished goods inventory efficiently to plan for distributor demand.

We outsource production to third-party manufacturers, which are responsible for purchasing and maintaining inventory of components and raw materials and, in certain cases, we resell third-party products on a white-label basis. We believe that this approach gives us the advantages of relatively low capital investment and significant flexibility in scheduling production, managing inventory levels and providing a comprehensive solution to meet network operator demand. The majority of our products are delivered to us at one of three distribution hubs, where we have outsourced the warehousing and delivery of our products to a third-party logistics provider and from which we manage worldwide fulfillment.

Impact of COVID-19

The recent outbreak of COVID-19 has resulted and is likely to continue to result in disruption to Cambium's business and operations as well as the operations of our customers and suppliers. We have experienced and are likely to continue to experience reductions in customer demand in several of our markets. We expect that social distancing measures, shutdowns globally that impact the ability of our end user customers to deploy our products, nearly complete cessation in travel impacting our sales activities, reductions in production due to mandated closures of or labor restrictions at our third-party manufacturers in Mexico, China, and Israel, as well as the reduced operational capacity of our suppliers will more meaningfully impact our operations in the second quarter, and general business uncertainty will continue to negatively impact demand in several of our markets in the second quarter, and possibly beyond. We expect to experience a reduction in revenues and an increase in certain costs, particularly transportation and logistics expenses. The pandemic could lead to an extended disruption of economic activity and the impact on our condensed consolidated results of operations, financial position and cash flows could be material.

We are focused on making sure our employees are safe and have largely transitioned our workforce to work from home. The third parties that perform our manufacturing, assembly, packaging and shipping have generally remained operational. The extent of the impact of the COVID-19 pandemic on our operational and financial performance will depend on future developments, including the duration, severity and spread of the pandemic, related restrictions on travel and transportation and other actions that may be taken by governmental authorities and the impact to the business of our suppliers or customers, all of which are uncertain and cannot be predicted.

With respect to liquidity, we believe our balance sheet will provide us the necessary capital to navigate the COVID-19 pandemic. In addition, we took the following actions to bolster our financial condition and reduce costs while supporting business operations through the COVID-19 pandemic:

- Fully drew down \$10.0 million from our revolving credit facility as a proactive measure to increase our cash position and preserve financial flexibility;
- Implemented several initiatives to conserve cash and optimize profitability, including limiting discretionary spending, reducing personnel costs, eliminating non-essential travel, delaying or reducing hiring activities, deferring certain discretionary capital expenditures; and
- Initiated conversations with our landlords for reductions or deferrals of future lease payments.

2020 Outlook in Consideration of the COVID-19 Pandemic

Due to the speed with which the COVID-19 pandemic is developing and the uncertainties created, including the depth and duration of any disruptions to customers and suppliers, its future effect to our business, results of operations, and financial condition cannot be predicted. While we are unable to accurately foresee these future impacts, we believe that our financial resources and liquidity levels, along with various plans to reduce costs are sufficient to manage the impact currently anticipated from the COVID-19 pandemic, which may include reduced sales, earnings and operating cash flows.

Because the COVID-19 pandemic is a rapidly evolving situation, we will continue to evaluate market conditions and its impact to determine if further steps are necessary.

Financial results for the three-month period ended March 31, 2020

- Total revenue was \$60.4 million, a decrease of 11.3% year-over-year
- Wi-Fi revenues increased 106% year-over-year
- Gross margin increased to 50.7%, an increase of 400 bps year-over-year

- Total costs of revenues and operating expenses were \$60.1 million
- Operating income was \$0.4 million

Xirrus acquisition

In August 2019, we acquired select assets and assumed select liabilities of the Xirrus Wi-Fi products and cloud services business from Riverbed Technology, Inc. Xirrus has a portfolio of high performance enterprise Wi-Fi access points and subscription services. We paid \$2.0 million upon closing and paid the full \$3.0 million of contingent consideration through February 2020. This acquisition enhances and accelerates our existing network service application capabilities.

We account for business combinations in accordance with ASC 805, *Business Combinations*. We recorded the acquisition using the acquisition method of accounting and recognized assets and liabilities at their fair value as of the date of acquisition. We based the preliminary allocation of the purchase price on estimates and assumptions that are subject to change within the purchase price allocation period, which is generally one year from the acquisition date. During the three-month period ended March 31, 2020, we made adjustments to the preliminary purchase price allocation for inventory and accrued warranty. The purchase accounting is not yet complete and as such the final allocation may be subject to future adjustments, including, but not limited to, inventory, intangibles, accrued warranty, deferred revenue, and certain income tax matters. We determined the estimated fair value of identifiable intangible assets acquired primarily using an income approach.

Basis of presentation

Revenues

Our revenues are generated primarily from the sale of our products, which consist of hardware with essential embedded software. Our revenues also include limited amounts for software products and extended warranty on hardware products. We generally recognize product revenues at the time of shipment, provided that all other revenue recognition criteria have been met. Revenues are recognized net of estimated stock returns, volume-based rebates and cooperative marketing allowances that we provide to distributors. We provide a standard warranty on our products, with the term depending on the product, and record a liability for the estimated future costs associated with potential warranty claims. In addition, we also offer extended warranties for purchase and represents a future performance obligation for us. The extended warranty is included in deferred revenues and is recognized on a straight-line basis over the term of the extended warranty. We provide our cnMaestro, LINKPlanner and cnArcher applications as supplemental tools to help network operators design, install, and manage their networks, and as a means of driving sales of our hardware products. We presently offer these applications without additional charge to the customer and these applications are not essential to the operation of our products.

Cost of revenues and gross profit

Our cost of revenues is comprised primarily of the costs of procuring finished goods from our third-party manufacturers, third-party logistics and warehousing provider costs, freight costs and warranty costs. We outsource our manufacturing to third-party manufacturers located primarily in Mexico, China and Israel. Cost of revenues also includes costs associated with supply operations, including personnel related costs, provision for excess and obsolete inventory, third-party license costs and third-party costs related to services we provide.

Gross profit has been and will continue to be affected by various factors, including changes in product mix. The margin profile of products within each of our core product categories can vary significantly depending on the operating performance, features and manufacturer of the product. Generally, our gross margins on backhaul and access point products are greater than those on our customer premise equipment (“CPE”) products. Because the ratio of CPE to PTP and PMP access points typically increases as network operators build out the density of their networks, increases in follow-on sales to network operators as a percentage of our total sales typically have a downward effect on our overall gross margins. Finally, gross margin will also vary as a function of changes in pricing due to competitive pressure, our third-party manufacturing and other production costs, cost of shipping and logistics, provision for excess and obsolete inventory and other factors. We expect our gross margins will fluctuate from period to period depending on the interplay of these various factors.

Operating expenses

We classify our operating expense as research and development, sales and marketing, and general and administrative expense. Personnel costs are the primary component of each of these operating expense categories, which consist of cash-based personnel costs, such as salaries, sales commissions, benefits and bonuses. After our IPO, operating expenses also include share-based compensation expense. In addition, we separate depreciation and amortization in their own category.

Research and development

In addition to personnel-related costs, research and development expense consists of costs associated with design and development of our products, product certification, travel and recruiting. We generally recognize research and development expense as incurred. For certain of our software projects under development, we capitalize the development cost during the period between determining technological feasibility of the product and commercial release. We amortize the capitalized development cost upon commercial release, generally over three years. We typically do not capitalize costs related to the development of first-generation product offerings as technological feasibility generally coincides with general availability of the software. We expect research and development expense to increase in absolute dollars as we continue to invest in our future products and services.

Sales and marketing

In addition to personnel costs for sales, marketing, service and product line management personnel, sales and marketing expense consists of our training programs, trade shows, marketing programs, promotional materials, demonstration equipment, national and local regulatory approval on our products, travel and entertainment, and recruiting. We expect sales and marketing expense to continue to increase in absolute dollars as we increase the size of our sales, marketing, service, and product line management organization in support of our investment in our growth opportunities, and, in particular, as we continue to expand our global distribution network.

General and administrative

In addition to personnel costs, general and administrative expense consists of professional fees, such as legal, audit, accounting, information technology and consulting costs, facilities and other supporting overhead costs. We expect general and administrative expense to increase in absolute dollars as we continue to incur additional costs associated with being a public company, partially offset by the absence of management fees previously paid to Vector Capital.

Depreciation and amortization

Depreciation and amortization expense consist of depreciation related to fixed assets such as computer equipment, furniture and fixtures, and testing equipment, as well as amortization related to acquired and internal use software and definite lived intangibles.

Provision for income taxes

Our provision for income taxes consists primarily of income taxes in the jurisdictions in which we conduct business. As we have expanded our international operations, we have incurred additional foreign tax expense, and we expect this to continue. Management assesses our deferred tax assets in each reporting period, and if it is determined that it is not more likely than not to be realized, we will record a change in our valuation allowance in that period.

Results of operations

The following table presents the consolidated statements of operations, as well as the percentage relationship to total revenues for items included in our consolidated statements of operations (in thousands):

(in thousands)	Three months ended March 31,	
	2019	2020
Statements of Operations Data:		
Revenues	\$ 68,112	\$ 60,429
Cost of revenues	36,322	29,797
Gross profit	31,790	30,632
Operating expenses		
Research and development	10,482	11,814
Sales and marketing	10,218	10,304
General and administrative	5,130	6,446
Depreciation and amortization	1,281	1,695
Total operating expenses	27,111	30,259
Operating income	4,679	373
Interest expense	2,268	1,345
Other expense (income)	134	(216)
Income (loss) before income taxes	2,277	(756)
Provision for income taxes	415	82
Net income (loss)	\$ 1,862	\$ (838)

	Three months ended March 31,	
	2019	2020
Percentage of Revenues:		
Revenues	100.0%	100.0%
Cost of revenues	53.3%	49.3%
Gross margin	46.7%	50.7%
Operating expenses		
Research and development	15.4%	19.6%
Sales and marketing	15.0%	17.1%
General and administrative	7.5%	10.7%
Depreciation and amortization	1.9%	2.8%
Total operating expenses	39.8%	50.2%
Operating income	6.9%	0.5%
Interest expense	3.3%	2.2%
Other expense (income)	0.2%	(0.4)%
Income (loss) before income taxes	3.4%	(1.3)%
Provision for income taxes	0.6%	0.2%
Net income (loss)	2.8%	(1.5)%

Comparison of three-month period ended March 31, 2019 to the three-month period ended March 31, 2020

Revenues

(dollars in thousands)	Three months ended March 31,		Change	
	2019	2020	\$	%
Revenues	\$ 68,112	\$ 60,429	\$ (7,683)	(11.3)%

Revenues decreased \$7.7 million, or 11.3%, to \$60.4 million for the three-month period ended March 31, 2020 from \$68.1 million for the three-month period ended March 31, 2019, which was attributable to lower demand for our point-to-multi-point products due to a technology transition and softer demand in the defense sector which impacted point-to-point revenues, offset by growth in our wi-fi products.

Revenues by product category

(dollars in thousands)	Three months ended March 31,		Change	
	2019	2020	\$	%
Point-to-Multi-Point	\$ 42,327	\$ 34,867	\$ (7,460)	(17.6)%
Point-to-Point	19,634	13,110	(6,524)	(33.2)%
Wi-Fi	5,586	11,481	5,895	105.5%
Other	565	971	406	71.9%
Total revenues by product category	\$ 68,112	\$ 60,429	\$ (7,683)	(11.3)%

Point-to-Multi-Point

Our PMP product line comprised 58% of total revenues for the three-month period ended March 31, 2020 and 62% of total revenues for the three-month period ended March 31, 2019. PMP revenue decline was attributable to lower sales to a larger European customer.

Point-to-Point

PTP revenue for the three-month period ended March 31, 2020 decreased due to lower sales in the defense sector.

Wi-Fi

Wi-Fi revenue increased to 19% of total revenues for the three-month period ended March 31, 2020 from 8% of revenues for the three-month period ended March 31, 2019. Wi-Fi growth is primarily as a result of recent new product introductions, including cnMatrix, a switch product included within our Wi-Fi category, and the addition of Xirrus Wi-Fi revenues in 2020.

Revenues by geography

(dollars in thousands)	Three months ended March 31,		Change	
	2019	2020	\$	%
North America	\$ 34,364	\$ 31,035	\$ (3,329)	(9.7)%
Europe, Middle East, Africa	21,970	18,744	(3,226)	(14.7)%
Caribbean and Latin America	7,099	5,230	(1,869)	(26.3)%
Asia Pacific	4,679	5,420	741	15.8%
Total revenues by geography	\$ 68,112	\$ 60,429	\$ (7,683)	(11.3)%

Revenues decreased in all but one region with North America and Europe, Middle East, Africa contributing 83% and 82% of total revenues for the three-month periods ended March 31, 2019 and 2020, respectively. North America sales decrease was affected by decreased sales to the defense industry. Europe, Middle East, Africa sales decreased due to lower sales to a larger European customer, partially offset by Xirrus Wi-Fi revenues. Caribbean and Latin America sales decreased due to lower PMP revenues as a result of economic and currency headwinds, while Asia Pacific sales benefitted from increased PMP product sales.

Cost of revenues and gross margin

(dollars in thousands)	Three months ended March 31,		Change	
	2019	2020	\$	%
Cost of revenues	\$ 36,322	\$ 29,797	\$ (6,525)	(18.0)%
Gross margin	46.7%	50.7%		400 bps

Cost of revenues decreased \$6.5 million, or 18.0%, to \$29.8 million for the three-month period ended March 31, 2020 from \$36.3 million for the three-month period ended March 31, 2019. The decrease in cost of revenues was primarily due to decreased revenues.

Gross margin increased to 50.7% for the three-month period ended March 31, 2020 from 46.7% for the three-month period ended March 31, 2019. The increase reflects the impact of a higher-margin product mix along with key initiatives put in place focused on cost reductions, price management, and supply chain efficiency.

Operating expenses

(dollars in thousands)	Three months ended March 31,		Change	
	2019	2020	\$	%
Research and development	\$ 10,482	\$ 11,814	\$ 1,332	12.7%
Sales and marketing	10,218	10,304	86	0.8%
General and administrative	5,130	6,446	1,316	25.7%
Depreciation and amortization	1,281	1,695	414	32.3%
Total operating expenses	\$ 27,111	\$ 30,259	\$ 3,148	11.6%

Research and development

Research and development expense increased \$1.3 million, or 12.7%, to \$11.8 million for the three-month period ended March 31, 2020 from \$10.5 million for the three-month period ended March 31, 2019. As a percentage of revenues, research and development expenses increased to 19.6% in 2020 from 15.4% in 2019 over the same periods. In absolute dollars, research and development costs increased due to \$0.4 million of share-based compensation expense as well as a \$1.1 million increase in headcount costs due to our continued investment in product development to grow our business, employee-related restructuring costs of \$0.6 million for actions taken in Q1 2020, higher engineering materials expense of \$0.2 million due to timing of projects, partially offset by \$0.9 million in lower contractor and outside sourced product development services costs.

Sales and marketing

Sales and marketing expense increased \$0.1 million, or 0.8%, to \$10.3 million for the three-month period ended March 31, 2020 from \$10.2 million for the three-month period ended March 31, 2019. As a percentage of revenues, sales and marketing expense increased to 17.1% in 2020 from 15.0% in 2019 over the same period. Sales and marketing expense increased due to \$0.5 million of employee-related restructuring costs for actions taken in Q1 2020, \$0.2 million of share-based compensation expense, and \$0.1 million of higher outside contractor spend, offset by lower travel spend of \$0.4 million, lower ongoing payroll related costs of \$0.2 million, and lower marketing related spend of \$0.1 million.

General and administrative

General and administrative expense increased \$1.3 million, or 25.7%, to \$6.4 million for the three-month period ended March 31, 2020 from \$5.1 million for the three-month period ended March 31, 2019. As a percentage of revenues, general and administrative expense increased to 10.7% in 2020 from 7.5% in 2019 over the same period. General and administrative expense increased in absolute dollars due to an increase in costs due to becoming a public company in June 2019. These include \$0.8 million of directors and officers insurance premiums and Board fees, \$0.2 million of share-based compensation expense, higher accounting and tax fees of \$0.3 million, higher legal fees of \$0.2 million, and higher outside contractor fees of \$0.1 million, partially offset by lower headcount costs of \$0.2 million and the absence of Vector management fees of \$0.1 million.

Depreciation and amortization

Depreciation and amortization expense increased \$0.4 million, or 32.3%, to \$1.7 million for the three-month period ended March 31, 2020 from \$1.3 million for the three-month period ended March 31, 2019. The increase in depreciation and amortization was driven by increases related to the Xirrus acquisition completed in August 2019 composed of \$0.3 million of intangible asset amortization related to the intangibles recognized, and \$0.1 million of higher depreciation related to the assets acquired.

Interest expense

(dollars in thousands)	Three months ended March 31,		Change	
	2019	2020	\$	%
Interest expense	\$ 2,268	\$ 1,345	\$ (923)	(40.7)%

Interest expense decreased \$0.9 million, or (40.7)%, to \$1.3 million for the three-month period ended March 31, 2020 from \$2.3 million for the three-month period ended March 31, 2019. The decrease was primarily due to interest being computed on a lower principle balance as a result of paying down \$20.7 million on the term loan and \$10.0 million on the revolver in July 2019 from the proceeds from the IPO, along with a lower interest rate as a result of a reduction in LIBOR.

Other expense(income)

(dollars in thousands)	Three months ended March 31,		Change	
	2019	2020	\$	%
Other expense (income)	\$ 134	\$ (216)	\$ (350)	nm

Other expense (income) changed from an expense of \$0.1 million for the three-month period ended March 31, 2019 to income of \$0.2 million for the three-month period ended March 31, 2020, and was primarily associated with foreign currency fluctuations.

Provision for income taxes

(dollars in thousands)	Three months ended March 31,		Change	
	2019	2020	\$	%
Provision for income taxes	\$ 415	\$ 82	\$ (333)	(80.2)%
Effective income tax rate	18.2%	(10.8)%		

Our provision for income taxes decreased \$0.3 million to \$0.1 million for the three-month period ended March 31, 2020 from \$0.4 million for the three-month period ended March 31, 2019. The effective tax rates were (10.8)% and 18.2% over the same periods, respectively, and reflect the application of our expected annual tax rate to pre-tax results for each of the periods as well as discrete tax impacts that arise during the periods. Tax expense was lower for the three-month period ended March 31, 2020 compared to March 31, 2019 primarily due to lower earnings resulting from lower revenues. For the three-month period ended March 31, 2020, our effective tax rate of (10.8)% was different from the statutory rate of 21.0% primarily due to expected losses in a foreign jurisdiction for which no tax benefit will be recognized.

Liquidity and Capital Resources

As of March 31, 2020, we had a cash balance of \$24.5 million. Our primary liquidity needs are: (i) to fund normal operating expenses; (ii) to meet interest and principal requirements of our outstanding indebtedness; and (iii) to fund capital expenditures. We believe these needs will be satisfied over at least the next 12 months using cash flow generated by our operations. Our future capital requirements may vary materially from those currently planned and will depend on many factors, including our rate of revenue growth, the timing and extent of spending to support development efforts, the timing of new product introductions, market acceptance of our products and overall economic conditions. In addition, as a result of an expected decrease in revenues, delays in payment by customers, and an increase in certain costs, including transportation and logistics costs as a result of the impact of the COVID-19 pandemic, we have taken steps to reduce costs, including personnel and occupancy costs, and travel and entertainment costs, and have fully drawn down our revolving credit facility, to ensure continued sufficient liquidity. We expect to regularly assess market conditions and may take additional measures, including raising additional equity or incur additional debt if and when our board of directors determines that doing so is in our best interest.

Cash Flows

The following table sets forth summarized cash flow data for the periods indicated (in thousands):

	Three months ended March 31,	
	2019	2020
Cash provided by (used in) operating activities	\$ 3,255	\$ (791)
Cash used in investing activities	\$ (1,511)	\$ (1,544)
Cash (used in) provided by financing activities	\$ (2,375)	\$ 7,552

Cash flows from operating activities

Net cash provided by operating activities for the three-month period ended March 31, 2019 of \$3.3 million consisted primarily of net income of \$1.9 million, adjustments for depreciation and amortization and other impacts of \$2.7 million and changes in operating assets and liabilities that resulted in net cash outflows of \$1.3 million. The changes in operating assets and liabilities consisted primarily of a \$2.7 million increase in inventories as we procured additional inventory of new products introduced toward the end of 2018 in anticipation of increased sales and a \$3.5 million increase in accounts receivable due to increased sales in the quarter, partially offset by increased payables and liabilities including \$1.8 million increase in accounts payable, \$1.5 million increase in accrued liabilities and \$1.4 million of increased in accrued employee compensation.

Net cash used in operating activities for the three-month period ended March 31, 2020 of \$0.8 million consisted primarily of net loss of \$0.8 million, adjustments for depreciation and amortization and other impacts of \$2.3 million, share-based compensation of \$0.8 million, and changes in operating assets and liabilities that resulted in net cash outflows of \$3.1 million. The changes in operating assets and liabilities consisted primarily of a \$8.7 million decrease in inventories as we procured additional inventory towards the end of 2019 which was sold in Q1 2020 offset by a \$2.2 million increase in accounts receivable as a result of lower collections offset by lower sales in Q1 2020, an \$8.5 million decrease in accounts payable related to Q1 2020 payments of inventory purchases made in Q4 2019 and a \$1.0 million reduction in other assets and liabilities, mostly driven by a reduction in deferred revenue.

Cash flows from investing activities

Our investing activities for all periods presented consisted of capital expenditures for property, equipment and software in support of the growth of our business. For the three-month period ended March 31, 2020, our investing activities also included \$0.3 million of cash paid for the final payment of contingent consideration related to the acquisition of the Xirrus Wi-Fi business.

Cash flows from financing activities

During the three-month period ended March 31, 2019, we used net cash of \$2.4 million to repay principal due under our term loan facility.

During the three-month period ended March 31, 2020, net cash provided of \$7.6 million was primarily due to \$10.0 million in proceeds received from borrowing under our revolving credit facility, partially offset by \$2.5 million to repay principal due under our term loan facility.

Debt

As of March 31, 2020, we had \$62.8 million outstanding on our term credit facility and \$10.0 million outstanding under our revolving credit facility. The interest rate in effect as of March 31, 2020 was 6.0% on the term credit facility and 6.0% on the revolving credit facility. Refer to Note 8 – Debt, to our unaudited consolidated financial statements in Part I of this Form 10-Q for additional information. .

Contractual Obligations and Commercial Commitments

For the three-month period ended March 31, 2020, there has been a material change to the contractual obligations and commercial commitments disclosed in Item 7 of our Form 10-K for the fiscal year ended December 31, 2019 as a result of us drawing down \$10.0 million on our revolving credit facility on March 31, 2020. There are no other material changes to the other items previously disclosed and these have not been updated. Below is the updated contractual obligations and commitments table to reflect the addition of the \$10.0 million along with the associated interest:

	Payments due by period				Total
	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	
Operating lease obligations	\$ 2,781	\$ 3,881	\$ 1,859	\$ 468	\$ 8,989
Term credit facility (1)	10,000	55,250	—	—	65,250
Term credit facility interest (1)	3,960	5,977	—	—	9,937
Revolving credit facility	—	10,000	—	—	10,000
Revolving credit facility interest (2)	450	600	—	—	1,050
Purchase obligations	32,724	—	—	—	32,724
Total	\$ 49,915	\$ 75,708	\$ 1,859	\$ 468	\$ 127,950

(1) Based upon the term loan debt outstanding and interest rate in effect on December 31, 2019, of 6.85%.

(2) Based upon the revolving credit facility outstanding and interest rate in effect on March 31, 2020 of 6.0%.

Off-balance sheet arrangements

We do not engage in transactions that generate relationships with unconsolidated entities or financial partnerships, such as entities often referred to as variable interest entities, structured finance, or special purpose entities, as part of our ongoing business. Accordingly, our operating results, financial condition and cash flows are not subject to off-balance sheet risks.

Recent accounting pronouncements

We have reviewed all recently issued accounting standards and have disclosed in Note 1 in this Quarterly Report on Form 10-Q the results of our review and assessment of the impact on the standards on our consolidated financial statements.

Significant Accounting Estimates

Our consolidated financial statements and the related notes thereto are prepared in accordance with U.S. GAAP. The preparation of these financial statements requires our management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expense and related disclosures. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these judgments and estimates under different assumptions or conditions and any such differences may be material. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

During the three-month period ended March 31, 2020, there were no significant changes to our critical accounting policies and estimates. Please refer to Management's Discussion and Analysis of Financial Condition and Results of Operations contained in Part II, Item 7 of our Annual Report on Form 10-K for our fiscal year ended December 31, 2019, filed on March 23, 2020, for a more complete discussion of our critical accounting policies and estimates.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Excluding the impact of changes in interest rates and the uncertainty in the global financial markets, there have been no material changes to our market risk for the three-month period ended March 31, 2020. We conduct business in all parts of the world and are thereby exposed to market risks related to fluctuations in foreign currency exchange rates. The U.S. dollar is the single largest currency in which our revenue contracts are denominated. Any decline in the value of local foreign currencies against the U.S. dollar results in our products and services being more expensive to a potential foreign customer. In those instances where our goods and services have already been sold, receivables may be more difficult to collect. Additionally, in jurisdictions where the revenue contracts are denominated in U.S. dollars and operating expenses are incurred in the local currency, any decline in the value of the U.S. dollar will have an unfavorable impact to operating margins. We have not entered into any foreign currency hedging transactions. We do not purchase or hold any derivative financial instruments for speculation or arbitrage.

We do not hold any cash in any investment accounts and all cash is deposited with financial institutions that management believes are of high credit quality. The Company's cash consists primarily of U.S. dollar denominated demand accounts.

We had \$62.8 million of debt outstanding on our term loan facility and \$10.0 million of debt outstanding on our revolving credit facility as of March 31, 2020 under our Credit Agreement. The Company is exposed to interest rate risk from fluctuations in the US LIBOR rate that is a component of the interest rate used to calculate interest expense on the debt. Interest accrues on the outstanding principal amount of the term loan on a quarterly basis and is equal to the US LIBOR rate plus a base rate of 4.75%, 4.25% or 4.00%. The base rate is affected by our financial performance as measured by the consolidated leverage ratio. The rate on both the term loan and revolving credit facility was set to 6.0% on March 31, 2020, due to a reduction in the US LIBOR rate. A hypothetical 100-basis point increase in interest rates, and assuming a constant base rate, would result in an additional \$0.6 million in interest expense related to the external debt per year.

In July 2017, the head of the United Kingdom Financial Conduct Authority announced plans to phase out the use of LIBOR by the end of 2021. At this time, no consensus exists as to what rate or rates may become acceptable alternatives to LIBOR and we are unable to predict the effect of any such alternatives on our current interest rate.

For a discussion of current market conditions resulting from the COVID-19 pandemic, refer to Part I, Item 2, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and to Part II, Item 1A, "Risk Factors".

There have been no other material changes in our market risk since December 31, 2019.

Item 4. Controls and Procedures.

Evaluation of disclosure controls and procedures

Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities and Exchange Act of 1934, as amended, or the Exchange Act), as of March 31, 2020, the end of the period covered by this Quarterly Report on Form 10-Q. Based on such evaluation, our principal executive officer and principal financial officer have concluded that, as of such date, our disclosure controls and procedures are effective at a reasonable assurance level.

Changes in internal control

There were no changes in our internal control over financial reporting identified in management's evaluation pursuant to Rules 13a-15(e) and 15d-15(e) of the Exchange Act during the period covered by this Quarterly Report on Form 10-Q that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Effective January 1, 2020, we adopted Accounting Standards Update 2016-03, *Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments*.

Limitations on effectiveness of controls and procedures

None.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

Third parties may from time to time assert legal claims against us. Our industry is characterized by vigorous protection and pursuit of intellectual property rights. A number of companies hold a large number of patents that may cover technology necessary to our products. We have in the past received and expect to continue to receive claims by third parties that we infringe their intellectual property rights. In the opinion of management, we believe we have established adequate accruals pursuant to U.S. generally accepted accounting principles for any expected future liability with respect to pending lawsuits, claims and proceedings, where the nature and extent of any such liability can be reasonably estimated based on presently available information. However, there can be no assurance that the final resolution of any existing or future lawsuits, claims or proceedings will not have a material adverse effect on our business, results of operations, financial conditions, or cash flows.

For additional information, see Note 15 – Commitments and contingencies in the Notes to the Condensed Consolidated Financial Statements in this Quarterly Report on Form 10-Q and Part I, Item 3. Legal Proceedings in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

Item 1A. Risk Factors.

There have been no material changes to the risk factors as disclosed in Item 1A of our Form 10-K for the fiscal year ended December 31, 2019 except as discussed below. Additional risk and uncertainties, including risks and uncertainties not presently known to us, or that we currently deem immaterial, could also have an adverse effect on our business, financial condition and/or results of operations.

Our business, results of operations and financial condition may be adversely impacted by the ongoing COVID-19 pandemic

The outbreak of the novel coronavirus (COVID-19) is a rapidly developing situation around the globe that has negatively impacted and could continue to negatively impact the global economy. COVID-19 has resulted and will continue to result in significant disruption that may adversely affect our business. We have experienced and expect to continue to experience reductions in customer demand in several of our markets. We expect that social distancing measures, shutdowns globally that impact the ability of our end user customers to deploy our products, nearly complete cessation in travel impacting our sales activities, reductions in production due to mandated closures of or labor restrictions at our third-party manufacturers in Mexico, China, and Israel, as well as the reduced operational capacity of our suppliers may impact our operations in future quarters. General business uncertainty may negatively impact demand in several of our markets that could result in a reduction in expected revenues and an increase in certain costs, particularly transportation and logistics expenses. The pandemic could lead to an extended disruption of economic activity and the impact on our business, results of operations, financial condition and cash flows could be material.

Due to the ongoing impact of COVID-19, we have implemented temporary cost savings measures to reduce operating expenses to better align our cost structure to current and expected future economic conditions, and have fully drawn down our revolving credit facility, to ensure continued sufficient liquidity. We can provide no assurance that these measures will be sufficient to align our costs with our revenues, if the impact of the COVID-19 pandemic increases or is sustained over a long period of time.

The effect of COVID-19 and related events, including those described above and those not known or knowable, may adversely affect our business, results of operations, financial condition and cash flows.

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

Not applicable.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

Not applicable.

Item 6. Exhibits.

We have filed the exhibits listed on the accompanying Exhibit Index, which is incorporated herein by reference.

EXHIBIT INDEX

Exhibit Number	Description
31.1*	Certification of Chief Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Chief Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith.

SIGNATURES

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

Cambium Networks Corporation

Date: May 13, 2020

By: _____
/s/ ATUL BHATNAGAR
Atul Bhatnagar
President and Chief Executive Officer

Date: May 13, 2020

By: _____
/s/ STEPHEN CUMMING
Stephen Cumming
Chief Financial Officer

**CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Stephen Cumming, certify that:

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

Date: May 13, 2020

By: _____ /s/ STEPHEN CUMMING

**Stephen Cumming
Chief Financial Officer**

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

In connection with the Quarterly Report of Cambium Networks Corporation (the "Company") on Form 10-Q for the period ending March 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to 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.

Date: May 13, 2020

By: _____ /s/ ATUL BHATNAGAR
Atul Bhatnagar
Chief Executive Officer

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

In connection with the Quarterly Report of Cambium Networks Corporation (the "Company") on Form 10-Q for the period ending March 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to 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.

Date: May 13, 2020

By: _____ /s/ STEPHEN CUMMING
Stephen Cumming
Chief Financial Officer