UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2021

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)**	**Not Applicable** **(I.R.S. Employer Identification No.)**
c/o Cambium Networks, Inc. **3800 Golf Road, Suite 360** **Rolling Meadows, Illinois 60008** **(Address of principal executive offices, including zip code)**	**(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	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☐
Emerging growth company	☒		

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

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

As of August 4, 2021, the registrant had 26,508,999 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 quarterly report 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;
- our ability to respond to increased competition from current competitors as well as emerging companies and established companies that may enter our markets;
- 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 impact of actual or threatened health epidemics and other outbreaks;
- our ability to achieve similar growth rates of our earlier years in future periods;
- 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 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 variation or decline in our gross margin from period-to-period;
- 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;
- our inability to effectively forecast demand or manage our inventory;
- credit risk of our channel partners, which could adversely affect their ability to purchase or pay for our products;
- our ability to effectively deploy and train our direct sales force;
- our ability to manage and enhance our brand;
- unpredictability of sales and revenues due to lengthy sales cycles;
- any delay in sales or decrease in demand for our products by government agencies;
- risks associated with international sales and operations;
- the uncertainty of any economic, financial, trade and legal implications of the withdrawal of the United Kingdom from the European Union;
- the loss of key personnel or an inability to attract, retain and motivate qualified personnel;

- the availability of unlicensed RF spectrum and the possibility that such spectrum becomes unavailable through overuse or licensing;
- the impact of any acquisition of, or investments in, other businesses;
- the impact of new regulations or standards, or changes in existing regulations or standards, in the U.S. or internationally, related to our products;
- our reliance on the availability of third-party licenses;
- risks associated with international sales and operations;
- our inability to obtain intellectual property protections for our products;
- our inability to maintain an effective system of internal controls, produce timely and accurate financial statements or comply with applicable regulations;
- current or future unfavorable economic conditions, both domestically and in foreign markets; and
- our ability to manage our growth and expand our operations.

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.

PART I—FINANCIAL INFORMATION

Item 1. Financial Statements

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

	December 31, 2020	June 30, 2021
ASSETS		
Current assets		
Cash	$ 62,472	$ 51,397
Receivables, net of allowances of $919 and $777	58,114	80,638
Inventories, net	33,962	28,393
Recoverable income taxes	1,420	2,356
Prepaid expenses	4,143	3,736
Other current assets	5,024	3,975
Total current assets	165,135	170,495
Noncurrent assets		
Property and equipment, net	7,535	8,510
Software, net	3,438	4,366
Operating lease assets	5,083	4,516
Intangible assets, net	12,895	11,792
Goodwill	9,842	9,842
Deferred tax assets, net	1,537	7,155
Other noncurrent assets	288	391
TOTAL ASSETS	$ 205,753	$ 217,067
LIABILITIES AND EQUITY		
Current liabilities		
Accounts payable	$ 30,859	$ 30,092
Accrued liabilities	20,160	19,978
Employee compensation	14,911	11,323
Current portion of long-term external debt, net	29,201	12,156
Deferred revenues	6,471	6,247
Other current liabilities	6,009	6,313
Total current liabilities	107,611	86,109
Noncurrent liabilities		
Long-term external debt, net	24,957	20,507
Deferred revenues	4,448	5,084
Noncurrent operating lease liabilities	3,332	3,244
Deferred tax liabilities, net	9	9
Other noncurrent liabilities	2,009	1,936
Total liabilities	142,366	116,889
Shareholders' equity		
Share capital; $0.0001 par value; 500,000,000 shares authorized at December 31, 2020 and June 30, 2021; 26,126,672 shares issued and 26,034,526 outstanding at December 31, 2020 and 26,639,054 shares issued and 26,503,019 outstanding at June 30, 2021	3	3
Additional paid in capital	109,837	117,521
Treasury shares, at cost, 92,146 shares at December 31, 2020 and 136,035 shares at June 30, 2021	(1,090)	(3,276)
Accumulated deficit	(44,799)	(13,422)
Accumulated other comprehensive loss	(564)	(648)
Total shareholders' equity	63,387	100,178
TOTAL LIABILITIES AND EQUITY	$ 205,753	$ 217,067

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 June 30,		Six Months Ended June 30,	
	2020	2021	2020	2021
Revenues	$ 62,254	$ 92,709	$ 122,683	$ 181,224
Cost of revenues	31,782	46,617	61,579	90,962
Gross profit	30,472	46,092	61,104	90,262
Operating expenses				
Research and development	9,299	12,617	21,113	24,220
Sales and marketing	8,035	9,718	18,339	19,758
General and administrative	6,625	7,896	13,071	15,425
Depreciation and amortization	1,700	1,564	3,395	3,159
Total operating expenses	25,659	31,795	55,918	62,562
Operating income	4,813	14,297	5,186	27,700
Interest expense, net	1,525	1,316	2,870	2,456
Other (income) expense, net	(22)	79	(238)	121
Income before income taxes	3,310	12,902	2,554	25,123
(Benefit) provision for income taxes	(2)	1,385	80	(6,254)
Net income	$ 3,312	$ 11,517	$ 2,474	$ 31,377
Earnings per share				
Basic	$ 0.13	$ 0.44	$ 0.10	$ 1.20
Diluted	$ 0.13	$ 0.40	$ 0.10	$ 1.09
Weighted-average number of shares outstanding to compute net earnings per share				
Basic	25,683,289	26,365,207	25,680,234	26,241,101
Diluted	25,789,830	28,909,348	25,764,966	28,730,225
Share-based compensation included in costs and expenses:				
Cost of revenues	$ 18	$ 50	$ 35	$ 69
Research and development	422	842	790	1,359
Sales and marketing	243	539	475	834
General and administrative	257	667	451	1,246
Total share-based compensation	$ 940	$ 2,098	$ 1,751	$ 3,508

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

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2021	2020	2021
Net income	$ 3,312	$ 11,517	$ 2,474	$ 31,377
Other comprehensive loss				
Foreign currency translation adjustment	(16)	(19)	(404)	(84)
Comprehensive income	**$ 3,296**	**$ 11,498**	**$ 2,070**	**$ 31,293**

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

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

Three Months Ended June 30, 2020

	Share Capital						
	Shares	Amount	Additional paid in capital	Treasury shares	Accumulated deficit	Accumulated other comprehensive loss	Total shareholders' equity
Balance at March 31, 2020	25,680	$ 3	$ 105,584	$ (1,041)	$ (64,212)	$ (767)	$ 39,567
Net loss	—	—	—	—	3,312	—	3,312
Share-based compensation	—	—	940	—	—	—	940
Issuance of vested shares	5	—	—	—	—	—	—
Treasury shares withheld for net settlement	(1)	—	—	(7)	—	—	(7)
Foreign currency translation	—	—	—	—	—	(16)	(16)
Balance at June 30, 2020	25,684	$ 3	$ 106,524	$ (1,048)	$ (60,900)	$ (783)	$ 43,796

Six Months Ended June 30, 2020

	Share Capital						
	Shares	Amount	Additional paid in capital	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	—	—	—	—	2,474	—	2,474
Share-based compensation	—	—	1,751	—	—	—	1,751
Issuance of vested shares	20	—	—	—	—	—	—
Treasury shares withheld for net settlement	(9)	—	—	46	—	—	46
Foreign currency translation	—	—	—	—	—	(404)	(404)
Balance at June 30, 2020	25,684	$ 3	$ 106,524	$ (1,048)	$ (60,900)	$ (783)	$ 43,796

Three Months Ended June 30, 2021

	Share Capital						
	Shares	Amount	Additional paid in capital	Treasury shares	Accumulated deficit	Accumulated other comprehensive loss	Total shareholders' equity
Balance at March 31, 2021	26,299	$ 3	$ 113,067	$ (3,101)	$ (24,939)	$ (629)	$ 84,401
Net income	—	—	—	—	11,517	—	11,517
Share-based compensation	—	—	1,916	—	—	—	1,916
Issuance of ordinary shares	39	—	1,164	—	—	—	1,164
Issuance of vested shares	40	—	—	—	—	—	—
Treasury shares withheld for net settlement	(3)	—	—	(175)	—	—	(175)
Share options exercised	128	—	1,374	—	—	—	1,374
Foreign currency translation	—	—	—	—	—	(19)	(19)
Balance at June 30, 2021	26,503	$ 3	$ 117,521	$ (3,276)	$ (13,422)	$ (648)	$ 100,178

Six Months Ended June 30, 2021

	Share Capital						
	Shares	Amount	Additional paid in capital	Treasury shares	Accumulated deficit	Accumulated other comprehensive loss	Total shareholders' equity
Balance at December 31, 2020	26,035	$ 3	$ 109,837	$ (1,090)	$ (44,799)	$ (564)	$ 63,387
Net income	—	—	—	—	31,377	—	31,377
Share-based compensation	—	—	3,175	—	—	—	3,175
Issuance of ordinary shares	39	—	1,164	—	—	—	1,164
Issuance of vested shares	161	—	—	—	—	—	—
Treasury shares withheld for net settlement	(44)	—	—	(2,186)	—	—	(2,186)
Share options exercised	312	—	3,345	—	—	—	3,345
Foreign currency translation	—	—	—	—	—	(84)	(84)
Balance at June 30, 2021	26,503	$ 3	$ 117,521	$ (3,276)	$ (13,422)	$ (648)	$ 100,178

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)

	Six Months ended June 30,	
	2020	2021
Cash flows from operating activities:		
Net income	$ 2,474	$ 31,377
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	1,913	1,697
Amortization of software and intangible assets	1,785	1,774
Amortization of debt issuance costs	273	577
Share-based compensation	1,751	3,508
Deferred income taxes	(250)	(5,619)
Provision for inventory excess and obsolescence	1,052	(769)
Other	138	(17)
Change in assets and liabilities:		
Receivables	9,467	(22,581)
Inventories	10,411	6,338
Prepaid expenses	1,506	401
Accounts payable	(4,981)	(1,482)
Accrued employee compensation	2,398	(3,438)
Accrued liabilities	(430)	1,004
Other assets and liabilities	(2,073)	(194)
Net cash provided by operating activities	25,434	12,576
Cash flows from investing activities:		
Purchase of property and equipment	(1,542)	(1,964)
Purchase of software	(436)	(1,599)
Cash paid for acquisition	(334)	—
Net cash used in investing activities	(2,312)	(3,563)
Cash flows from financing activities:		
Proceeds from issuance of revolver debt	10,000	—
Repayment of term loan	(5,000)	(22,072)
Repayment of revolver debt	(10,000)	—
Issuance of ordinary shares	—	833
Taxes paid from shares withheld	46	(2,185)
Proceeds from share option exercises	—	3,345
Net cash used in financing activities	(4,954)	(20,079)
Effect of exchange rate on cash	(70)	(9)
Net increase (decrease) in cash	18,098	(11,075)
Cash, beginning of period	19,346	62,472
Cash, end of period	$ 37,444	$ 51,397
Supplemental disclosure of cash flow information:		
Income taxes paid	$ 421	$ 379
Interest paid	$ 2,213	$ 1,404

The accompanying notes are an integral part of these 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. in an acquisition funded by investment funds affiliated with Vector Capital. Cambium Networks became the renamed entity subsequent to the acquisition.

Cambium Networks Corporation and its wholly owned subsidiaries provide fixed wireless broadband and Wi-Fi networking infrastructure solutions that work for businesses, communities and cities worldwide. Cambium Networks' radios are deployed to connect people, places and things with a unified wireless fabric that spans multiple standards and frequencies of fixed wireless and Wi-Fi, all managed centrally via the cloud. The Company's solutions are deployed in networks by service providers, enterprise, industrial and government connectivity solutions in urban, suburban and rural environments.

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 June 30, 2021, and for the three-month and six-month periods ended June 30, 2020 and 2021, 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 June 30, 2021 and results of operations for the three-month and six-month period ended June 30, 2020 and 2021 and cash flows for the six-month periods ended June 30, 2020 and 2021. The condensed consolidated balance sheet as of December 31, 2020 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, 2020 included in the Company's annual report on Form 10-K and filed with the SEC on March 1, 2021. The results of operations for the three-month and six-month periods ended June 30, 2021 are not necessarily indicative of the operating results to be expected for the full year.

The Company has reclassified certain prior period amounts in the condensed consolidated statement of cash flows to conform to the current period's presentation. Specifically, within the condensed consolidated statements of cash flows, the provision for inventory excess and obsolescence has been reclassified from "Other" to "Provision for inventory excess and obsolescence" and prepaid expenss has been reclassified from "Other assets and liabilities" to "Prepaid expenses". This change in classification does not affect previously reported cash flows from operating activities in the condensed consolidated statements of cash flows.

Update to Significant Accounting Policies

There have been no material changes to the Company's signifiant accounting policies disclosed in the 2020 Form 10-K, Part II, Item 8.

Recently adopted accounting pronouncements

In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reportin*g. 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 that is expected to be discontinued. The guidance is effective for all entities as of March 12, 2020 through December 31, 2022, when the reference rate replacement activity is expected to be completed. The adoption of ASU 2020-04 will not have an impact on the condensed consolidated financial statements until the debt agreement is modified to no longer reference LIBOR, and is not expected to be material.

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 removed 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 amended other aspects of the guidance to help simplify and promote consistent application of GAAP. The Company adopted this ASU effective January 1, 2021 on a prospective basis. The adoption of ASU 2019-12 did not have a material impact on the condensed consolidated financial statements.

Note 2. 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 $55.3 million and $33.2 million as of December 31, 2020 and June 30, 2021, respectively.

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

Note 3. Balance sheet components

Inventories, net

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

	December 31, 2020	June 30, 2021 (unaudited)
Finished goods	$ 35,241	$ 30,073
Raw materials	4,576	3,406
Gross inventory	39,817	33,479
Less: Excess and obsolete provision	(5,855)	(5,086)
Inventories, net	$ 33,962	$ 28,393

Accrued liabilities

Accrued liabilities consisted of the following (in thousands):

	December 31, 2020	June 30, 2021 (unaudited)
Accrued goods and services	$ 7,937	$ 8,347
Accrued inventory purchases	4,830	5,094
Accrued customer rebates	7,380	6,522
Other	13	15
Accrued liabilities	$ 20,160	$ 19,978

Accrued warranty

Provisions for warranty claims are primarily related to our hardware products and are recorded at the time products are sold. The change to accrued warranty was as follows (in thousands):

	Year ended December 31, 2020	Six months ended June 30, 2021 (unaudited)
Beginning balance	$ 706	$ 1,714
Warranties assumed due to acquisition	1,174	—
Fulfillment of assumed acquisition warranty	(482)	(178)
Provision increase, net	316	303
Ending balance	$ 1,714	$ 1,839

At June 30, 2021, $1.3 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 4. Property and equipment

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

	Useful Life	December 31, 2020	June 30, 2021 (unaudited)
Equipment and tooling	3 to 5 years	$ 24,367	$ 26,895
Computer equipment	3 to 5 years	3,137	3,213
Furniture and fixtures	10 years	745	748
Leasehold improvements	2 to 3 years	282	282
Total cost		28,531	31,138
Less: Accumulated depreciation		(20,996)	(22,628)
Property and equipment, net		$ 7,535	$ 8,510

Total depreciation expense was $0.9 million and $0.8 million for the three-month periods ended June 30, 2020 and 2021, respectively, and $1.9 million and $1.7 million for the six-month periods ended June 30, 2020 and 2021, respectively.

Note 5. Software

Software consisted of the following (in thousands):

	Useful Life	December 31, 2020 Gross carrying amount	December 31, 2020 Accumulated amortization	December 31, 2020 Net balance	June 30, 2021 Gross carrying amount (unaudited)	June 30, 2021 Accumulated amortization (unaudited)	June 30, 2021 Net balance (unaudited)
Acquired and Software for internal use	3 to7 years	$ 15,680	$ (14,214)	$ 1,466	$ 15,693	$ (14,569)	$ 1,124
Software marketed for external sale	3 years	3,411	(1,439)	1,972	4,993	(1,751)	3,242
Total		$ 19,091	$ (15,653)	$ 3,438	$ 20,686	$ (16,320)	$ 4,366

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 $0.2 million and $0.2 million for the three-month periods ended June 30, 2020 and 2021, respectively, and $0.4 million and $0.4 million for the six-month periods ended June 30, 2020 and 2021, 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 June 30, 2020 and 2021, respectively, and $0.3 million and $0.3 million for the six-month periods ended June 30, 2020 and 2021and is included in cost of revenues on the condensed consolidated statements of operations.

Based on capitalized software assets at June 30, 2021, 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
2021 (July - December)	$ 330	$ 533	$ 863
2022	417	1,146	1,563
2023	167	1,032	1,199
2024	68	509	577
2025	68	22	90
Thereafter	74	—	74
Total amortization	$ 1,124	$ 3,242	$ 4,366

Note 6. 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 15 – Segment information, 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.

There was no change in the carrying amount of goodwill during the six-month period ended June 30, 2021 (unaudited).

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 assessments 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 impact of 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 assessments for the quarter did not indicate the existence of impairment indicators. Based on the operating results for the six-month period ended June 30, 2021 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 June 30, 2021 that would necessitate an interim impairment assessment.

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):

		December 31, 2020			June 30, 2021		
	Useful Life	Gross carrying amount	Accumulated amortization	Net balance	Gross carrying amount (unaudited)	Accumulated amortization (unaudited)	Net balance (unaudited)
Unpatented technology	3 - 7 years	$ 14,660	$ (14,375)	$ 285	$ 14,660	$ (14,465)	$ 195
Customer relationships	5 - 18 years	19,300	(7,128)	12,172	19,300	(7,877)	11,423
Patents	7 years	11,300	(11,300)	—	11,300	(11,300)	—
Trademarks	10 years	5,270	(4,832)	438	5,270	(5,096)	174
Total		$ 50,530	$ (37,635)	$ 12,895	$ 50,530	$ (38,738)	$ 11,792

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 $0.5 million and $0.5 million for the three-month periods ended June 30, 2020 and 2021, respectively, and $1.1 million and $1.1 million for the six-month periods ended June 30, 2020 and 2021.

Based on capitalized intangible assets as of June 30, 2021, estimated amortization expense amounts in future fiscal years are as follows (unaudited and in thousands):

Year ending December 31,	Amortization
2021 (July - December)	$ 1,013
2022	1,603
2023	1,498
2024	1,498
2025	1,498
Thereafter	4,682
Total amortization	$ 11,792

Note 7. Debt

As of June 30, 2021, the Company had $33.2 million outstanding under its current term loan facility and $0.0 million in borrowings under its revolving credit facility. The Company has available $10.0 million under its revolving credit facility (unaudited).

The following table reflects the current and noncurrent portions of the external debt facilities at December 31, 2020 and June 30, 2021 (in thousands):

	December 31, 2020	June 30, 2021 (unaudited)
Term loan facility	$ 55,250	$ 33,178
Less debt issuance costs	(1,092)	(515)
Total debt	54,158	32,663
Less current portion of term facility	(29,747)	(12,500)
Current portion of debt issuance costs	546	344
Total long-term external debt, net	$ 24,957	$ 20,507

On May 27, 2021, the Company paid $19.6 million related to a required repayment of principal in accordance with the excess cash flow provision of the term loan agreement based on the calculation of excess cash flow at December 31, 2020.

Secured credit agreement

Both the term loan facility and the revolving credit facility mature on December 21, 2022. The Company is currently operating under the Third Amendment ("Third Amendment") to the December 21, 2017 credit agreement (as amended and restated, the "Credit Agreement"), which was entered into on June 28, 2019. Under the Third Amendment, the Company is required to make quarterly principal payments of $2.5 million, with the remaining principal due on maturity on December 21, 2022. At June 30, 2021, the current portion of term facility includes $2.5 million of principal due June 30, 2021 and paid on July 1, 2021 and is included in Current portion of long-term debt on the condensed consolidated balance sheets.

Interest accrues on the outstanding principal amount of the term loan on a quarterly basis and is equal to a base rate of the higher of (a) 1.25% per annum or (b) the rate per annum determined by reference to the 1-, 2-, 3- or 6-month US Dollar LIBOR rate as selected by the Company, plus an applicable margin of 4.75%, 4.25%, or 4.00% as determined by the Company's performance as measured by the consolidated leverage ratio. The rate on the term loan was 5.5% at December 31, 2020 and 5.25% at June 30, 2021. In addition to paying interest on the outstanding principal under the term loan facility, the Company is required to pay a commitment fee on the unutilized commitments under the revolving credit facility, 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 June 30, 2021 is as follows (unaudited and in thousands):

Year ending December 31,	
2021 (July - December)	$ 7,500
2022	25,678
Total	$ 33,178

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 June 30, 2021, the Company was in compliance with all affirmative and negative covenants (unaudited).

Net interest expense, including bank charges and amortization of debt issuance costs on the external debt, was $1.5 million and $1.3 million for the three-month periods ended June 30, 2020 and 2021, respectively, and $2.9 million and $2.5 million for the six-month periods ended June 30, 2020 and 2021, respectively. The three-month and six-month periods ended June 30, 2021 include $0.3 million of additional amortization of debt issuance costs associated with the excess cash flow payment.

Expected Discontinuation of LIBOR

In July 2017, the United Kingdom's Financial Conduct Authority, or FCA, which regulates LIBOR, announced it will no longer compel banks to submit rates for the calculation of LIBOR after 2021. In May 2021, the FCA confirmed the 1 week and 2-month US Dollar LIBOR tenors will cease on December 31, 2021, but the remaining five US Dollar LIBOR tenors (overnight and 1, 3, 6 and 12 month) will not cease until June 30, 2023. The base interest rate on the Company's Credit Agreement may be determined by reference to the 1-, 2-, 3- or 6-month US Dollar LIBOR rate, as selected by the Company. The Credit Agreement matures on December 21, 2022, which is prior to the cessation of all tenors of the US Dollar LIBOR rate.

The Credit Agreement contemplates the discontinuation of LIBOR and provides options for the Company in such an event. The Company is evaluating the potential impact of a transition from LIBOR as an interest rate benchmark to other potential alternative reference rates. The Company will continue to actively assess the related opportunities and risks involved in this transition.

Note 8. Employee benefit plans

The Company's employee benefit plans currently consist of a retirement 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. employees that satisfy certain eligibility requirements, including requirements related to age and length of service, are eligible to participate in the Cambium Networks, Inc. 401(k) Plan. The plan is intended to qualify as a tax-qualified 401(k) plan so that contributions to the 401(k) plan, and income earned on such contributions, are not taxable to participants until withdrawn or distributed from the 401(k) plan. Under the 401(k) plan, each employee is fully vested in his or her deferred salary contributions. Employee contributions are held and invested by the plan's trustee as directed by participants. Under the Cambium Networks, Inc. 401(k) Plan, the Company matches 100% of employee contributions to the 401(k) plan up to a maximum amount of 4% of eligible wages, which matching contributions are subject to vesting in equal annual increments over two years of service. All contributions, including the Company match, are made in cash. Contributions made by the Company under the Cambium Networks, Inc. 401(k) Plan were $0.3 million and $0.2 million for the three-month periods ended June 30, 2020 and 2021, respectively, and $0.5 million and $0.8 million for the six-month periods ended June 30, 2020 and 2021, respectively.

UK plan

UK employees who satisfy certain eligibility requirements 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% of eligible compensation 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 June 30, 2020 and 2021, respectively, and $0.2 million and $0.2 million for the six-month periods ended June 30, 2020 and 2021, respectively.

Note 9. Other (income) expense, net

Net other (income) expense was $(0.0) million and $0.1 million for the three-month periods ended June 30, 2020 and 2021, respectively, and $(0.2) million and $0.1 million for the six-month periods ended June 30, 2020 and 2021, respectively, and represents foreign exchange gains and losses.

Note 10. 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 reserved for issuance 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 Vector Cambium Holdings (Cayman), L.P. ("VCH L.P.") in connection with the Company's initial public offering ("IPO") based on a price of $12.00 per share ("Recapitalization Awards"). The share reserve under the 2019 Plan is automatically increased on the first day of each fiscal year, beginning with the fiscal year ended December 31, 2020 and continuing until, and including, the fiscal year ending December 31, 2029. The number of shares added annually is 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 1, 2021, the Company registered 1,301,726 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 Recapitalization Awards were granted.

The following table summarizes changes in the number of shares available for grant under the Company's equity incentive plans during the six-month period ended June 30, 2021 (unaudited):

	Number of shares
Available for grant at December 31, 2020	832,134
Added to 2019 Share Incentive Plan	1,301,726
RSUs granted	(247,670)
Options granted	(116,035)
Shares withheld in settlement of taxes and/or exercise price	43,889
Forfeitures	19,527
Available for grant at June 30, 2021	1,833,571

Share-based compensation

The following table shows total share-based compensation expense for the three-month and six-month periods ended June 30, 2020 and 2021 (unaudited and in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2021	2020	2021
Cost of revenues	$ 18	$ 50	$ 35	$ 69
Research and development	422	842	790	1,359
Sales and marketing	243	539	475	834
General and administrative	257	667	451	1,246
Total share-based compensation expense	$ 940	$ 2,098	$ 1,751	$ 3,508

For the three-month and six-month periods ended June 30, 2020, the Company recorded share-based compensation expense of $0.0 million and $0.0 million, respectively, and for the three-month and six-month periods ended June 30, 2021, the Company recorded share-based compensation expense of $0.2 million and $0.3 million, respectively, related to the Company's employee share purchase plan.

For the three-month period ended June 30, 2020 and 2021, the Company recorded corresponding income tax benefits of $0.2 million and $1.1 million, respectively, and for the six-month period ended June 30, 2020 and 2021, the Company recorded corresponding tax benefits of $0.3 million and $2.4 million, respectively.

As of June 30, 2021, the Company estimates the pre-tax unrecognized compensation expense of $21.6 million, net of estimated forfeitures, related to all unvested share-based awards, including share options, restricted share units and restricted share awards will be recognized through the first quarter of 2025. 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 that have been reserved under the 2019 Plan.

The Company uses the Black-Scholes option pricing model to estimate the fair value of share options. The Company utilized a forfeiture rate of 5% during the six-month period ended June 30, 2021 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 six-month period ended June 30, 2021 (unaudited):

	Options	Weighted average exercise price	Weighted Average remaining contractual term (years)	Aggregate intrinsic value
Outstanding at December 31, 2020	3,164,185	$ 11.24	8.8	$ 43,793,890
Options granted	116,035	$ 42.52	—	$ —
Options exercised	(312,404)	$ 10.71	—	$ —
Options forfeited	(17,812)	$ 10.81	—	$ —
Outstanding at June 30, 2021	2,950,004	$ 12.53	8.4	$ 105,672,118
Options exercisable at June 30, 2021	929,847	$ 10.58	8.1	$ 35,120,703
Options vested and expected to vest at June 30, 2021	2,894,174	$ 12.52	8.4	$ 103,689,431

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

At June 30, 2021, the aggregate intrinsic value of options exercisable under the Company's share incentive plans was $35.1 million. The Company had 312,404 options exercised during the six-month period ended June 30, 2021.

At June 30, 2021, there was $11.0 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 first quarter of 2025.

The fair value of options granted are 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 is estimated using the following weighted-average assumptions (unaudited):

	Six Months Ended June 30,	
	2020	2021
Expected dividend yield	—	—
Risk-free interest rate	0.43%	1.14%
Weighted-average expected volatility	48.9%	50.9%
Expected term (in years)	6.5	6.5
Weighted average grant-date fair value per share of options granted	$ 3.22	$ 21.36

Restricted shares

The following is a summary of restricted shares activity for the Company's share incentive plans for the six-month period ended June 30, 2021 (unaudited):

	Units		Weighted average grant date fair value
RSU and RSA balance at December 31, 2020	519,197	$	4.89
RSUs and RSAs granted	247,670	$	42.63
RSUs and RSAs vested	(160,391)	$	4.87
RSUs and RSAs forfeited	(1,715)	$	42.52
RSU and RSA balance at June 30, 2021	604,761	$	20.25
RSUs and RSAs expected to vest at June 30, 2021	604,761	$	20.25

During the six-month period ended June 30, 2021, 247,670 RSUs were granted under the Company's 2019 Share Incentive Plan and 160,391 RSUs vested. The Company withheld 43,889 of those shares to pay the employees' portion of the minimum payroll withholding taxes.

As of June 30, 2021, there was $10.6 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 first quarter of 2025.

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, and the initial offering period of six months commenced on January 1, 2021 and ran through June 30, 2021. The purchase price of the shares is 85% of the lower of the fair market value of the Company's ordinary shares on the first trading day of the offering period and the purchase date. Upon adoption of the plan, 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 Company registered 256,730 and 260,345 additional shares on March 24, 2020 and March 1, 2021, respectively, for a total of 1,067,075 shares that may be issued under the ESPP.

For the three-month and six-month periods ended June 30, 2021, the Company recognized $0.2 million and $0.3 million, respectively, of share-based compensation expense related to the ESPP. There were 39,061 shares issued under the ESPP during the three and six-month periods ended June 30, 2021.

Note 11. Share capital - shares

The following table reflects the share capital activity (unaudited):

	Number of shares		Value (in thousands)
Balance at December 31, 2020	26,034,526	$	3
Issuance of ordinary shares	39,061		—
Issuance of vested shares	160,917		—
Share options exercised	312,404		—
Shares withheld for net settlement of shares issued	(43,889)		—
Balance at June 30, 2021	26,503,019	$	3

As of June 30, 2021, no dividends have been declared or paid.

Note 12. Earnings per share

Basic net earnings per share is computed by dividing net income 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, RSAs and ESPP awards are considered to be ordinary share equivalents but are excluded from the calculation of diluted earnings per share when including them would have an anti-dilutive effect. The following table sets forth the computation of basic and diluted net earnings per share (unaudited and in thousands, except for share and per share data):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2021	2020	2021
Numerator:				
Net income	$ 3,312	$ 11,517	$ 2,474	$ 31,377
Denominator:				
Basic weighted average shares outstanding	25,683,289	26,365,207	25,680,234	26,241,101
Dilutive effect of share option awards	—	2,113,603	—	2,058,633
Dilutive effect of restricted share units and restricted share awards	106,541	408,068	84,732	412,428
Dilutive effect of employee share purchase plan awards	—	22,470	—	18,063
Diluted weighted average shares outstanding	25,789,830	28,909,348	25,764,966	28,730,225
Net earnings per share, basic	$ 0.13	$ 0.44	$ 0.10	$ 1.20
Net earnings per share, diluted	$ 0.13	$ 0.40	$ 0.10	$ 1.09

Note 13. Income taxes

The Company's provision for income taxes is based upon estimated annual tax rate for the year applied to federal, state and foreign income. The Company recorded a tax benefit of $(0.0) million and a provision of $1.4 million for the three-month periods ended June 30, 2020 and 2021, with an effective tax rate of (0.1)% and 10.7%, respectively. In the three-month period ended June 30, 2020, the effective tax rate of (0.1)% was primarily due to a partial release of a valuation allowance against the loss carryforwards in the Company's UK entity. For the three-month period ended June 30, 2021, the effective tax rate of 10.7% did not benefit from the release of a valuation allowance, as all of the remaining valuation allowance on the UK NOL was released in the first quarter of 2021. For the three-month period ended June 30, 2021, the Company's effective tax rate of 10.7% was different from the statutory rate of 21.0% primarily due to tax benefits arising on employee restricted share vesting and option exercises.

In the six-month periods ended June 30, 2020 and 2021, the Company recorded a provision for income taxes of $0.1 million and a tax benefit of $(6.3) million, with an effective tax rate of 3.1% and (24.9)%, respectively. The change in the effective tax rate from 3.1% to (24.9)% was primarily due to the release of a valuation allowance against the loss carryforwards in the Company's UK entity and tax benefits arising on employee restricted share vesting and option exercises. For the six-month period ended June 30, 2021, the Company's effective tax rate of (24.9)% was different from the statutory rate of 21.0% primarily due to the release of a valuation allowance against the loss carryforwards in the Company's UK entity resulting in recognition of a tax benefit, and tax benefits arising on employee restricted share vesting and option exercises.

The Company reviews the likelihood that it will realize the benefit of its deferred tax assets and, therefore, the need for a valuation allowance on a quarterly basis. It established a valuation allowance on all of its net deferred tax assets of its UK entity at June 30, 2019, given that the Company was in a 12-quarter cumulative loss position. The Company had continued to carry the valuation allowance through 2019, and during 2020 through the period ended December 31, 2020, due to a continuing 12-quarter cumulative loss position.

In the first quarter of 2021, management concluded that all of the valuation allowance on the Company's UK entity's deferred tax assets was no longer needed. This is primarily due to a 12-quarter cumulative income through the first quarter of 2021 and the forecast of future taxable income. As of June 30, 2021, based on the evaluation of positive and negative evidence, the Company believes it is more likely than not that the net deferred tax assets will be realized by its UK entity. Accordingly, management has recognized, and continues to recognize a non-recurring tax benefit of $7.7 million related to the valuation allowance reversal. As of June 30, 2021, the Company continued to maintain a valuation allowance of $0.7 million for state research and development tax credit benefits in the state of California. Such assessment may change in the future as further evidence becomes available.

On June 10, 2021, a new tax law became effective in the UK. The new tax law introduced certain tax changes in the UK, including a higher rate of 25% beginning April 1, 2023, and a 30% first year bonus depreciation on qualifying capital expenditures beginning April 1, 2021. The Company has revalued certain longer termed deferred assets at the higher future tax rate of 25% based on the expected reversal date of those assets. In addition, the Company initiated utilization of the 30% bonus first year depreciation on fixed assets placed into service beginning on April 1, 2021. The impact of the tax changes was not significant for the six-month period ended June 30, 2021, though the impact will become more significant when the current tax rate changes from the current rate of 19% to 25% beginning on April 1, 2023.

Note 14. 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 customers 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. 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. The Company records accruals for loss contingencies to the extent that it concludes it is probable that a liability has been incurred and the amount of the related loss can be reasonably estimated. The Company evaluates, on a regular basis, developments in legal proceedings and other matters that could cause a change in amounts recorded. Due to the inherent uncertainty involving legal matters, the ultimate resolution could differ from amounts recorded. There is no pending or threatened legal proceedings to which the Company is a party, that in the Company's opinion, is likely to have a material adverse effect on its financial condition or results of operations.

Note 15. Segment information

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.

Note 16. 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, extended warranty on hardware products and subscription services. Substantially all products are sold through distributors and other channel partners, such as resellers and systems integrators.

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.

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. 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 co-operative 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 essential embedded software is recognized when control of the asset is tranferred, which is typically at the time of shipment. Revenue from perpetual license software 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. Revenue from software subscriptions is recognized ratably over the term in which the services are provided and the performance obligation is satisfied.

The Company enters into revenue arrangements that may consist of multiple performance obligations, such as hardware products 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 simlar 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.

Disaggregation of revenues

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

	Three Months Ended June 30,				Six Months Ended June 30,			
	2020		2021		2020		2021	
Point-to-Multi-Point	$ 40,564	65%	$ 59,796	64%	$ 75,431	61%	$ 117,595	65%
Point-to-Point	12,602	20%	14,066	15%	25,712	21%	31,542	17%
Wi-Fi	7,640	12%	18,297	20%	19,121	16%	30,420	17%
Other	1,448	3%	550	1%	2,419	2%	1,667	1%
Total Revenues	$ 62,254	100%	$ 92,709	100%	$ 122,683	100%	$ 181,224	100%

The Company’s products are predominately distributed through a third-party logistics provider with facilities 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 June 30,				Six Months Ended June 30,			
	2020		2021		2020		2021	
North America	$ 32,454	52%	$ 49,346	53%	$ 63,489	52%	$ 103,541	57%
Europe, Middle East and Africa	20,424	33%	24,943	27%	39,168	32%	43,633	24%
Caribbean and Latin America	4,653	7%	12,152	13%	9,883	8%	22,667	13%
Asia Pacific	4,723	8%	6,268	7%	10,143	8%	11,383	6%
Total Revenues	$ 62,254	100%	$ 92,709	100%	$ 122,683	100%	$ 181,224	100%

Contract balances

The following table summarizes contract balances as of December 31, 2020 and June 30, 2021 (in thousands):

	December 31, 2020	June 30, 2021
		(unaudited)
Trade accounts receivable, net of allowance for credit losses	$ 56,798	$ 80,212
Deferred revenue - current	6,471	6,247
Deferred revenue - noncurrent	4,448	5,084
Refund liability	$ 2,416	$ 2,923

Deferred revenue consists of amounts due or received from customers in advance of the Company satisfying performance obligations under contractual arrangements. 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.

Receivables and concentration of credit risk

Trade accounts receivable represents amounts for which the Company has an unconditional right to payment. Amounts are in accordance with contractual terms and are recorded at face amount less an allowance for credit losses. 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.

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 two customers representing more than 10% of trade receivables at December 31, 2020 and two customers representing more than 10% of trade receivables at June 30, 2021.

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, 2020, deferred revenue (current and noncurrent) of $10.9 million represents the Company’s remaining performance obligations, of which $6.5 million is expected to be recognized within one year, with the remainder to be recognized thereafter. As of June 30, 2021, deferred revenue (current and noncurrent) of $11.3 million represents the Company’s remaining performance obligations, of which $6.2 million is expected to be recognized within one year, with the remainder to be recognized thereafter (unaudited).

Revenue recognized during the three and six-month periods ended June 30, 2021 which was previously included in deferred revenues as of December 31, 2020 was $1.9 million and $3.6 million, respectively, compared to $2.1 million and $4.8 million of revenue recognized during the three and six-month periods ended June 30, 2020, respectively, which was previously included in deferred revenues as of December 31, 2019.

Cost to obtain a contract

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

Note 17. Leases

Right-of-use 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 lease, 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 (unaudited and in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2021	2020	2021
Operating lease cost	$ 648	$ 687	$ 1,292	$ 1,351
Short-term lease cost	122	68	149	140
Variable lease costs	106	106	215	229
Total lease expense	$ 876	$ 861	$ 1,656	$ 1,720

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

	Balance Sheet Caption	December 31, 2020	June 30, 2021 (unaudited)
Operating leases:			
Operating lease assets	Operating lease assets	$ 5,083	$ 4,516
Current lease liabilities	Other current liabilities	$ 2,167	$ 1,743
Noncurrent lease liabilities	Noncurrent operating lease liabilities	$ 3,332	$ 3,244
Weighted average remaining lease term (years):			
Operating leases		3.35	3.39
Weighted average discount rate:			
Operating leases		8.36%	7.36%

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

	Six Months Ended June 30,	
	2020	2021
Supplemental cash flow information:		
Cash paid for amounts included in the measurement of lease liabilities	$ 1,273	$ 1,300

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

Remaining maturities on lease liabilities as of June 30, 2021 is as follows (unaudited and in thousands):

	Operating leases
2021 (July - December)	$ 1,229
2022	1,595
2023	1,474
2024	717
2025	479
Thereafter	218
Total lease payments	5,712
Less: interest	725
Present value of lease liabilities	$ 4,987

As of June 30, 2021, the Company has one lease, an office facility located in India, with the present value of the lease liability of $0.1 million, that has not yet commenced.

Note 18. 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 June 30, 2020 and 2021, the Company did not have any related party transactions.

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, 2020, filed March 1, 2021. Results for the three-month and six-month periods ended June 30, 2021 are not necessarily indicative of the results that may be expected for any period in the future.

Overview

We provide fixed wireless broadband and Wi-Fi networking infrastructure solutions for network operators, including wireless internet service providers, enterprises, mobile network operators, government agencies, communities, and cities worldwide. Our scalable, reliable, and high-performance solutions create a purpose-built wireless network deployed indoors and outdoors that connects people, places and things with a unified wireless fabric that spans multiple standards and frequencies of fixed wireless and Wi-Fi, all managed centrally via the cloud. Our multi-gigabit wireless fabric offers a compelling value proposition to traditional fiber and alternative wireless solutions mobile infrastructure.

Our wireless fabric includes intelligent radios, smart antennas, radio frequency, or RF, algorithms, wireless-aware switches and our on-premises or cloud-based network management software. 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". The intelligent edge offers network operators increased performance, visibility, control, and management, as well as the ability to efficiently transfer large amounts of data back to enterprise data centers for fast and efficient analysis and decision-making even in conditions characterized by a high degree of interfering signals generated both within the network or from outside sources, which we refer to as noise. Our products support licensed and unlicensed spectrum, tailored for many frequency bands. We provide deep technical and operational expertise based on years of deploying networks, resulting in ease of use of our products, and all Cambium Networks solutions are backed by our global organization that provides 24/7 support services tailored to meet the business needs of our end users.

We were formed in 2011 when Cambium Networks acquired the Point-to-Point ("PTP") and Point-to-Multi-Point ("PMP") businesses from Motorola Solutions. Prior to the acquisition, Motorola Solutions had invested over a decade in developing the technology and intellectual property assets that formed the foundation of 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 and we 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, switch and IIoT solutions.

We offer our fixed wireless broadband and Wi-Fi solutions in three categories:

- PTP: We offer PTP solutions that are designed to operate in unlicensed spectrum from 220 MHz to 5.9 GHz and in licensed spectrum from 6-38 and 71-86 GHz. In addition, our PTP 700 operates in NATO Band IV from 4.4-5.9 GHz, as well as in the 7 GHz and 8 GHz bands, and meets stringent federal operating, performance and security standards. 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. In addition to dedicated point-to-point platforms, as technology has evolved, solutions have developed that while principally supporting point-to-multi-point architectures, also support point-to-point applications, including the recently introduced 60 GHz cnWave v3000 Client Node and the ePMP Force 425. Revenues from these products are included in the PMP product category in our revenues by product category reporting, as that is their primary application.
- 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. The PMP 450 product line also supports the FCC's Citizen Broadband Radio Service, or CBRS. The FCC completed the auction of CBRS Priority Access Licenses, or PAL, in the third quarter of 2020, complementing the existing availability of General Authorized Access, or GAA, licenses. Network operators are adopting the PMP 450 solution to exercise both PAL and GAA licenses. 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. cnRanger, our Fixed LTE solution, operated in the 2 GHz (Bands 38, 40, 41) and 3 GHz (Bands 42, 43, 48). Like the PMP 450 platform, the 3 GHz cnRanger solution supports the CRBS service, while the 2 GHz bands support the FCC's Educational Broadband Service, or EBS, classification. cnReach products enable 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. In the fourth quarter of 2020, we began shipping our 60 GHz solution, cnWave, which enables Gbps networking using the 60 GHz band and includes Facebook Terragraph technology.

- Wi-Fi: Our Wi-Fi portfolio includes our cnPilot cloud-managed Wi-Fi solutions, our cnMatrix cloud-managed wireless-aware switching solution, our Xirrus Wi-Fi solutions, and our Wi-Fi 6 portfolio of Wi-Fi 6 access points which support both cnMaestro and Xirrus XMS management. cnPilot is for indoor and outdoor enterprise, small business and home applications and offers a range of Wi-Fi 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. In June 2020, we introduced our first Wi-Fi 6 access point, the XV3-8, which supports both cnPilot and Xirrus solutions. Additional Wi-Fi 6 access points are under development to meet diverse user cases. In the first quarter of 2021, we introduced and began shipping the cnMatrix TX 2020R-P. The TX 2020R-P is the first of a series of switches designed specifically to support PMP and PTP fixed wireless broadband networks, incorporating the cnMatrix enterprise class feature set and incorporating additional features and services pertinent to network operators deploying fixed wireless broadband networks. The TX 2012R-P was introduced in April of 2021 and is the second platform in the TX series.

We generate a substantial majority of our sales through our global channel distribution network, including, as of June 30, 2021, approximately 175 distributors that we sell to directly, together with over 10,100 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, who 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.

Trends impacting our business

COVID-19

Although the outbreak of COVID-19 has resulted and is likely to continue to result in disruption to our business and operations as well as the operations of our customers and suppliers, our markets continue to improve as the need for additional connectivity grows to meet the needs of a remote workforce and remote education. We continue to experience increases in customer demand, as a result of strong demand for PMP products as the need for connectivity continues to grow, and as schools, businesses, and enterprises continue to operate remotely. We also continue to experience increased PTP revenues as a result of improved federal business and an increase in demand from service providers deploying PMP networks. In addition, we continue to see a recovery in enterprise Wi-Fi solutions driven by improved field deployments and the transition to Wi-Fi 6 solutions.

However, we expect that continuing shutdowns globally that impact the ability of our end user customers to deploy our products, continued restrictions on travel impacting our sales activities, and general business uncertainty will continue to negatively impact demand in several of our markets.

We are focused on making sure our employees are safe and continue to operate with a substantial portion of our workforce working from home. We have allowed limited opening of our offices, but continue to have extended remote working and will continue to monitor conditions for extending this further. We continue to allow select travel to meet customer needs and are beginning to increase our business travel to customers. While we have largely recovered from the impact of COVID-19, the extent of the continued 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, during 2020, we implemented several initiatives to conserve cash and optimize profitability, including limiting discretionary spending, temporarily reducing personnel costs, eliminating non-essential travel, delaying or reducing hiring activities, and deferring certain discretionary capital expenditures. In 2021, we have and will continue to enforce several of these initiatives to conserve cash and optimize profitability.

Component shortages and increased freight costs

We remain constrained by the global component part shortages, particularly the shortage in available semiconductor chipsets and related components, as the global integrated circuit supply is under pressure as demand surpasses supply capacity, causing foundries to allocate existing supply among their customers. These supply constraints are occurring at a time of increasing revenue for us, further exacerbating the supply constraint. As a result, we continue to experience increased lead times for the supply of some of our products. In particular, semiconductor chips and merchant silicon are currently in high demand with limited supply, which is resulting in significantly longer than usual lead times for these components. Due to global demand, foundries are running short of capacity, and we are seeing allocations happening in the active semiconductor related part supply. We have encountered, and are likely to continue to encounter, shortages and delays in obtaining these or other components, and this could have a material adverse effect on our ability to meet customer orders. In addition, such shortages or delays could result in increased component and delivery costs. We have also experienced price increases in base commodities, impacting component pricing generally and in particular for electromechanical commodities.

Logistics challenges remain as well, as container shortages in China continue to lengthen availability times of containers and carriage, resulting in increases in relevant freight costs, all at a time when demand across many of our product lines has increased. We are also experiencing increasing rates, resulting in increased use of expedited freight modes due to supply shortages.

Digital transformation and new product introductions

We continue to experience increases in product sales as enterprises and governments look to digital transformation to improve operations by harnessing new technologies, software and applications. Enterprises seek to gain analytics and improve security and risk, while governments seek to connect more of the unconnected, including people, places (such as schools and government buildings) and things (such as meters, valves, doors, cameras), as well as to enable digital education, digital economy and digital currency. Each of these digital transformation objectives are underpinned by the need for increased connectivity, as employees, customers and others must be able to access the enterprise network securely from anywhere. As a result, we are seeing increases in sales in connection with our wireless broadband solutions for customers accessing the CBRS band where we have benefitted from investments we have made over the past few years in fixed wireless infrastructure technologies in such areas as PMP, including CBRS-compatible products in the U.S. We have also seen increases in revenue from our new opportunities such as gigabit wireless solutions with our 60 GHz cnWave millimeter wave products, our new enterprise Wi-Fi 6, and cloud-enabled wireless switching products which enable higher speed connectivity (gigabits per second) and can be very rapidly deployed with a lot of flexibility to keep pace with the network demand these digital transformations are presenting. In the U.S., the first phase of the Rural Digital Opportunity Fund, or RDOF, launched by the Federal Communications Commission, or FCC, is expected to accelerate the provision of high-speed broadband service to millions of underserved communities in the U.S. over the next ten years, as well as the anticipated Infrastructure Investment and Jobs Act currently being considered.

International trade

A substantial portion of our Wi-Fi products are manufactured in China, and we continue to monitor tensions between the U.S. and China and their potential impact on our ability to produce and ship our products. We have continued to incur costs related to increased tariffs for China-manufactured goods, and should tensions escalate, our ability to manufacture our products in China could be affected, causing disruptions in our supply chain, and requiring us to seek other sources of supply.

Financial results for the three-month period ended June 30, 2021

- Total revenue was $92.7 million, an increase of 48.9% year-over-year
- Gross margin was 49.7%
- Total costs of revenues and operating expenses were $78.4 million
- Operating income was $14.3 million
- Net income was $11.5 million

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, extended warranty on hardware products and subscription services. 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 recognize subscription services revenue ratably over the term in which services are provided and our performance obligation is satisfied. We provide a standard warranty on our hardware 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.

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, Israel and Taiwan. 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. Cost of revenues also includes share-based compensation expense and the amortization of capitalized development costs on software marketed for sale.

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, or 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 personnel costs, such as salaries, sales commissions, benefits, bonuses and 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, which is included in cost of revenues. 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. Although research and development expenses decreased in 2020 related to lower contractor spend and travel as a result of restrictions due to the COVID-19 pandemic, as these restrictions are lifted, we expect research and development expense to begin to increase 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. Although selling and marketing expenses decreased in 2020 related to lower payroll related costs as a result of our announced restructurings and reduced travel and marketing related spending as a result of restrictions due to the COVID-19 pandemic, we expect sales and marketing expense to begin to increase as these restrictions are lifted and we increase the size of our sales, marketing, service, and product line management organization in support of our growth, 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, insurance, 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 and to support our growth.

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 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 June 30, 2020	Three months ended June 30, 2021	Six months ended June 30, 2020	Six months ended June 30, 2021
Statements of Operations Data:				
Revenues	$ 62,254	$ 92,709	$ 122,683	$ 181,224
Cost of revenues	31,782	46,617	61,579	90,962
Gross profit	30,472	46,092	61,104	90,262
Operating expenses				
Research and development	9,299	12,617	21,113	24,220
Sales and marketing	8,035	9,718	18,339	19,758
General and administrative	6,625	7,896	13,071	15,425
Depreciation and amortization	1,700	1,564	3,395	3,159
Total operating expenses	25,659	31,795	55,918	62,562
Operating income	4,813	14,297	5,186	27,700
Interest expense, net	1,525	1,316	2,870	2,456
Other (income) expense, net	(22)	79	(238)	121
Income before income taxes	3,310	12,902	2,554	25,123
(Benefit) provision for income taxes	(2)	1,385	80	(6,254)
Net income	**$ 3,312**	**$ 11,517**	**$ 2,474**	**$ 31,377**

	Three months ended June 30, 2020	Three months ended June 30, 2021	Six months ended June 30, 2020	Six months ended June 30, 2021
Percentage of Revenues:				
Revenues	100.0%	100.0%	100.0%	100.0%
Cost of revenues	51.1%	50.3%	50.2%	50.2%
Gross margin	48.9%	49.7%	49.8%	49.8%
Operating expenses				
Research and development	14.9%	13.6%	17.2%	13.4%
Sales and marketing	12.9%	10.5%	14.9%	10.9%
General and administrative	10.6%	8.5%	10.7%	8.5%
Depreciation and amortization	2.7%	1.7%	2.8%	1.7%
Total operating expenses	41.1%	34.3%	45.6%	34.5%
Operating income	7.8%	15.4%	4.2%	15.3%
Interest expense, net	2.4%	1.4%	2.1%	1.4%
Other (income) expense, net	(0.0)%	0.1%	(0.2)%	0.1%
Income before income taxes	5.4%	13.9%	2.3%	13.8%
(Benefit) provision for income taxes	(0.0)%	1.5%	0.1%	(3.5)%
Net income	5.4%	12.4%	2.2%	17.3%

Comparison of three-month period ended June 30, 2020 to the three-month period ended June 30, 2021

Revenues

	Three months ended June 30,		Change	
(dollars in thousands)	**2020**	**2021**	**$**	**%**
Revenues	$ 62,254	$ 92,709	$ 30,455	48.9%

Revenues increased $30.4 million, or 48.9%, to $92.7 million for the three-month period ended March 31, 2021 from $62.3 million for the three-month period ended March 31, 2020, with a significant increase coming from our point-to-multi-point and Wi-Fi product categories. Both product categories also benefitted from increased demand for new product introductions, such as our 60 GHz PMP products and our Wi-Fi 6 products. Our revenues continue to benefit from the increase in the number of channel partners, which consists of over 10,100 channel partners as of June 30, 2021.

Revenues by product category

	Three months ended June 30,		Change	
(dollars in thousands)	**2020**	**2021**	**$**	**%**
Point-to-Multi-Point	$ 40,564	$ 59,796	$ 19,232	47.4%
Point-to-Point	12,602	14,066	1,464	11.6%
Wi-Fi	7,640	18,297	10,657	139.5%
Other	1,448	550	(898)	(62.0)%
Total revenues by product category	$ 62,254	$ 92,709	$ 30,455	48.9%

Point-to-Multi-Point

Our PMP revenues increased $19.2 million, or 47.4%, from the three-month period ended March 31, 2020 to 2021, and represented 65% and 64% of our total revenues over the same periods, respectively. Point-to-multi-point revenues benefitted from service providers and governments continuing to scale networks due to requests for increased capacity along with demand for new technology, including CBRS compatible products, ePMP, and 60 GHz cnWave millimeter wave products.

Point-to-Point

PTP revenues increased $1.5 million, or 11.6%, from the three-month period ended March 31, 2020 to 2021 mostly driven by increased sales in North America, Europe, Middle East, Africa and Caribbean and Latin America driven by increased demand from service providers.

Wi-Fi

Wi-Fi revenues increased $10.7 million, or 139.5%, from the three-month period ended March 31, 2020 to 2021. Wi-Fi revenues improved as a result of improving sales in education, and as the retail and hospitality industries continue recovering from the impact of the global shutdowns and other restrictions imposed by the COVID-19 pandemic along with new product momentum from Wi-Fi 6 and switching products.

Revenues by geography

	Three months ended June 30,		Change	
(dollars in thousands)	**2020**	**2021**	**$**	**%**
North America	$ 32,454	$ 49,346	$ 16,892	52.0%
Europe, Middle East, Africa	20,424	24,943	4,519	22.1%
Caribbean and Latin America	4,653	12,152	7,499	161.2%
Asia Pacific	4,723	6,268	1,545	32.7%
Total revenues by geography	$ 62,254	$ 92,709	$ 30,455	48.9%

Revenues increased across all regions from the three-month period ended June 30, 2020 to June 30, 2021. North America grew by $16.9 million, or 52.0%, and contributed 52% and 53% of total revenues for the three-month periods ended June 30, 2020 and 2021, respectively. The increase in North America revenues was primarily due to higher PMP revenues due to increased demand for

CBRS products, government grant funded programs and 60 GHz cnWave products and higher Wi-Fi revenues due to increased demand for Wi-Fi 6 and switching products. Europe, Middle East, Africa revenues grew by $4.5 million, or 22.1%, with PMP revenues increasing on sales to a large service provider in Africa and higher Wi-Fi revenues. Caribbean and Latin America revenues increased $7.5 million, or 161.2%, due to higher PMP revenues on increased demand for CBRS products in Puerto Rico and higher Wi-Fi revenues on strength of larger government projects and recovery in the hospitality industry. Asia Pacific revenues increased $1.5 million, or 32.7%, due to higher PMP revenues and higher Wi-Fi revenues and beginning to recover from business shut-downs and other restrictions due to the COVID-19 pandemic.

Cost of revenues and gross margin

	Three months ended June 30,		Change	
(dollars in thousands)	**2020**	**2021**	**$**	**%**
Cost of revenues	$ 31,782	$ 46,617	$ 14,835	46.7%
Gross margin	48.9%	49.7%		80 bps

Cost of revenues increased $14.8 million, or 46.7%, to $46.6 million for the three-month period ended June 30, 2021 from $31.8 million for the three-month period ended June 30, 2020. The increase in cost of revenues was primarily due to increased revenues, but also included higher duty and freight costs as a result of material shortages and COVID-19 surcharges including higher logistics costs to meet current quarter demand.

Gross margin increased to 49.7% for the three-month period ended June 30, 2021 from 48.9% for the three-month period ended June 30, 2020. The increase reflects an increased mix of higher margin products partially offset by higher shipping costs to meet demand and higher production costs due to component shortages.

Operating expenses

	Three months ended June 30,		Change	
(dollars in thousands)	**2020**	**2021**	**$**	**%**
Research and development	$ 9,299	$ 12,617	$ 3,318	35.7%
Sales and marketing	8,035	9,718	1,683	20.9%
General and administrative	6,625	7,896	1,271	19.2%
Depreciation and amortization	1,700	1,564	(136)	(8.0)%
Total operating expenses	$ 25,659	$ 31,795	$ 6,136	23.9%

Research and development

Research and development expense increased $3.3 million, or 35.7%, to $12.6 million for the three-month period ended June 30, 2021 from $9.3 million for the three-month period ended June 30, 2020. As a percentage of revenues, research and development expenses decreased to 13.6% in 2021 from 14.9% in 2020 over the same period. The increase in research and development expense in actual dollars was primarily due to $1.5 million higher payroll-related costs due to increased headcount and the elimination of salary reductions imposed in the second quarter of 2020, $0.7 million higher corporate bonus accrual and $0.4 million higher share-based compensation expense. The increase was also driven by $1.0 million higher contractor spend as a result of both an increase in the number of contractors as projects ramped in the second quarter of 2021 along with the second quarter of 2020 reflecting lower negotiated contractor costs amidst the uncertainty of COVID-19 and $0.3 million higher homologation and regulatory testing offset by $0.5 million higher capitalized software costs and $0.1 million lower engineering material spend due to timing of purchases.

Sales and marketing

Sales and marketing expense increased $1.7 million, or 20.9%, to $9.7 million for the three-month period ended June 30, 2021 from $8.0 million for the three-month period ended June 30, 2020. As a percentage of revenues, sales and marketing expense decreased to 10.5% in 2021 from 12.9% in 2020 over the same period. The increase in sales and marketing expense in actual dollars was primarily due to $0.9 million higher payroll related costs due to higher headcount and the elimination of salary reductions imposed in the second quarter of 2020 along with $0.3 million higher share-based compensation expense and $0.2 million higher corporate bonus accrual. The increase was also driven by $0.2 million higher marketing-related spend due to increased trade show and marketing services spend and $0.1 million higher travel-related spend as restrictions imposed by the COVID-19 pandemic are lessoning.

General and administrative

General and administrative expense increased $1.3 million, or 19.2%, to $7.9 million for the three-month period ended June 30, 2021 from $6.6 million for the three-month period ended June 30, 2020. As a percentage of revenues, general and administrative expense decreased to 8.5% in 2021 from 10.6% in 2020 over the same period. The increase in general and administrative expense in actual dollars was primarily due to $0.4 million increase in share-based compensation expense, $0.3 million higher payroll-related costs due to increased headcount and elimination of salary reductions imposed in the second quarter of 2020, and $0.2 million increase in corporate bonus accrual. The increase was also driven by $0.4 million of expenses related to the secondary offering completed in June 2021 and $0.2 million higher accounting and audit fees, offset by lower legal fees of $0.2 million.

Depreciation and amortization

Depreciation and amortization expense decreased $0.1 million, or 8.0%, to $1.6 million for the three-month period ended June 30, 2021 from $1.7 million for the three-month period ended June 30, 2020. The decrease in depreciation and amortization was mostly driven by assets becoming fully depreciated during 2020.

Interest expense, net

	Three months ended June 30,		Change	
(dollars in thousands)	**2020**	**2021**	**$**	**%**
Interest expense, net	$ 1,525	$ 1,316	$ (209)	(13.7)%

Interest expense decreased $0.2 million, or 13.7%, to $1.3 million for the three-month period ended June 30, 2021 from $1.5 million for the three-month period ended June 30, 2020. The decrease was primarily due to a reduction in the interest rate on the term loan from 6.0% to 5.25% along with lower term loan principal balance as a result of the excess cash flow payment of $19.6 million made in May 2021. Interest expense for the three-month period ended June 30, 2021 also includes an additional $0.3 million of amortization of debt issuance costs as a result of this excess cash flow payment.

Other (income) expense, net

	Three months ended June 30,		Change	
(dollars in thousands)	**2020**	**2021**	**$**	**%**
Other (income) expense, net	$ (22)	$ 79	$ 101	nm

Other (income) expense, net changed from income of $0.0 million for the three-month period ended June 30, 2020 to expense of $0.1 million for the three-month period ended June 30, 2021, primarily due to foreign currency fluctuations.

Provision (benefit) for income taxes

	Three months ended June 30,		Change	
(dollars in thousands)	**2020**	**2021**	**$**	**%**
(Benefit) provision for income taxes	$ (2)	$ 1,385	$ 1,387	nm
Effective income tax rate	(0.1)%	10.7%		

Our provision (benefit) for income taxes changed $1.4 million to a provision of $1.4 million for the three-month period ended June 30, 2021 from a benefit of $(0.0) million for the three-month period ended June 30, 2020. The effective tax rates were 10.7% and (0.1)% 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. In the three-month period ended June 30, 2020, the effective tax rate of (0.1)% was primarily due to a partial release of a valuation allowance against the loss carryforwards in our UK entity. For the three-month period ended June 30, 2020, the effective tax rate of 10.7% did not benefit from the release of a valuation allowance, as all of the remaining valuation allowance on the UK NOL was released in the first quarter of 2021. For the three-month period ended June 30, 2021, our effective tax rate of 10.7% was different from the statutory rate of 21.0% primarily due to tax benefits arising on employee restricted share vesting and option exercises.

Comparison of six-month period ended June 30, 2020 to the six-month period ended June 30, 2021

Revenues

(dollars in thousands)	Six months ended June 30, 2020	Six months ended June 30, 2021	Change $	Change %
Revenues	$ 122,683	$ 181,224	$ 58,541	47.7%

Revenues increased $58.5 million, or 47.7%, to $181.2 million for the six-month period ended June 30, 2021 from $122.7 million for the six-month period ended June, 2020, which was attributable to increased demand across all primary product categories, with a significant increase coming from our point-to-multi-point and Wi-Fi product categories. Both product categories also benefitted from increased demand for new product introductions, such as our 60 GHz PMP cnWave products and our Wi-Fi 6 products. Our revenues continue to benefit from the increase in the number of channel partners, which consists of over 10,100 channel partners as of June 30, 2021.

Revenues by product category

(dollars in thousands)	Six months ended June 30, 2020	Six months ended June 30, 2021	Change $	Change %
Point-to-Multi-Point	$ 75,431	$ 117,595	$ 42,164	55.9%
Point-to-Point	25,712	31,542	5,830	22.7%
Wi-Fi	19,121	30,420	11,299	59.1%
Other	2,419	1,667	(752)	(31.1)%
Total revenues by product category	$ 122,683	$ 181,224	$ 58,541	47.7%

Point-to-Multi-Point

Our PMP revenues increased $42.2 million, or 55.9%, from the six-month period ended June 30, 2020 to 2021, and grew from 61% to 65% of our total revenues over the same period. Point-to-multi-point revenues benefitted from service providers and governments continuing to scale networks due to requests for increased capacity along with demand for new technology, including CBRS compatible products in North America, PMP, and 60 GHz cnWave millimeter wave products.

Point-to-Point

PTP revenues increased $5.8 million, or 22.7%, from the six-month period ended June 30, 2020 to 2021 as a result of stronger sales in North America driven by increased demand from service providers along with increased sales to the federal government.

Wi-Fi

Wi-Fi revenues increased $11.3 million, or 59.1%, from the six-month period ended June 30, 2020 to 2021. Wi-Fi revenues improved as a result of improving sales in education, and as retail and hospitality industries begin recovering from the impact of the global shutdowns and other restrictions imposed by the COVID-19 pandemic, as well as strength from new product introductions, such as Wi-Fi 6.

Revenues by geography

(dollars in thousands)	Six months ended June 30, 2020	Six months ended June 30, 2021	Change $	Change %
North America	$ 63,489	$ 103,541	$ 40,052	63.1%
Europe, Middle East, Africa	39,168	43,633	4,465	11.4%
Caribbean and Latin America	9,883	22,667	12,784	129.4%
Asia Pacific	10,143	11,383	1,240	12.2%
Total revenues by geography	$ 122,683	$ 181,224	$ 58,541	47.7%

Revenues increased in all regions from the six-month period ended June 30, 2020 to June 30, 2021. North America revenues increased $40.1 million, or 63.1%, due to higher revenues for all product lines, primarily the result of higher PMP revenues due to increased demand from service providers and new product introductions. Europe, Middle East, Africa revenues increased $4.5 million, or 11.4%, with PMP revenues increasing and improved Wi-Fi revenues. Caribbean and Latin America revenues increased $12.8 million, or 129.4%, due to higher PMP revenues on increased demand for CBRS products in Puerto Rico and higher Wi-Fi revenues on strength of larger government projects. Asia Pacific revenues increased $1.2 million, or 12.2%, due to higher Wi-Fi revenues and recovery from business shut-downs and other restrictions due to the COVID-19 pandemic.

Cost of revenues and gross margin

	Six months ended June 30,		Change	
(dollars in thousands)	**2020**	**2021**	**$**	**%**
Cost of revenues	$ 61,579	$ 90,962	$ 29,383	47.7%
Gross margin	49.8%	49.8%		0 bps

Cost of revenues increased $29.4 million, or 47.7%, to $91.0 million for the six-month period ended June 30, 2021 from $61.6 million for the six-month period ended June 30, 2020. The increase in cost of revenues was primarily due to increased revenues, but also included higher freight inbound, interwarehouse transfers and duty costs as a result of material shortages and COVID-19 surcharges, higher production costs due to component shortages to meet current quarter demand, offset by favorable movement in provision for excess and obsolescence.

Gross margin remained flat at 49.8% for both the six-month period ended June 30, 2021 and 2020.

Operating expenses

	Six months ended June 30,		Change	
(dollars in thousands)	**2020**	**2021**	**$**	**%**
Research and development	$ 21,113	$ 24,220	$ 3,107	14.7%
Sales and marketing	18,339	19,758	1,419	7.7%
General and administrative	13,071	15,425	2,354	18.0%
Depreciation and amortization	3,395	3,159	(236)	(7.0)%
Total operating expenses	$ 55,918	$ 62,562	$ 6,644	11.9%

Research and development

Research and development expense increased $3.1 million, or 14.7%, to $24.2 million for the six-month period ended June 30, 2021 from $21.1 million for the six-month period ended June 30, 2020. As a percentage of revenues, research and development expenses decreased to 13.4% in 2021 from 17.2% in 2020 over the same period. The increase in research and development expense in actual dollars was primarily due to $2.0 million increase in corporate bonus accrual, $1.7 million in payroll-related costs due to higher headcount and impact of the elimination of salary reductions implemented in the second quarter of 2020, higher contractor costs of $1.2 million due to ramping of projects in 2021 and impact of negotiated lower contractor fees in 2020 due to COVID-19. These costs are offset by higher capitalized software costs of $1.2 million, restructuring costs incurred in the first quarter of 2020 of $0.6 million that did not repeat in 2021, $0.3 million higher research and development tax credit, $0.2 million of lower engineering material costs and $0.1 million lower travel-related costs due to continued restrictions on travel due to the COVID-19 pandemic.

Sales and marketing

Sales and marketing expense increased $1.4 million, or 7.7%, to $19.8 million for the six-month period ended June 30, 2021 from $18.3 million for the six-month period ended June 30, 2020. As a percentage of revenues, sales and marketing expense decreased to 10.9% in 2021 from 14.9% in 2020 over the same period. The increase in sales and marketing expense in actual dollars was primarily due to $1.3 million increase in payroll-related costs due to increased headcount and impact of the elimination of salary reductions implemented in the second quarter of 2020 along with $1.1 million higher sales incentive and corporate bonus plan accruals and $0.4 million higher share-based compensation expense, offset by $0.6 million lower travel-related spend due to reductions in non-essential travel as a result of restrictions on travel due to the COVID-19 pandemic, restructuring incurred in the first quarter of 2020 of $0.5 million that did not repeat in the first quarter of 2021, and lower outside services spend of $0.3 million.

General and administrative

General and administrative expense increased $2.3 million, or 18.0%, to $15.4 million for the six-month period ended June 30, 2021 from $13.1 million for the six-month period ended June 30, 2020. As a percentage of revenues, general and administrative expense decreased to 8.5% in 2021 from 10.7% in 2020 over the same period. The increase in general and administrative expense in actual dollars was primarily due to $0.9 million increase in corporate bonus accrual together with an increase in share-based compensation expense of $0.8 million, and an increase in payroll-related costs of $0.6 million due to increased headcount and impact of the elimination of salary reductions implemented in the second quarter of 2020, $0.4 million of costs associated with the secondary offering completed in June 2021, $0.2 million higher D&O and other insurance fees and $0.2 million higher accounting and audit fees due to increased costs of being public, offset by lower legal fees of $0.7 million, mostly related to the settlement of litigation in 2020.

Depreciation and amortization

Depreciation and amortization expense decreased $0.2 million, or 7.0%, to $3.2 million for the six-month period ended June 30, 2021 from $3.4 million for the six-month period ended June 30, 2020. The decrease in depreciation and amortization was mostly driven by assets becoming fully depreciated during 2020.

Interest expense, net

	Six months ended June 30,		Change	
(dollars in thousands)	**2020**	**2021**	**$**	**%**
Interest expense, net	$ 2,870	$ 2,456	$ (414)	(14.4)%

Interest expense decreased $0.4 million, or 14.4%, to $2.5 million for the six-month period ended June 30, 2021 from $2.9 million for the six-month period ended June 30, 2020. The decrease was primarily due to a reduction in the interest rate on the term loan from 6.0% to 5.25% along with lower term loan principal balance as a result of the excess cash flow payment made in May 2021. Interest expense for the six-months ended June 30, 2021 also includes an additional $0.3 million of amortization of debt issuance costs as a result of this excess cash flow payment.

Other expense, net

	Six months ended June 30,		Change	
(dollars in thousands)	**2020**	**2021**	**$**	**%**
Other (income) expense, net	$ (238)	$ 121	$ 359	nm

Other (income) expense, net changed from income of $0.2 million for the six-month period ended June 30, 2020 to expense of $0.1 million for the six-month period ended June 30, 2021, primarily due to foreign currency fluctuations.

Provision (benefit) for income taxes

	Six months ended June 30,		Change	
(dollars in thousands)	**2020**	**2021**	**$**	**%**
Provision (benefit) for income taxes	$ 80	$ (6,254)	$ (6,334)	nm
Effective income tax rate	3.1%	(24.9)%		

Our provision (benefit) for income taxes changed $6.3 million to a benefit of $6.2 million for the six-month period ended June 30, 2021 from a provision of $0.1 million for the six-month period ended June 30, 2020. The effective tax rates were (24.9)% and 3.1% 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. The change in the effective tax rate from 3.1% for the six-month period ended June 30, 2020 to (24.9)% for the six-month period ended June 30, 2021, was primarily due to the release of a valuation allowance against the loss carryforwards in our UK entity and tax benefits arising on employee restricted share vesting and option exercises. For the six-month period ended June 30, 2021, our effective tax rate of (24.9)% was different from the statutory rate of 21.0% primarily due to the release of a valuation allowance against the loss carryforwards in our UK entity, resulting in recognition of a tax benefit, and tax benefits arising on employee restricted share vesting and option exercises.

Liquidity and Capital Resources

As of June 30, 2021, we had a cash balance of $51.4 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 existing cash and 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. We expect to regularly assess market conditions and may take measures, including raising additional equity or incurring 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):

Cash flows from operating activities

	Six months ended June 30,	
	2020	2021
Cash provided by operating activities	$ 25,434	$ 12,576
Cash used in investing activities	$ (2,312)	$ (3,563)
Cash used in financing activities	$ (4,954)	$ (20,079)

Net cash provided by operating activities for the six-month period ended June 30, 2020 of $25.4 million consisted primarily of net income of $2.5 million, adjustments for depreciation and amortization and other impacts of $4.9 million, share-based compensation of $1.8 million, and changes in operating assets and liabilities that resulted in net cash provided of $16.3 million. The changes in operating assets and liabilities consisted primarily of a $10.4 million decrease in inventories as we procured additional inventory towards the end of 2019 which was sold in 2020 along with a $9.5 million decrease in accounts receivable as a result of stronger collections and lower sales in 2020 and $2.4 million increase in accrued employee compensation, offset by a $5.0 million decrease in accounts payable related to 2020 payments of inventory purchases made in the fourth quarter of 2019 and lower inventory purchases in 2020 and a $1.0 million reduction in other assets and liabilities, mostly driven by a reduction in deferred revenue.

Net cash provided by operating activities for the six-month period ended June 30, 2021 of $12.6 million consisted primarily of net income of $31.4 million, an increase in deferred income taxes of $5.6 million, adjustments for depreciation and amortization and other impacts of $3.3 million, share-based compensation expense of $3.5 million, and changes in operating assets and liabilities that resulted in net cash outflows of $20.0 million. The changes in operating assets and liabilities consisted primarily of a $22.6 million increase in accounts receivable as a result of higher sales in 2021, a $3.4 million decrease in accrued employee compensation primarily due to the payment of the 2020 corporate bonus net of the accrual for the 2021 corporate bonus, and a $1.5 million reduction in accounts payable related to timing of purchases and payments. This was partially offset by a $6.3 million decrease in inventories due to strong sales in the first half of 2021 and $1.0 million increase in accrued liabilities.

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 six-month period ended June 30, 2020, our investing activities also included $0.3 million of cash paid to Riverbed Technology, Inc. for the final payment of contingent consideration related to the acquisition of the Xirrus Wi-Fi business.

Cash flows from financing activities

During the six-month period ended June 30, 2020, net cash used of $5.0 million was primarily due to $10.0 million in proceeds received from borrowing under our revolving credit facility offset by $10.0 million repayment against our revolving credit facility and $5.0 million repayment of principal due under our term loan facility.

During the six-month period ended June 30, 2021, net cash used of $20.1 million was primarily due the $19.6 million excess cash flow payment along with the $2.5 million repayment of principal due under our term loan facility and $2.2 million for taxes paid from shares withheld in net settlement of taxes due on vesting of restricted shares issued to our employees, offset by proceeds received of $3.3 million from the exercise of share options and $0.8 million for the issuance of ordinary shares under our Employee Share Purchase Plan.

Debt

As of June 30, 2021, we had $33.2 million outstanding on our term credit facility and have $10.0 million available under our revolving credit facility. The interest rate in effect on the term credit facility at June 30, 2021 was 5.25%. We made a required payment in the second quarter of 2021 of $19.6 million in accordance with the excess cash flow provision in our term credit facility and expect to repay $7.5 million of indebtedness under our credit facility during the remainder of 2021. Our term loan matures on December 21, 2022. We expect to use existing cash and cash generated from operations to meet all debt obligations for the remainder of 2021. Refer to Note 7 – Debt, to our unaudited condensed 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 June 30, 2021, there has been no material change to the contractual obligations and commercial commitments disclosed in Item 7 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2020.

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 June 30, 2021, 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, 2020, filed on March 1, 2021, 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 June 30, 2021. 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 $33.2 million of debt outstanding on our term loan facility and $0.0 million of debt outstanding on our revolving credit facility as of June 30, 2021 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 a base rate of the higher of (a) 1.25% per annum or (b) the rate per annum determined by reference to the 1-, 2-, 3- or 6-month US Dollar LIBOR rate as selected by the Company, plus an applicable margin of 4.75%, 4.25% or 4.00% as determined by our financial performance as measured by the consolidated leverage ratio. The rate on both the term loan and revolving credit facility was 5.25% on June 30, 2021. A hypothetical 100-basis point increase in interest rates, and assuming a constant base rate, would result in an additional $0.3 million in interest expense related to the external debt per year.

In July 2017, the head of the United Kingdom Financial Conduct Authority, or FCA, announced plans to phase out the use of LIBOR by the end of 2021. In May 2021, the FCA confirmed the 1 week and 2-month US Dollar LIBOR rates will cease on December 31, 2021, but the remaining US Dollar LIBOR rates will not cease until June 30, 2023. 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 business shut downs and other restrictions resulting from government efforts to combat the impact of 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, 2020.

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 June 30, 2021, 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.

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, 2020.

Item 1A. Risk Factors.

There have been no material changes to the risk factors as disclosed in Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2020 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.

We face risks related to actual or threatened health epidemics and other outbreaks, which could significantly disrupt our manufacturing, sales and other operations.

Our business could be adversely impacted by the effects of a widespread outbreak of contagious disease, such as COVID-19. Although the outbreak of COVID-19 has resulted and is likely to continue to result in disruption to our business and operations as well as the operations of our customers and suppliers, the severity of the impact has lessened, and our markets are recovering as the need for additional connectivity grows to meet the needs of a remote workforce and remote education.

In addition, a pandemic or other health crisis could impact our supply operations; for example, as a result of the COVID -19 pandemic, one of our mechanical suppliers ceased operating, causing us to move production to an alternate supplier, and we are working with other suppliers who have experienced component part shortages due to capacity constraints caused by COVID-19 that have caused lead times for our products to increase. The majority of our products are manufactured at contract manufacturers located outside the U.S., and one of our primary distribution centers for the sale and distribution of some of our products is a third-party logistics provider in China. Previously, in an effort to halt the outbreak of COVID-19, the Chinese government placed significant restrictions on travel within China, leading to extended business closures, including closures at our third-party manufacturers. Although most of the restrictions on operations of our third-party manufacturers and other suppliers have been lifted or eased, our suppliers and third-party manufacturers could continue to be disrupted by worker absenteeism, quarantines, office and factory closures, disruptions to ports and other shipping infrastructure, or other travel or health-related restrictions and such restrictions could spread to other locations where we outsource manufacture or distribution of our products if the virus and its variants continues to spread or resurge. If our supply chain operations are affected or are curtailed by the outbreak of diseases such as COVID-19, our supply chain, manufacturing and product shipments will be delayed, which could adversely affect our business, operations and customer relationships. We may need to seek alternate sources of supply which may be more expensive, unavailable or may result in delays in shipments to us from our supply chain and subsequently to our customers. Further, if our distributors’ or end user customers’ businesses are similarly affected, they might delay or reduce purchases from us, which could adversely affect our results of operations.

In addition, freight and logistics constraints caused in part by restrictions imposed by governments to combat the COVID-19 pandemic have resulted in increased costs and constrained available transport, for us and our channel partners. If our supply chain operations continue to be affected or are curtailed by the outbreak of diseases such as COVID-19, our supply chain, manufacturing and product shipments will be delayed, which could adversely affect our business, operations and customer relationships. We have sought and may continue to seek alternate sources of supply which may be more expensive, unavailable or may result in delays in shipments to us and from our supply chain and subsequently to our customers.

We are conducting business with substantial modifications to employee travel, employee work locations, and virtualization or cancellation of certain sales and marketing events, among other modifications. Our business is highly dependent on travel of our sales, operations, quality and technical support, and other managers and employees. Limitations placed on travel globally could significantly limit our ability to market our products, establish relationships with new customers, and manage post-contract support and maintenance activities. Other companies as well as many governments have imposed significant restrictions on business operations and other precautionary and preemptive actions to address COVID-19, and they may take further actions that cause us or our customers or suppliers to alter their normal business operations. We will continue to actively monitor the situation and may take further actions that alter our business operations as may be required by federal, state or local authorities, or that we determine are in the best interest of our employees, customers, partners, suppliers and shareholders. Any such alterations or modifications may adversely impact our business, our customers and prospects, or our financial results.

The extent to which the COVID-19 pandemic will impact our business and financial results going forward will be dependent on future developments such as the length and severity of the crisis, the potential resurgence of COVID-19 and its variants in the future, future government actions in response to the crisis, the acceptance and effectiveness of the COVID-19 vaccines and the overall impact of the COVID-19 pandemic on the global economy and capital markets, among many other factors, all of which remain highly uncertain and unpredictable. We cannot at this time quantify or forecast the business impact of COVID-19, and there can be no assurance that the COVID-19 pandemic will not have a material and adverse effect on our business, financial results and financial condition. In addition, the COVID-19 pandemic increases the likelihood and potential severity of other risks described in our risks set forth in the “Risk Factors” section of our Annual Report on Form 10-K.

Because some of the key components in our products come from sole or limited sources of supply, we are susceptible to supply shortages, extended lead times or supply changes, which could disrupt or delay our scheduled product deliveries to our end customers and may result in the loss of sales and end customers.

We purchase components, directly or through our contract manufacturers, from third parties that are necessary for the manufacture of our products. Our ability to manage our supply chain may also be adversely affected by other factors including shortages of, and extended lead times for, components used to manufacture our products, a reduction or interruption of supply, prioritization of component shipments to other vendors, cessation of manufacturing of such components by our suppliers and geopolitical conditions such as the U.S. trade war with China and the impact of public health epidemics like the COVID-19 pandemic. Insufficient component supply, or any increases in the time required to manufacture our products, have and may continue to lead to inventory shortages that could result in increased customer lead times for our products, delayed revenue or loss of sales opportunities altogether as potential end customers turn to competitors’ products that are readily available. Shortages in the supply of components or other supply disruptions, including, without limitations, due to reductions in supply as a result of COVID-19, may not be predicted in time to design-in different components or qualify other suppliers. Qualifying new suppliers to compensate for such shortages may be time-consuming and costly and may increase the likelihood of errors in design or production. Similar delays may occur in the future.

Certain components are currently and may in the future be in short supply. In particular, semiconductor chips and merchant silicon are currently in high demand with limited supply, which is resulting in significantly longer than usual lead times for these components. We have encountered, and are likely in the future to encounter, shortages and delays in obtaining these or other components, and this could have a material adverse effect on our ability to meet customer orders. In addition, such shortages or delays could result in increased component and delivery costs.

We use our forecast of expected demand to determine our material requirements. Lead times for materials and components we order vary significantly, and depend on factors such as the specific supplier, contract terms and demand for a component at a given time. If forecasts exceed orders, we may have excess and/or obsolete inventory, which could have a material adverse effect on our business, operating results and financial condition. If orders exceed forecasts, or available supply, we may have inadequate supplies of certain materials and components, which could have a material adverse effect on our ability to meet customer delivery requirements and to recognize revenue. If we are unable to pass component price increases along to our end customers or maintain stable pricing, our gross margins could be adversely affected and our business, financial condition, results of operations and prospects could suffer.

In order to reduce manufacturing lead times and plan for adequate component supply, from time to time, we may issue purchase orders for components and products that are non-cancelable and non-returnable. In addition, we may purchase components and products that have extended lead teams to ensure adequate supply to support long-term customer demand and mitigate the impact of COVID-19 related supply disruptions**.**

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	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the inline XBRL document
101.SCH	Inline XBRL Taxonomy Extension Schema
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)

* 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: August 9, 2021	By:	/s/ ATUL BHATNAGAR
		Atul Bhatnagar
		President and Chief Executive Officer
Date: August 9, 2021	By:	/s/ STEPHEN CUMMING
		Stephen Cumming
		Chief Financial Officer

Exhibit 31.1

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, Atul Bhatnagar, 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: August 9, 2021

By: /s/ ATUL BHATNAGAR

Atul Bhatnagar
Chief Executive Officer

Exhibit 31.2

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: August 9, 2021

By: /s/ STEPHEN CUMMING

Stephen Cumming
Chief Financial Officer

Exhibit 32.1

**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 ended June 30, 2021 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: August 9, 2021

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

Exhibit 32.2

**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 ended June 30, 2021 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: August 9, 2021

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