U.S. SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 40-F

☐ REGISTRATION STATEMENT PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

OR

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

For the fiscal year ended December 31, 2019

Commission File No.: 000-30718

SIERRA WIRELESS, INC.

(Exact name of Registrant as specified in its charter)

Canada

(Province or other jurisdiction of incorporation or organization)

Primary Standard Industrial Classification Code (if applicable): 3663

I.R.S. Employer Identification Number (if applicable): 98-0163236

13811 Wireless Way, Richmond
British Columbia, Canada V6V 3A4
(604) 231-1100
(Address and telephone number of principal executive offices)

CT Corporation
111 Eighth Avenue
New York, New York 10011
(212) 894-8940
(Agent for service in the United States)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Shares, without par value	SWIR	The Nasdaq Global Market

Securities registered or to be registered pursuant to Section 12(g) of the Act: **None**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None**

For annual reports, indicate by check mark the information filed with this Form:
☑ Annual Information Form ☑ Audited Annual Financial Statements

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report: **36,233,361 Common Shares, without par value, as at December 31, 2019**

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act 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 an emerging growth company as defined in Rule 12b-2 of the Exchange Act.

Emerging growth company ☐

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, 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 Section13(a) of the Exchange Act. ☐

A. Disclosure Controls and Procedures

Disclosure controls and procedures are defined by the Securities and Exchange Commission (the "Commission") as those controls and other procedures that are designed to ensure that information required to be disclosed by the Registrant in reports filed or submitted by it under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms.

The Registrant's Chief Executive Officer and Chief Financial Officer have evaluated the effectiveness of the Registrant's disclosure controls and procedures and have determined that such disclosure controls and procedures were effective as of the end of the period covered by this Annual Report. A discussion of the Registrant's disclosure controls and procedures can be found in its Management's Discussion and Analysis of Financial Condition and Results of Operations for the fiscal year ended December 31, 2019, filed as Exhibit No. 1.3 to this Annual Report, under the heading "Disclosure Controls and Procedures".

B. Management's Annual Report on Internal Control Over Financial Reporting

See Management's Discussion and Analysis of Financial Condition and Results of Operations for the fiscal year ended December 31, 2019, filed as Exhibit No. 1.3 to this Annual Report, under the heading "Internal Control Over Financial Reporting — Management's Annual Report on Internal Control Over Financial Reporting".

C. Attestation Report of the Registered Public Accounting Firm

The attestation report of Ernst & Young LLP ("EY"), the independent registered public accounting firm of the Registrant, is included in EY's report, dated March 10, 2020 to the shareholders of the Registrant, which accompanies the Registrant's audited consolidated financial statements for the fiscal year ended December 31, 2019, filed as Exhibit 1.2 to this Annual Report.

D. Changes in Internal Control Over Financial Reporting

See Management's Discussion and Analysis of Financial Condition and Results of Operations for the fiscal year ended December 31, 2019, filed as Exhibit No. 1.3 to this Annual Report, under the heading "Internal Control Over Financial Reporting - Management's Annual Report on Internal Control Over Financial Reporting".

E. Notice of Pension Fund Blackout Period

The Registrant was not required by Rule 104 of Regulation BTR to send any notice to any of its directors or executive officers during the fiscal year ended December 31, 2019.

F. Audit Committee Financial Expert

The Registrant’s Board of Directors has determined that Paul G. Cataford, Robin A. Abrams, Russell N. Jones, Lori M. O'Neill and Thomas Sieber are the audit committee financial experts, within the meaning of General Instruction B(8)(b) of Form 40-F and are independent within the meaning of Rule 10A-3 under the Exchange Act and as that term is defined by the rules and regulations of The Nasdaq Stock Market LLC (“Nasdaq”). Although she continues to serve as Chair of the Board of Directors of the Registrant, Robin A. Abrams resigned from the Audit Committee effective December 31, 2019 and therefore is no longer considered to be an audit committee financial expert as of such date.

The Commission has indicated that the designation of a person as an audit committee financial expert does not make such person an “expert” for any purpose, impose any duties, obligations or liability on such person that are greater than those imposed on members of the Audit Committee and the Board of Directors who do not carry this designation, or affect the duties, obligations or liability of any other member of the Audit Committee or Board of Directors.

G. Code of Ethics

See Annual Information Form dated March 10, 2020, filed as Exhibit No. 1.1 to this Annual Report, under the heading “Code of Business Conduct”. A copy of the Code of Business Conduct (the “Code”) may be obtained at www.sierrawireless.com. The information contained on, or that can be accessed through, the Registrant's website is not a part of this Annual Report. The Registrant has included its website address in this Annual Report solely as an inactive textual reference. The Registrant will provide a copy of the Code without charge to any person that requests a copy by contacting the Corporate Secretary at the address that appears on the cover of this Annual Report on Form 40-F.

H. Principal Accountant Fees and Services

EY served as the Registrant's principal accountant (the "Principal Accountant") for the years ended December 31, 2019 and 2018.

Audit Fees

The aggregate fees billed by the Principal Accountant for the fiscal years ended December 31, 2019 and 2018, for professional services rendered by the Principal Accountant for the audit of the Registrant’s annual financial statements or services that are normally provided by the Principal Accountant in connection with statutory and regulatory filings or engagements for such fiscal years were US$1,017,000 and US$1,014,060, respectively.

Audit-Related Fees

The aggregate fees billed by the Principal Accountant for the fiscal years ended December 31, 2019 and 2018, for assurance and related services rendered by the Principal Accountant that are reasonably related to the performance of the audit or review of the Registrant’s financial statements and are not reported above as audit fees were US$38,755 and US$nil, respectively. Audit-related fees for 2019 relate to due diligence related to an acquisition.

Tax Fees

The aggregate fees billed by the Principal Accountant for the fiscal years ended December 31, 2019 and 2018, for professional services rendered by the Principal Accountant for tax compliance, tax advice, transfer pricing services, tax planning and other services were US$79,020 and US$9,400, respectively. Tax fees for 2019 relate to tax advisory services related to an acquisition and tax compliance matters. Tax fees for 2018 relate to tax compliance matters.

All Other Fees

There were no additional fees billed by the Principal Accountant for the fiscal years ended December 31, 2019 and 2018.

Audit Committee Pre-Approval Policies and Procedures

Since the enactment of the Sarbanes-Oxley Act of 2002 on July 30, 2002, all audit and non-audit services performed by the Registrant’s outside auditors are pre-approved by the audit committee of the Registrant.

I. Off-Balance Sheet Arrangements

On June 26, 2019, we entered into an uncommitted Receivables Purchase Agreement with the Canadian Imperial Bank of Commerce, which allows us to sell, with limited recourse, qualifying receivables. See Management's Discussion and Analysis of Financial Condition and Results of Operations for the fiscal year ended December 31, 2019, filed as Exhibit No. 1.3 to this Annual Report, under the heading "Liquidity and Capital Resources - Accounts Receivable Purchase Agreement".

J. Tabular Disclosure of Contractual Obligations

See Management's Discussion and Analysis of Financial Condition and Results of Operations for the fiscal year ended December 31, 2019, filed as Exhibit No. 1.3 to this Annual Report, under the heading "Liquidity and Capital Resources - Cash Requirements".

K. Identification of Audit Committee

The Registrant has a separately designated standing audit committee established in accordance with Section 3(a)(58)(A) of the Exchange Act comprised of five individuals: Paul G. Cataford (Chair), Robin A. Abrams (resigned effective December 31, 2019), Russel N. Jones, Lori M. O'Neill and Thomas Sieber. Each of the members of the audit committee is independent, within the meaning of Rule 10A-3 under the Exchange Act and as that term is defined by the rules and regulations of the Nasdaq.

L. Critical Accounting Policies

A discussion of the Registrant's critical accounting policies can be found in its Management's Discussion and Analysis of Financial Condition and Results of Operations for the fiscal year ended December 31, 2019, filed as Exhibit No. 1.3 to this Annual Report, under the heading "Critical Accounting Policies and Estimates".

M. Nasdaq Exemptions

The rules and regulations of the Nasdaq require each listed issuer to provide that a quorum for its shareholders' meetings be at least 33 1/3 percent of the issuer's outstanding shares. The Registrant has been granted an exemption from this requirement because it is contrary to generally accepted business practices in Canada, the Registrant's country of domicile. The Registrant has had the benefit of this exemption in the current and prior years.

In determining whether a requirement is contrary to generally accepted business practices, the Nasdaq rules generally look to the requirements of the primary market in the issuer's country of domicile. The rules and policies of the Toronto Stock Exchange, the primary market in Canada, do not contain quorum requirements, and the *Canada Business Corporations Act*, the Registrant's governing statute, defers to the quorum requirements contained in an issuer's By-laws. Under the Registrant's By-laws, a quorum for a meeting of the Registrant's shareholders is two persons present in person, each being a shareholder entitled to vote thereat or a duly appointed proxyholder or representative for a shareholder so entitled.

N. Interactive Data File

The Registrant is submitting as Exhibit 101 to this Annual Report, and has posted on its corporate website, an Interactive Data File.

UNDERTAKING AND CONSENT TO SERVICE OF PROCESS

A. Undertaking

The Registrant undertakes to make available, in person or by telephone, representatives to respond to inquiries made by the Commission staff, and to furnish promptly, when requested to do so by the Commission staff, information relating to: the securities registered pursuant to Form 40-F; the securities in relation to which the obligation to file an annual report on Form 40-F arises; or transactions in said securities.

B. Consent to Service of Process

A Form F-X, as amended, signed by the Registrant and the Registrant’s agent for service of process with respect to the Common Shares has previously been filed with the Commission. Any change to the name or address of the Registrant’s agent for service shall be communicated promptly to the Commission by amendment to the Form F-X referencing the file number of the Registrant.

SIGNATURES

Pursuant to the requirements of the Exchange Act, the Registrant certifies that it meets all of the requirements for filing on Form 40-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereto duly authorized.

SIERRA WIRELESS, INC.
(Registrant)

/s/ David G. McLennan

David G. McLennan
Chief Financial Officer and Secretary

Date: March 10, 2020

EXHIBIT INDEX

Exhibit No.	Document
1.1	Annual Information Form for the fiscal year ended December 31, 2019, dated March 10, 2020
1.2	Audited Consolidated Financial Statements for the fiscal year ended December 31, 2019, prepared in accordance with U.S. generally accepted accounting principles
1.3	Management's Discussion and Analysis of Financial Condition and Results of Operations for the fiscal year ended December 31, 2019
23.1	Consent of Ernst & Young LLP
31.1	Certification of the Chief Executive Officer and Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of the Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	Interactive Data File

Exhibit 1.1

SIERRA WIRELESS, INC.
ANNUAL INFORMATION FORM
For the Fiscal Year Ended December 31, 2019

DATED March 10, 2020

ANNUAL INFORMATION FORM

Table of Contents

Cautionary Note Regarding Forward-looking Statements

Certain statements and information in this Annual Information Form ("AIF") are not based on historical facts and constitute forward-looking statements or forward-looking information within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and Canadian securities laws (collectively, "forward-looking statements") and may include statements and information relating to our 2019 corporate update; financial guidance for our fiscal year 2020; expectations regarding the Company's cost savings initiatives; expectations regarding expected earnings of the M2M Group and ability to expand our market presence in Australia and Southern Asia; the potential impact of the coronavirus on customer demand, our supply chain, manufacturing capacity and our ability to meet customer demand; our business outlook for the short and long term; statements regarding our strategy, plans, goals, objectives, expectations and future operating performance; the Company's liquidity and capital resources; the Company's financial and operating objectives and strategies to achieve them; general economic conditions; estimates of our expenses, future revenues, non-GAAP earnings per share and capital requirements; our expectations regarding the legal proceedings we are involved in; statements with respect to the Company's estimated working capital; expectations with respect to the adoption of Internet of Things ("IoT") solutions; expectations regarding trends in the IoT market and wireless module market; expectations regarding product and price competition from other wireless device manufacturers and solution providers; our ability to implement effective control procedures; and expectations regarding the launch of fifth generation cellular embedded modules. Forward-looking statements are provided to help you understand our views of our short and long term plans, expectations and prospects. We caution you that forward-looking statements may not be appropriate for other purposes.

Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often, but not always, identified by words or phrases such as "outlook", "expects", "is expected", "anticipates", "believes", "plans", "projects", "estimates", "assumes", "intends", "strategy", "goals", "objectives", "potential", "possible", or variations thereof, or stating that certain actions, events, conditions or results "may", "could", "would", "should", "might" or "will" be taken, occur or be achieved, or the negative of any of these terms and similar expressions) are not statements of historical fact and may be forward-looking statements. Forward-looking statements are not promises or guarantees of future performance. They represent our current views and may change significantly. Forward-looking statements are based on a number of material assumptions, including, but not limited to, those listed below, which could prove to be significantly incorrect:

- *expected component supply constraints and manufacturing capacity;*
- *our ability to continue to sell our products and services in the expected quantities at the expected prices and expected times;*
- *our ability to effect and to realize the anticipated benefits of our business transformation initiatives, and the timing thereof;*
- *our ability to develop, manufacture and sell new products and services that meet the needs of our customers and gain commercial acceptance;*
- *expected macro-economic business conditions;*
- *expected cost of sales;*
- *our ability to win new business;*
- *our ability to integrate acquired businesses and realize expected benefits;*
- *our ability to renew or obtain credit facilities when required;*
- *expected deployment of next generation networks by wireless network operators;*
- *our operations not being adversely disrupted by other developments, operating, cyber security, litigation, or regulatory risks;*
- *expected tax and foreign exchange rates; and*
- *our ability to recruit a new Chief Financial Officer.*

Forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors that could cause actual events or results to differ significantly from those expressed or implied in our forward-looking statements, including, without limitation:

- *competition from new or established competitors or from those with greater resources;*
- *natural catastrophes or public health epidemics could impact customer demand, result in production disruption and impact our ability to meet customer demand or capacity to continue critical operations;*
- *the loss of, or significant demand fluctuations from, any of our significant customers;*
- *our financial results being subject to fluctuation;*
- *our business transformation initiatives may result in disruptions to our business and may not achieve the anticipated benefits;*
- *our ability to respond to changing technology, industry standards and customer requirements;*
- *failures of our products or services due to design flaws and errors, component quality issues, manufacturing defects, network service interruptions, cyber-security vulnerabilities or other quality issues;*
- *deterioration in macro-economic conditions could adversely affect our operating results and financial conditions;*
- *our ability to attract or retain key personnel and the impact of organizational change on our business;*
- *cyber-attacks or other breaches of our information technology security;*
- *risks related to the transmission, use and disclosure of user data and personal information;*
- *disruption of, and demands on, our ongoing business and diversion of management's time and attention in connection with acquisitions or divestitures;*
- *risks that the acquisition of M2M Group (as defined below) or our investments and partnerships may fail to realize the expected benefits;*
- *risks related to infringement on intellectual property rights of others;*
- *our ability to obtain necessary rights to use software or components supplied by third parties;*
- *our ability to enforce our intellectual property rights;*
- *our reliance on single source suppliers for certain components used in our products;*
- *our dependence on a limited number of third party manufacturers;*
- *unanticipated costs associated with litigation or settlements;*
- *our dependence on mobile network operators to promote and offer acceptable wireless data services;*
- *risks related to contractual disputes with counterparties;*
- *risks related to governmental regulation;*
- *risks inherent in foreign jurisdictions; and*
- *risks related to tariffs or other trade restrictions.*

This list is not exhaustive of the factors that may affect any of our forward-looking statements. Forward-looking statements are statements about the future and are inherently uncertain, and our actual achievements or other future events or conditions may differ materially from those reflected in the forward-looking statements due to a variety of risks, uncertainties and other factors, including, without limitation, those referred to below under "Risks and Uncertainties" and those referred to in our other regulatory filings with the U.S. Securities and Exchange Commission (the "SEC") in the United States and the provincial securities commissions in Canada.

Our forward-looking statements are based on the beliefs, expectations and opinions of management on the date the statements are made, and we do not assume any obligation to update forward-looking statements if circumstances or management's beliefs, expectations or opinions should change, except as required by applicable law. For the reasons set forth above, investors should not place undue reliance on forward-looking statements.

CURRENCY

Unless otherwise indicated, all figures are stated in United States dollars.

CORPORATE STRUCTURE

Unless the context otherwise indicates, references to “we”, “our”, “us”, “the Company”, “the Corporation” or “Sierra Wireless” in this Annual Information Form means Sierra Wireless, Inc. and its subsidiaries.

Sierra Wireless was incorporated under the *Canada Business Corporations Act* on May 31, 1993. The Articles of Sierra Wireless were amended by a Certificate of Amendment issued March 29, 1999 to remove the private company provisions and restrictions on share transfer. The Articles of the Company were further amended by Certificates of Amendment issued May 13, 1999 and May 14, 1999 to: (i) re-designate and change all existing Common Shares in the capital of the Company to new Common Shares in the capital of the Company (the “Common Shares”); (ii) change the rights attached to all Preference Shares in the capital of the Company (the “Preference Shares”) and to remove each existing series of Preference Shares; and (iii) consolidate the Common Shares on the basis of one post-consolidation Common Share for 1.5 pre-consolidation Common Shares. Effective March 30, 2003, the Company amended the Company's By-Laws to take into account certain changes made to the *Canada Business Corporations Act*, including (i) the reduction of the Canadian residency requirement to 25% and (ii) to allow for the advance of funds by the Corporation to a director, officer or other person for the costs of a proceeding where the Company is obligated to indemnify such person. The Company amended the By-laws further on April 14, 2014 to (i) increase the quorum for the transaction of business at any meeting of the board to a majority of the directors, (ii) increase the quorum at any meeting of shareholders to two presents in person, each being a shareholder entitled to vote or duly appointed proxyholder or representative for a shareholder so entitled, and holding or representing, in the aggregate, at least 25% of the votes attaching to all the shares of the Company entitled to be voted at the meeting, and (iii) to adopt the Company's advance notice policy.

The Company’s registered and records office is located at Suite 2600, Three Bentall Centre, 595 Burrard Street, Vancouver, British Columbia, Canada, V7X 1L3 and its head office and principal place of business is located at 13811 Wireless Way, Richmond, British Columbia, Canada, V6V 3A4.

The following table lists the principal subsidiaries of Sierra Wireless and their jurisdictions of incorporation or organization. All such entities are 100% owned, directly or indirectly, by Sierra Wireless.

Name	**Jurisdiction of Incorporation or Organization**
Sierra Wireless America, Inc.	Delaware, U.S.A.
Sierra Wireless S.A.	France
Sierra Wireless Hong Kong Limited	Hong Kong
Sierra Wireless Sweden AB	Sweden
Sierra Wireless Services America Holdings Inc. (formerly: Numerex Corp.)	Pennsylvania, U.S.A.

Subsidiaries with total assets and revenues less than 10 per cent, and in the aggregate less than 20 per cent, of total consolidated assets or total consolidated revenue are excluded from the list.

GENERAL DEVELOPMENT OF THE BUSINESS

Sierra Wireless is an Internet of Things ("IoT") pioneer that empowers businesses and industries to transform and thrive in the connected economy.

We provide integrated Device-to-Cloud IoT solutions that are comprised of our recurring connectivity services, our IoT cloud platform, and our embedded cellular modules and gateways. Enterprises, industrial companies and Original Equipment Manufacturers ("OEMs") worldwide rely on our expertise to deliver fully-integrated IoT solutions to reduce complexity, gather intelligent edge data and enable connected IoT products and services.

To accelerate our transformation to a fully-integrated Device-to-Cloud IoT solutions company, we launched certain strategic and organizational structure changes in late 2018. Since then, we have designed and commenced implementation of a variety of cost reduction initiatives broadly across the Company, including moving certain positions to lower cost geographies, outsourcing a variety of finance, human resources, IT and operations functions, exiting numerous facilities, as well as the renegotiation of certain supplier contracts. Organizationally, we have combined three development teams into a single research and development ("R&D") entity to improve efficiency. Similarly, we have combined product management into one centralized team. We also re-organized our Go-To-Market team with a strong focus on leveraging our IoT device leadership position to focus on Device-to-Cloud IoT solutions and driving recurring revenue. In conjunction with this cost reduction and organizational activity, we have also made investments in people, products, processes and systems designed to underpin and accelerate our transformation to a IoT solutions company.

Based on the organizational changes we made in the first quarter of fiscal 2019, our segments have changed from those reported at December 31, 2018, when we previously reported three segments. Our new organizational structure clearly delineates our Device-to-Cloud IoT solutions activities and we now have two reportable segments effective the first quarter of 2019: (i) the IoT Solutions segment and (ii) the Embedded Broadband segment. We have adjusted our comparative information to align with this new segmentation.

IoT Solutions

Our IoT Solutions segment is focused on integrated end-to-end IoT solutions that include recurring connectivity services, cloud management software, and cellular modules and gateways targeted primarily at enterprises and OEMs in the IoT space. Our primary focus is on three key markets: (i) Industrial Edge for manufacturing asset monitoring; (ii) Mobile Edge for mobile asset tracking; and (iii) Infrastructure Edge for commercial infrastructure and building monitoring. We believe the IoT opportunities we are focusing on have a high potential to generate recurring services to the customer along with our cloud platform, devices and management tools. This segment is comprised of our former IoT Services and Enterprise Solutions segments, as well as a portion of our former OEM Solutions segment.

In this segment, we provide Device-to-Cloud IoT solutions that include: (i) our global cellular connectivity services, which are subscription-based and include our flexible Smart SIM and core network platforms; (ii) our cloud platform services, which provide a secure and scalable cloud platform for deploying and managing IoT subscriptions, over-the-air updates, devices and applications; and (iii) our managed broadband cellular services, which include a combination of hardware, managed high speed connectivity and cloud services. We also provide unified data orchestration to provide enhanced data management from the edge of the network to the cloud. This service, which is called Octave, securely integrates edge device, network and cloud application programming interfaces into a single platform.

Our embedded devices in this reporting segment are comprised of IoT embedded cellular wireless modules that include Low Power Wide Area technologies ("LPWA"), second generation ("2G"), third generation ("3G"), and fourth generation ("4G") Long-Term Evolution ("LTE") products. We are currently working on the development of fifth generation ("5G") cellular embedded modules for anticipated launch in 2020. We also provide 3G and 4G cellular gateways and routers that are complemented by cloud-based services and on-premise software for secure device and network management.

Our gateway solutions address a broad range of vertical market applications within the mobility, industrial and enterprise market segments. Our AirLink gateways and routers have strong brand recognition with network operators, distributors, value added resellers and end customers. Our products are known for their high reliability and technical capability in mission-critical applications. These gateways and routers leverage our expertise in wireless technologies and offer the latest capabilities in LTE networking, including FirstNet solutions as well as Wi-Fi, Bluetooth and Global Navigation Satellite System ("GNSS") technologies. We also provide our customers with AirLink Management Services through our IoT platform and have introduced new advanced reporting and analytics to our portfolio.

In December 2017, we acquired all of the outstanding shares of U.S.-based Numerex Corp. in a stock-for-stock merger transaction. This acquisition added a portfolio of managed end-to-end IoT solutions, including smart devices, network connectivity and service applications, addressing a wide spectrum of vertical markets and industrial customers.

On January 7, 2020, we completed the acquisition of M2M group of companies ("M2M Group") in Australia. The M2M Group is focused on IoT connectivity services and cellular devices in Australia, and the acquisition expands the Company's IoT Solutions business in the Asia-Pacific region. We believe that the business is an excellent strategic fit with our IoT Solutions business with slightly more than half of the M2M Group’s revenue comprised of subscription-based recurring revenue, and representing a segment of the business that has been growing rapidly over the last several years. We believe the M2M Group has a solid platform for us to increase our IoT services and solutions in Australia and Southeast Asia.

Embedded Broadband

Our Embedded Broadband segment is comprised of our high-speed cellular embedded modules that are typically used in non-industrial applications, namely Automobile, Mobile Computing and Enterprise Networking markets. The products in this segment are typically high-speed 4G LTE and LTE-Advanced cellular modules that are ordered in larger volumes. In this segment, we have limited opportunities to provide connectivity services or fully-integrated IoT solutions to the OEM customer. We have a strong customer base in the Embedded Broadband business that is expected to transition over time from 4G LTE to 5G cellular technology.

As a leading embedded module vendor, we make it simple for our customers to embed high-speed cellular technologies and manage these devices through our IoT cloud platform. The design cycles in this business segment can range from two to three years in the Automotive market to 12 to 18 months in the Mobile Computing market. We are currently working on a number of potential 5G design opportunities with existing customers and new customers. Our portfolio also includes cloud-based remote device and data management capability, as well as support for our embedded application framework called Legato, which is an open source, Linux-based platform.

Additionally, we continue to seek opportunities to partner, acquire or invest in businesses, products and technologies that will help us drive our growth strategy forward and expand our position in the IoT market.

Key highlights for the year ended December 31, 2019:

Corporate

- We continued with our cost reduction initiatives we announced in late 2018 and commenced various initiatives in 2019, including consolidation of engineering resources, the transfer of certain functions to lower cost locations and outsourcing of a select group of business processes in finance, IT and human resources. In addition, we continued to work on purchasing initiatives and have renegotiated certain supplier agreements with contract manufacturers in an effort to better manage our costs.

- Mr. Jim Ryan was appointed Senior Vice President, Strategic Partner Growth, focusing on acquiring, aligning and maximizing the impact of our strategic partnerships in the Cloud, Analytics and System Integrator ecosystem. Mr. Ryan has more than 20 years of senior leadership experience in global telecoms and early stage IoT environments, including Zipit Wireless and AT&T and Sprint in the United States and O2 in Europe.

- Ms. Lori O'Neill was appointed to the Company's Board of Directors. Ms. O'Neill is an experienced independent corporate director, financial executive and advisor to growth-oriented companies. She started her career with Deloitte & Touche LLP in 1988 and served as Audit Partner from 1996 to 2012. She is a board member for Constellation Software, as well as a board member and chair of the Audit Committee for the Ontario Lottery and Gaming Corporation, Hydro Ottawa and the University of Ottawa Heart Institute. Ms. O'Neill also serves as chair of the Board of Governors for Ashbury College. She graduated from Carleton University with a Bachelor of Commerce (Highest Honors).

- Mr. David McLennan has decided to retire from his position as Chief Financial Officer after 16 years of dedicated service. By providing a lengthy notice period, Mr. McLennan will be assisting the Company's transition to a new Chief Financial Officer. The Company has engaged a global executive search firm and a formal process has commenced to recruit a replacement. The Company expects to complete the transition by the middle of 2020.

- On January 7, 2020, we completed the acquisition of M2M Group in Australia. Total cash consideration paid to the shareholders of M2M Group was $19.6 million for 100% of the equity plus approximately $1.4 million for the retirement of certain obligations, subject to normal working capital adjustments. The M2M Group is focused on IoT connectivity services and cellular devices in Australia, and the acquisition expands the Company's IoT Solutions business in the Asia-Pacific region.

IoT Solutions

- In early 2019, we announced mass production of our award-winning Ready-to-Connect solutions. Ready-to-Connect delivers all the key elements needed for an IoT application - cellular module, integrated Subscriber Identity Modules ("SIMs") that's pre-connected to global mobile networks and IoT platform for device and subscription management and simplified operations - in one integrated bundle.

- MANN + HUMMEL, a leading global expert for filtration solutions, selected our Smart SIMs and AirVantage® IoT Platform to connect and mange global deployments of Senzit, MANN + HUMMEL's new predictive maintenance platform developed to increase uptime for industrial and agricultural fleets.

- Unimar, a worldwide supplier of tower and obstruction lighting products, has selected our device-to-cloud solution, including AirLink® RV50 industrial LTE gateways and SIMs, configured and managed over the air using the AirVantage® IoT Platform, to connect and manage critical lighting and control systems along flight paths.

- Together with Duke Energy and Open Energy Solutions, we have developed a next-generation intelligent edge platform to run more complex, centrally managed and containerized edge applications to enable more resilient, efficient and secure smart grids.

- Nimb selected our Ready-to-Connect cellular modules for its smart safety ring, designed to alert emergency contacts with a press of a hidden panic button, to develop a fully autonomous safety system that does not need to be paired with another mobile device.

- Annexia International Inc., an expert in ultra-low-power asset devices, selected our Smart IoT Connectivity for global deployment of its NStar™ asset tracking and management solution to turn traditional equipment into connected, data-rich transportation assets that generate additional revenue for their customers, as well as deploy their solutions globally without having to manage multiple carrier agreements.

- AirLink® Complete is a new comprehensive management and support service that delivers a best-in-class experience by combining cloud-based management, security monitoring, 24/7 technical support and extended warranty. Every purchase of eligible AirLink routers and gateways will now include one complimentary year of AirLink Complete.

- NurtureWatch selected our IoT connectivity solution to enable tracking and communication for its NurtureWatch, a wearable device that helps elderly people stay safe, healthy and independent.

- Stone Technologies, a supplier of intelligent monitoring solutions, chose our Uplink remote monitoring solution and connectivity services to expand its traditional monitoring business with a managed service for industrial monitoring.

- We commenced a strategic collaboration with Microsoft to develop one of the industry's first full-stack IoT solutions. We believe our new Octave edge data orchestration solution integrated with Microsoft Azure IoT Central will simplify and accelerate time-to-value for enterprise IoT projects.

- We announced general availability of our Octave all-in-one edge-to-cloud solution for connecting industrial assets to the cloud. Octave integrates edge devices, network, and interfaces to all major cloud service providers into an all-in-one solution that securely extracts, orchestrates and acts on data from remote assets at the edge to the cloud. Octave will help industrial companies accelerate IoT development, de-risk their IoT deployments and free them to focus on their IoT data rather than the infrastructure.

- We released our Omnilink OM500 ankle bracelet, an advanced offender monitoring solution with LTE connectivity and voice commands that enables law enforcement agencies to better manage pre-trial detainees, individuals under house arrest, probationers and parolees.

- Our smart IoT connectivity solution is enabling global communications for France Televisions, the main public broadcaster in France, ensuring global connectivity for its broadcast journalists around the world. Sierra's smart IoT connectivity solution automatically connects to the best available 2G, 3G, or LTE network in a given region, without the need for installing a local SIM card and configuring the equipment.

- We launched our AirLink Managed Network Service with embedded FirstNet connectivity. This bundled solution will help public safety agencies of all sizes take advantage of the benefits and capabilities enabled by FirstNet-connected solutions.

- Our AirLink® MG90 High Performance Multi-Network Vehicle Router is now certified and approved for use on the UK's Emergency Services Network, a dedicated network for emergency services that provides secure and resilient mobile broadband data for routine and mission-critical emergency services use and is expected to be the future platform for communications in the emergency services.

- We announced our Ready-to-Connect RC Series of embedded modules to simplify IoT development, reduce costs and accelerate time to market. The RC Series modules deliver all of the key elements needed for an IoT application - cellular module, integrated SIM that's pre-connected to global mobile networks, IoT management platform and end-to-end security - in one integrated bundle.

Embedded Broadband:

- We unveiled the industry's first 5G mechanical module sample at Mobile World Congress 2019. Based on the M.2 form factor, the connectorized AirPrime module will enable OEMs and system integrators requiring the highest possible speeds to deploy 5G on their mobile computing, networking and IoT platforms worldwide.

- We expanded our portfolio of mobile broadband embedded modules for mobile computing, routers, gateways, industrial automation, and new IoT applications, such as robotics, drones and private networks. Sierra's first-to-market 5G EM919x and 4G LTE Cat-20 EM769x embedded modules are sampling to OEMs and system integrators requiring secure connectivity and the highest possible speeds to deploy cellular on their mobile computing, networking and IoT platforms worldwide.

Highlights of Recent Financial Performance of our Business

Fiscal Year 2019 Compared to Fiscal Year 2018

Our 2019 revenue was $713.5 million compared to $793.6 million in 2018, a decrease of 10.1%. The decrease in revenue was driven by lower revenues from our Embedded Broadband segment, which experienced weaker demand from mobile computing and networking customers as we complete certain programs with these customers, partially offset by higher automotive revenue. IoT Solutions segment revenue improved as a result of stronger sales of Enterprise gateway products, as well as growth in recurring and other services revenue, partially offset by lower revenue from Integrated IoT solutions modules.

Product revenue was $614.4 million in 2019 and $699.2 million in 2018, representing a year-over-year decrease of 12.1%. Recurring and other services revenue was $99.1 million in 2019 and $94.4 million in 2018, representing a year-over-year increase of 5.0%. Recurring and other services revenue represented 13.9% of our total revenue in 2019, compared to 11.9% in 2018.

Gross margin was 30.8% in 2019 compared to 33.3% in 2018. The decrease was primarily due to unfavorable product and customer mix in our Embedded Broadband segment, which resulted in lower sales of higher margin mobile computing and networking embedded modules and greater sales of lower margin automotive embedded modules. Our automotive embedded module gross margins were also negatively affected by certain warranty and inventory provisions expensed during 2019. Gross margin percentage of 37.1% in our IoT Solutions segment in 2019 was consistent with 2018.

Net loss was $70.5 million in 2019 compared to $24.6 million in 2018. The increase in net loss of 45.9 million was primarily attributable to lower revenue and gross margin, higher restructuring expense, higher income tax expense, partially offset by lower administration and R&D expense due to various cost initiatives, as well as lower acquisition-related and integration expense.

Fiscal Year 2018 Compared to Fiscal Year 2017

Revenue was $793.6 million in 2018 and $690.7 million in 2017, up 14.9%. This increase was driven by organic growth in both of our reportable segments, which experienced solid year-over-year growth, as well as growth resulting from the acquisition of Numerex: Embedded Broadband experienced notable year-over-year increases in revenue earned from automotive, networking and distribution customers. IoT Solutions experienced strong growth from our Airlink gateway products and related services; contribution from the addition of Numerex, acquired in December 2017, as well as solid subscriber growth in cloud and connectivity services.

Product revenue increased by $53.8 million, or 8.3%, in 2018 compared to 2017. The increase was primarily driven by growth in revenue from automotive, networking and distribution customers and Airlink gateway products. Recurring and other services revenue increased by $49.1 million, or 108.4%, in 2018 compared to 2017, primarily driven by contribution from Numerex as well as organic growth in subscribers. Recurring and other services revenue represented 11.9% of our total revenue in 2018, compared to 6.6% in 2017.

Gross margin was 33.3% in 2018 compared to 33.9% in 2017. In 2018, gross margin was impacted by unfavorable product and customer mix, including the effects of higher automotive volumes at lower gross margin, offset by improved sales of higher margin gateway products and related services and the addition of higher margin services contributed by Numerex in our IoT Solutions segment.

We incurred a net loss of $24.6 million in 2018 compared to net earnings of $4.5 million in 2017. The decrease in net earnings reflects higher operating expenses combined with higher restructuring expense, consulting fees, separation costs on the retirement of our former CEO, loss on disposal of our remote tank monitoring business ("iTank") and the unfavorable impact of foreign exchange, offset by lower acquisition costs, absence of impairment loss, and lower income tax expense.

Revenue by Segment

Our revenue by segment for the years ended December 31, 2019 and 2018 per quarter was as follows:

	2019					2018				
	Total	**Q4**	**Q3**	**Q2**	**Q1**	**Total**	**Q4**	**Q3**	**Q2**	**Q1**
IoT Solutions	$ 377,808	$ 90,937	$ 93,439	$ 99,145	$ 94,287	$ 373,937	$ 95,728	$ 95,487	$ 93,274	$ 89,448
Embedded Broadband	335,705	83,364	80,586	92,229	79,526	419,665	105,667	107,939	108,629	97,430
	$ 713,513	**$ 174,301**	**$ 174,025**	**$ 191,374**	**$ 173,813**	**$ 793,602**	**$ 201,395**	**$ 203,426**	**$201,903**	**$186,878**

NARRATIVE DESCRIPTION OF THE BUSINESS

Industry Background

We manufacture cellular wireless devices and provide services in the wireless communications and information technology industry, enabling connectivity for IoT solutions through cellular and short range wireless technologies. These technologies include 2G cellular standards such as GSM/GPRS/EDGE and CDMA/1xRTT; 3G standards such as UMTS (including HSPDA and HSUPA) and EV-DO; 4G standards such as HSPA+, LTE, LTE-A; 5G standards such as 5G NR (New Radio) standards (both millimeter wave and sub-6 Gigahertz frequencies); Low Power Wide Area ("LPWA") standards such as LTE-M and NB-IoT; and wireless local area network technologies such as Wi-Fi, Bluetooth, and GNSS. Key industry participants include:

- mobile network operators ("MNOs") and mobile virtual network operators ("MVNOs"), who deploy, own and operate wireless networks and provide service to end users;
- infrastructure vendors, who provide the networking equipment and software to build such networks;
- device manufacturers, who provide voice and data communication devices that use the network, such as modems, embedded wireless modules and wireless gateways;
- semiconductor companies who manufacture the technology platforms and chipsets that are often used by device manufacturers to develop their products, and
- application enablement and cloud vendors, who provide applications and data analytics to enterprises and consumers that utilize the wireless networks.

Over the past several years, we have transitioned our business to focus specifically on integrated device-to-cloud solutions for IoT applications providing cloud and connectivity services as well as a broad portfolio of 2G, 3G, 4G, LPWA and short-range wireless embedded modules, and intelligent gateways.

Recent market trends in the wireless communications industry include:

- *Evolving wireless networks.* Mobile network operators around the world continue to invest in network upgrades to support LTE technologies, enabling mobile broadband connectivity beyond gigabytes per second. Mobile network operators also continue to expand and improve network coverage, improving the ubiquity of cellular wireless access globally. Many global telecommunications carriers are testing various 5G technologies, the next phase of mobile telecommunications standards which is expected to be deployed in the market by 2020-21.

- *Adoption of LPWA technology.* To expand the market for IoT applications, the industry adopted LPWA standards in 2016 by approving specifications for Cat M-1 and Cat NB-1. Sierra Wireless worked actively with the 3GPP standards body in setting the Cat M-1 and Cat NB-1 standards and we remain active in evolving this innovative technology. This development is expected to significantly expand the market for low power, deep coverage IoT applications. Cat M-1 and NB-1 devices and related services began to be deployed in late 2018 and we expect this new technology to grow in 2020.

- *Technology improvements in devices and software.* Improvements in wireless chipset technology, including greater integration, higher speeds, and lower power consumption, are driving further advances in cellular devices including on-board application processing, faster data transfer, smaller form factors, lower hardware costs, and longer battery life for host devices. These advances have helped enable the growth in demand for connected IoT devices and applications across many segments including automotive, transportation, energy, enterprise networking, sales and payment, industrial control and monitoring and field service.

- *Lower, more flexible service pricing.* MNOs are introducing new wireless connectivity service pricing models to accelerate growth of IoT solutions and applications globally.

- *Emergence of MVNOs specifically for the IoT*. MVNOs are increasing their level of activity in the IoT and expanding their service offerings by leveraging their connectivity services and adding application enablement and device management for IoT applications, often targeting specific vertical market segments.

- *Increasing focus and investment by large ecosystem participants.* Large ecosystem participants, such as mobile network operators, system integrators, semiconductor companies, contract manufacturers, cloud services providers and application enablement companies, are increasing their investments in, and strategic focus on, IoT solutions. Enterprises, governments and other organizations are increasingly incorporating IoT solutions into their business models to enhance productivity, reduce costs and create competitive advantage.

We expect these trends, and others, to stimulate overall growth in the IoT market. With higher speeds, lower costs, increased battery life and ubiquitous coverage in mobile networks, plus more ecosystem investment and innovative products from solution providers, the number of wireless connected devices and data traffic is expected to increase substantially over the next decade. This growth will be driven largely by deployment of LPWA and 5G technologies for both low-speed and high-speed IoT connectivity. In turn, this growth is expected to drive demand for secure, scalable integrated device-to-cloud IoT solutions that can connect, gather, store and manage data for customer applications.

Products and Solutions

We provide integrated Device-to-Cloud IoT solutions that are comprised of our recurring connectivity services, our IoT cloud platform, and our embedded cellular modules and gateways. Enterprises, industrial companies and OEMs worldwide rely on our expertise to deliver fully integrated IoT solutions to reduce complexity, gather intelligent edge data and enable connected IoT products and services.

With sales, engineering, and R&D teams located in offices around the world, we offer a comprehensive portfolio of embedded modules and gateways, seamlessly integrated with our cloud and connectivity services. Our integrated solutions are developed to be simple, scalable and secure, enabling customers to get their connected products and services to market faster. Our devices are currently operating on more than 600 networks globally and we have shipped more than 176 million connected devices worldwide.

IoT Solutions

Our IoT Solutions segment is focused on integrated end-to-end IoT solutions that include recurring connectivity services, cloud management software, and cellular modules and gateways targeted primarily at enterprises and OEMs in the IoT space. Our primary focus is on three key markets: (i) Industrial Edge for manufacturing asset monitoring; (ii) Mobile Edge for mobile asset tracking; and (iii) Infrastructure Edge for commercial infrastructure and building monitoring. We believe the IoT opportunities we are focusing on have a high potential to generate recurring services to the customer along with our cloud platform, devices and management tools. This segment is comprised of our former IoT Services and Enterprise Solutions segments, as well as a portion of our former OEM Solutions segment.

In this segment, we provide Device-to-Cloud IoT solutions that include: (i) our global cellular connectivity services, which are subscription-based and include our flexible Smart SIM and core network platforms; (ii) our cloud platform services, which provide a secure and scalable cloud platform for deploying and managing IoT subscriptions, over-the-air updates, devices and applications; and (iii) our managed broadband cellular services, which include a combination of hardware, managed high speed connectivity and cloud services. We also provide unified data orchestration to provide enhanced data management from the edge of the network to the cloud. This service, which is called Octave, securely integrates edge device, network and cloud application programming interfaces into a single platform.

We launched Octave in 2019 and commenced a strategic collaboration with Microsoft to develop one of the industry's first full-stack IoT solutions. We believe our new Octave edge data orchestration solution integrated with Microsoft Azure IoT Central will simplify and accelerate time-to value for enterprise IoT projects. We entered into a preferred partnership with Azure IoT to do joint marketing with them at IoT industry conferences and Octave is included in their IoT marketplace for the Microsoft Azure channel partners.

Our AirVantage Cloud Platform simplifies the deployment of IoT solutions by providing a seamless connection between devices and the enterprise. IoT solution providers can use the latest cloud application programming interface ("API") standards to quickly integrate data from their machines or assets with their own enterprise applications and back-end solutions. The AirVantage Management Service is a comprehensive device management application with interactive dashboards that make it easy to deploy, monitor and upgrade wireless devices remotely.

Our IoT Solutions segment also includes connectivity and data management services. As part of these services we introduced the multi-operator Sierra Wireless Smart SIM and Connectivity Service. The Smart SIM delivers multi-operator coverage, reliable performance and flexible global pricing through a patented embedded agent designed specifically for enabling IoT connectivity anywhere in the world. In 2016, we introduced eUICC as part of our global Smart SIM and connectivity service. eUICC is a GSMA specification that allows users to remotely provision and change service providers over the air without physically accessing the SIM card. This provides a global, operator-independent connectivity solution which is critical for the deployment of the IoT. As a key part of this strategy we have negotiated wholesale agreements with a number of mobile network operators for the provision of airtime on their networks to support our connectivity services business. In early 2019, we commenced production of our

Ready-to-Connect solution which includes an embedded cellular module; integrated SIM that is pre-connected to global mobile networks; and IoT platform for device and subscription management - all in one integrated bundle.

Our connectivity services in IoT Solutions enable companies operating in many different sectors of the economy including Industrial, Energy, Industrial Control and Monitoring, Infrastructure and Utility. We also have several IoT vertical markets that we serve directly with our connectivity and managed services including Security, Offender Monitoring and Asset Tracking.

Our embedded devices in this reporting segment are comprised of IoT embedded cellular wireless modules that include LPWA, 2G, 3G, 4G LTE products. We are currently working on the development of 5G cellular embedded modules for anticipated launch later in 2020. We also provide 3G and 4G cellular gateways and routers that are complemented by cloud-based services and on-premise software for secure device and network management.

Our gateway solutions address a broad range of vertical market applications within the mobility, industrial and enterprise market segments. Our AirLink gateways and routers have strong brand recognition with network operators, distributors, value added resellers and end customers. Our products are known for their high reliability and technical capability in mission-critical applications. These gateways and routers leverage our expertise in wireless technologies and offer the latest capabilities in LTE networking, including FirstNet solutions as well as Wi-Fi, Bluetooth and Global Navigation Satellite System ("GNSS") technologies. We also provide our customers with AirLink Management Services through our IoT platform and have introduced new advanced reporting and analytics to our portfolio. Our AirLink product portfolio includes 3G, 4G LTE and LTE-Advanced intelligent wireless gateways and routers that provide plug and play mission-critical connectivity. They are designed for use where reliability and security are essential and are sold to industrial, utility, energy, public safety, transportation, field service, retail and financial enterprises around the world.

Our gateway customers can remotely configure, deploy, and monitor their AirLink gateways over-the-air using our AirLink Management Service ("ALMS") which is powered by our AirVantage cloud platform. This service generates recurring, subscription-based revenue for the segment. In 2018, we launched our AirLink LX60, the industry's first cloud-managed LPWA cellular router for commercial and enterprise IoT applications. The LX60 extends the AirLink Networking Solutions portfolio into new applications, including building automation, digital signage, taxis, automated teller machines, kiosks and point-of-sale terminals for both primary and backup connectivity.   Our AirLink MG90 High-Performance Multi-Network Vehicle Router, based on our AirPrime EM 7511 embedded module, has been certified and approved for operation on FirstNet in the United States. FirstNet is the nationwide public safety communications platform dedicated to America's first responders. We launched AirLink® LX40, the industry's most compact cellular router optimized for the IoT, providing secure, managed connectivity out of the box for business-critical IoT enterprise applications and AirLink® Management Service - Advanced Reporting and Analytics providing customers with operational insight for vehicle fleet operations using our secure, cloud-based device management platform. We launched AirLink® RV55 LTE-Advanced Pro router, the industry's most compact, rugged LTE-A Pro router to simplify and lower the cost of connecting critical remote assets, infrastructure and mobile workforces in utility, energy, smart city and public safety applications. All of our cellular gateways can be monitored, managed and controlled remotely through our ALMS. In 2019, we launched AirLink Complete, a new comprehensive management and support service that combines cloud-based management, security monitoring, 24/7 technical support and extended warranty. We also launched our AirLink Managed Network Service with embedded FirstNet connectivity. This bundled solution will help public safety agencies of all sizes take advantage of the benefits and capabilities enabled by FirstNet-connected solutions. Our AirLink MG90 High Performance Multi-Network Vehicle has been certified and approved for use on the UK's Emergency Services Network, a dedicated network for emergency services that provides secure and resilient mobile broadband data for routine and mission-critical emergency services use.

Total revenue from our IoT Solutions segment increased by $3.9 million, or 1% in 2019 compared to 2018. This increase was primarily due to strong contributions from our recurring and other services, as well as our Enterprise gateway products, partially offset by lower revenue from Integrated IoT solutions modules. Within the IoT Solutions segment, excluding iTank, which was sold at the end of 2018, recurring and other services revenue was up $6.8 million, or $7.4%.

Embedded Solutions

Our Embedded Broadband segment is comprised of our high-speed cellular embedded modules that are typically used in non-industrial applications, namely Automobile, Enterprise Networking, and Mobile Computing markets. The products in this segment are typically high-speed 4G LTE and LTE-Advanced cellular modules that are ordered in larger volumes. In this segment, we have limited opportunities to provide connectivity services or fully integrated IoT solutions to the OEM customer. We have a strong customer base in the Embedded Broadband business that is expected to transition over time from 4G LTE to 5G as the next generation cellular technology begins to be deployed later in 2020.

As a leading embedded module vendor, we make it simple for our customers to embed high-speed cellular technologies and manage these devices through our IoT cloud platform. The design cycles in this business segment can range from two to three years in the Automotive market to 12 to 18 months in the Mobile Computing market. We are currently working on a number of potential 5G design opportunities with existing customers and new customers. Our portfolio also includes cloud-based remote device and data management capability, as well as support for our embedded application framework called Legato, which is an open source, Linux-based platform.

Our Legato™ platform, an open source embedded platform built on Linux, simplifies IoT application development. Comprised of a tightly integrated application framework, fully tested Linux distribution and feature-rich development environment, the open source Legato™ platform accelerates application level development of connected devices, thereby lowering total development and system costs for OEMs. Legato™ provides existing customizable components needed for IoT solutions across a wide range of target markets, including connected cars, industrial automation and smart meters.

We also continue to expand our MangOH development kits which is an open source hardware design that accelerates innovation within the IoT by enabling rapid prototyping and shortens time-to-market for IoT developers. IoT developers can use the MangOH development kit to deploy multiple wireless and sensor technologies to determine the best solutions for their specific IoT use-case requirements. Once their prototype is complete, they can then re-use the industrial-grade design and IoT modules in final production. We introduced MangOH Green and MangOH Red rapid prototyping kits which are being well received by the development community, and in 2019 we released mangOH® Yellow which is smaller in size and targeted at IoT applications where compactness and low-power consumption are essential.

In 2019, we also expanded our portfolio of leading edge mobile broadband embedded modules for mobile computing, routers, gateways, industrial automation and new IoT applications. We introduced our 5G EM919x embedded module and the 4G LTE Cat-20 EM769x embedded module which OEMs and system integrators are using to secure connectivity at the highest possible speeds on their mobile computing, networking and IoT platforms worldwide.

In addition to our devices and related software products, we offer professional services to OEM customers during their product development and launch process. We leverage our expertise in wireless design, software, integration and certification to provide services that enable customers to more rapidly and cost-effectively bring their IoT and connected device solutions to market.

Total revenue from our Embedded Solutions segment decreased by $84.0 million, or 20.0%, in 2019 compared to 2018, primarily due to some earlier design win losses and weaker demand from mobile computing and networking customers partially offset by slightly higher revenue from automotive customers.

Customers

Our IoT devices and integrated solutions are used by a variety of customers across numerous market segments and many use cases. Market segments that we serve include industrial, utility, energy, manufacturing, transportation, public safety, security, sales and payment, automotive, mobile computing, enterprise networking, cleantech, field services, residential and healthcare.

We sell our products both directly and through indirect channels including OEMs, distributors, value-added resellers and mobile network operators. We sell our products to customers worldwide and have built sales and distribution teams to support our international business.

Original Equipment Manufacturers

OEMs are customers that integrate our devices into their machines and equipment which they manufacture and sell to end-user markets through their own direct sales force and indirect distribution channels. In many cases we leverage the market-specific expertise and go-to-market capabilities of our OEM partners to address the connectivity solution needs of certain market segments. Our devices have been integrated into a range of OEM solutions, such as automobiles and commercial vehicles, smart energy meters, point of sale terminals, enterprise routers, notebooks, assembly line machinery, mobile and fixed equipment, alarm panels and medical equipment. We sell to OEMs both directly and indirectly through distribution partners around the world.

Resellers and Distributors

Resellers purchase our products either directly from us or from our distributor network and resell them to OEMs and enterprise customers. In order to support our global resellers and OEMs, we have established a global network of distribution partners. Distributors ensure that our products are available to a large number of resellers and OEM customers around the world. Resellers often combine our products with other elements of an overall solution, such as additional hardware, application software and communication services and deliver a complete solution to the end-user customer. Resellers include IT VARs, system integrators and application solution providers.

Mobile Network Operators

We maintain strong relationships with key mobile network operators worldwide and these relationships allow us to stay aligned with wireless technology trends while we work together to develop the market to drive IoT growth. We have also entered into wholesale purchase agreements with several mobile network operators that enable us to provide global cellular connectivity services to our customers. Additionally, mobile network operator sales teams often work with our sales teams to jointly sell wireless solutions to OEMs, enterprise and government customers. The mobile network operator channel provides us with extended customer reach, while at the same time allows the operators to leverage our wireless solutions expertise to help sell their connectivity services.

Strategic Partnership

In June 2019, we established a partnership with Microsoft and our Octave solution is now part of the Azure IoT marketplace. We are actively engaged with the Azure IoT sales team and the Systems Integration partners which are part of the Azure IoT ecosystem. We are participating in numerous joint co-marketing activities including webinars, conferences and events in North America and Europe. We have secured a number of joint customer wins with Azure and have a growing funnel of joint prospects in development.

Product Development

We have built a reputation in the wireless industry for creating state-of-the-art, high quality products and services and for bringing them to market within aggressive timeframes. Our global product development teams of approximately 592 full time employees, at December 31, 2019, are located in Richmond, British Columbia; Carlsbad, California; Toulouse, France; Hong Kong SAR, China; Shenzhen, China; Atlanta, Georgia and Taipei, Taiwan. These teams are skilled in the areas of radio design, hardware design, embedded software design cloud-based application development and cellular network design. The product development teams include leaders with extensive experience in their fields, along with younger graduates from leading universities.

Our goal is to develop complete, thoroughly validated, high quality products and solutions that are closely managed throughout their entire life cycle. As part of this approach, individuals from our product development group form product-specific teams with staff from other functional areas, including research and development, product management, marketing, operations, technical support and quality. These teams work closely to bring new products through the development phase, while balancing the market requirements of performance, time to market and product cost. Concepts and prototypes are validated by working with lead customers, channel partners and industry consultants. From time to time, projects are outsourced to third parties, who provide product development leverage for our in-house development teams.

Products and services that result from our development process are designed and tested to industry standards, as well as customer requirements and are introduced to our contract manufacturing partners for production and delivery to our customers. Included in the development effort is the certification of our products with industry and regulatory standards bodies and mobile network operators. A group of senior engineers develops and monitors our development processes within an ISO 9001 approved framework or ISO/TS 16949 for automotive grade products. These processes are applied across all development projects to ensure uniformity and high quality.

Our product development staff stays current with technology by participating in industry groups such as the Global Certification Forum, the Cellular Telecommunications Industry Association, the European Telecommunications Standards Institute, the Third Generation Partnership Project, the Third Generation Partnership Project 2, the GSM Association and Open Mobile Alliance, as well as through ongoing technical education. We maintain close relationships with local universities by providing financial and technical contributions, hiring co-op students, giving lectures, supporting professorships and participating in regular informal meetings with faculty members.

Marketing

Product Management & Segment Marketing

Members of our product management and marketing teams play an active role in the development and management of products through their entire product life cycle. Emphasis is placed on understanding customer and market segment needs, developing the business case for new products and services, determining competitive positioning and pricing, and ensuring product completeness, which includes market and competitive analysis, documentation and packaging. The product management team also develops and manages the product portfolio roadmap and both the product management and segment marketing groups interface with customers regarding business opportunities and product requirements.

Corporate Marketing

Members of this team develop and communicate corporate and product positioning to a variety of audiences including new and prospective customers, media and analysts, channel partners, ecosystem partners, and the industry in general in several ways, including:

- Global corporate and product branding, positioning and messaging;

- Marketing content generation to build awareness for our device-to-cloud offering and thought leadership topics including material such as: webinars, white papers, product and corporate videos, training tutorials, bylined articles, customer stories, news releases, datasheets, segment brochures and corporate brochures;
- Product launch and Sales support by way of sales tools, presentations, and outbound launch programs;
- Demand generation programs to generate marketing and sales qualified leads that turn into opportunities for the business;
- Seek and secure editorial coverage and place advertisements in industry, business and trade publications, and meet with industry experts, media and industry analysts;
- Participate in industry and segment conferences and trade shows to drive brand awareness and generate leads;
- Develop channel marketing initiatives to educate resellers and distributors and to encourage sell-through of our products and solutions; and
- Develop partnerships with other participants in the IoT ecosystem.

Manufacturing

We outsource most of our manufacturing, procurement of certain components, kitting, logistics, assembly, testing and repair. We believe that outsourcing allows us to:

- Focus on our core competencies, including research and development, sales and marketing;
- Participate in contract manufacturer economies of scale and favorable geographic locations; getting access to high quality, lower cost manufacturing resources;
- Provide regional manufacturing to support customer requirements and minimize costs;
- Achieve rapid production scale; and
- Optimize capital utilization.

We use several contract manufacturers and logistics partners to provide an end-to-end manufacturing solution. The integrated supply chain services provided by these electronic manufacturing services ("EMS") partners, enable us to optimize product costs and capital utilization, as well as generally achieve increased operating efficiencies and scalability.

We perform certain manufacturing and supply chain related functions in-house, including key component sourcing, manufacturing engineering, and most of the manufacturing test development.

Competition

The market for IoT devices and solutions is growing and we expect that it will continue to attract significant competition. Some of our competitors are large corporations with manufacturing scale and financial resources at their disposal, while others are small. However, we believe that our innovation, deep expertise in wireless IoT communications, and the ability to provide an integrated end-to-end IoT solution to our customers with security features gives us an opportunity to differentiate ourselves.

IoT Services: Our cloud and connectivity services are a strategic differentiator of our integrated device to cloud IoT solutions offering. We are unique in having our own Smart SIM pre-integrated into our devices. Depending on the customers served, our competitors include MNOs and other companies who operate MVNOs or cloud platforms for the IoT market such as Wireless Logic, Kore Wireless Group Inc., Aeris, Cubic Telecom, Eseye, Arkessa, Airlinq and Transatel.

Wireless Embedded Modules: We have established a strong leadership position by being early to market with leading edge, high performance, high quality products that support the latest wireless technologies. We are a global market leader in wireless cellular embedded modules for IoT with a broad product portfolio, a global footprint, strong relationships with global OEMs, and unique software platforms including Legato and Octave. Our primary competitors include Gemalto NV, Telit Communications Plc, u-blox Holding AG, Quectel Wireless Solutions, Fibocom Wireless Inc., Sunsea Telecommunications Co. Ltd., and Huawei Technologies Corporation.

Intelligent Gateways and Routers: The market for intelligent wireless gateways is quite fragmented depending on the vertical market segment, customer base and level of competition. In the segments where we compete, we believe that our market share is strong, and that competition is intensifying. In order to strengthen our share position, we have launched new products to rejuvenate our product line and increased our investments in sales capacity and other go-to-market initiatives. Our competitors in this line of business vary by market segment and include Cradlepoint Incorporated, Cisco Systems Inc., CalAmp Corp., Digi International Inc., and Multi-Tech Systems Inc.

Employees

As of December 31, 2019 we had a total of 1,280 full time employees, 417 of whom are located at our head office in Richmond, British Columbia, with the balance being located across the United States, Canada, Europe and Asia. Of our 1,280 employees, 592 are involved in product development, 79 are involved in manufacturing and operations, 374 are sales and support personnel, 80 are marketing personnel and 155 are in finance and administration. Employees have access to ongoing training and professional development opportunities that are funded by the Company through on-the-job and outside educational programs.

Competitive compensation, including cash compensation, our employee stock option plan, our employee restricted share unit plans and our retirement plan contribution program, are complemented by internal recognition programs and career advancement opportunities. We believe our relationships with our employees are positive.

We have entered into non-disclosure agreements and confidentiality agreements with key management personnel and with substantially all of our other employees.

Intellectual Property

We believe that a considerable portion of the value of the Company resides in our intellectual property, the combined expertise of our teams, our inventions and our ability to apply rapidly changing technology to new and innovative solutions for our customers.

We protect our intellectual property through a combination of patent protection, copyright, trademarks, trade secrets, licenses, non-disclosure agreements and contractual provisions. We enter into a non-disclosure and confidentiality agreement with each of our employees, consultants and third parties that have access to our proprietary technology. Under assignment of inventions agreements, all of our employees and consultants assign to Sierra Wireless all intellectual property rights in the inventions created during such person's employment or contract with Sierra Wireless.

We currently hold 166 United States patents and 158 international patents. Additional patent applications are pending. We also access the intellectual property of third parties by entering into commercial licenses and cross-licenses when appropriate.

Governmental Regulation

Our products are subject to certain mandatory regulatory approvals in the United States, Canada, the European Union ("EU") and other regions in which we operate. In the United States, the Federal Communications Commission regulates many aspects of communications devices, including radiation of electromagnetic energy, biological safety and rules for devices to be connected to the telephone network. In Canada, similar regulations are administered by the Ministry of Industry, through Industry Canada. EU directives provide the comparable regulatory guidance in Europe.

Wireless modems must be approved under these regulations by the relevant government authority prior to these products being offered for sale. We have obtained all necessary Federal Communications Commission, Industry Canada, EU and other required regulatory approvals for the products we currently sell.

Foreign Operations

We operate foreign research and development facilities in Toulouse, France; Carlsbad, California, Atlanta, Georgia, United States; Taipei, Taiwan; Hong Kong SAR and Shenzhen, China.

Our major foreign sales, marketing and support functions are in Toulouse, France; Carlsbad, California, Atlanta, Georgia, United States; Taipei, Taiwan; and in Hong Kong SAR, China.

We use a number of large global EMS providers with factories located in China, Brazil, and Vietnam to manufacture our products and provide integral supply chain services. We also use additional partners to support regional manufacturing requirements and select products including more complex, lower volume devices.

Additional Information Concerning Our Business

From time to time, some of our products may be subject to importation tariffs in the United States and other markets around the world.

Our operations do not have a significant impact on the environment. We have not made, and are not required to make, any significant capital expenditures to comply with environmental regulations nor will our competitive position be affected by environmental protection requirements. Working with the contract manufacturers who build our products and relevant component suppliers, we ensure that our products that are sold in the EU comply with the EU directives that restrict the use of certain hazardous substances in electronic equipment sold in the EU after July 1, 2006.

The Company has been actively involved in building a responsible, sustainable business for many years, along with empowering other businesses to create sustainable practices using our products. We are a member of the Responsible Business Alliance (RBA, formerly EICC), and committed to conducting our operations in line with the RBA Code of Conduct, which sets out common standards for social, environmental and ethical issues aimed at achieving more equitable work environments and environmentally friendly supply chains.

The sustainability principles to which we are committed, and are integrating into our business, have been presented in our second annual Corporate Social Responsibility progress report, published in March 2019, and available on our website at www.sierrawireless.com/company/corporate-social-responsibility/. In the report, we acknowledged our responsibility to work towards a better, more sustainable future from the manufacturing floor to the boardroom and demonstrated the ways in which we are honoring our commitment to integrate environmental sustainability and positive social impacts throughout our business. We are committed to working with vendors, partners and our team members to bring prominence to social responsibility in the IoT industry. We will continue to develop our goals as part of our recognition that our commitment to improving our corporate responsibility and refining our sustainability approach are essential components of our long-term growth.

Our Conflict Minerals policy sets out our commitment to source materials and components from environmentally and socially responsible suppliers. In general, it is our policy that we do not knowingly purchase materials, components or supplies which contain conflict minerals that originate in the Democratic Republic of Congo and adjoining countries that have not been certified as conflict free by an independent third party. We expect our suppliers to adhere to the same standard and to have in place programs and processes to ensure conflict free supply chains. We request confirmation annually from our suppliers regarding the conflict free status of the products that they provide to Sierra Wireless. We report the results of this process as part of the annual requirements the SEC has developed in response to Section 1502 of the Dodd-Frank Act.

RISK FACTORS

Our business is subject to significant risks and uncertainties and past performance is no guarantee of future performance. These risks and uncertainties are described in our MD&A for the year ended December 31, 2019, which can be found on our website at www.sierrawireless.com or at www.sedar.com, and filed as Exhibit 1.3 to our Annual Report on Form 40-F.

DIVIDENDS

Since incorporation, we have not paid any dividends on our Common Shares. Our current intention is to reinvest earnings to finance the growth of our business. We do not anticipate that we will pay any dividends on our Common Shares in the immediate or foreseeable future.

DESCRIPTION OF CAPITAL STRUCTURE

Our authorized capital consists of an unlimited number of Common Shares, of which, at March 9, 2020, 36,335,547 were issued and outstanding, and an unlimited number of Preference Shares, issuable in series, of which none were issued and outstanding. Our board of directors is authorized to determine the designation, rights and restrictions to be attached to the Preference Shares upon issuance.

Holders of Common Shares are entitled to receive notice of any meeting of shareholders and to attend and vote at those meetings, except those meetings at which only the holders of shares of another class or of a particular series are entitled to vote. Each Common Share entitles its holder to one vote. Subject to the rights of the holders of Preference Shares, the holders of Common Shares are entitled to receive on a proportionate basis such dividends as our board of directors may declare out of funds legally available. In the event of the dissolution, liquidation, winding up or other distribution of our assets, the holders of the Common Shares are entitled to receive on a proportionate basis all of our assets remaining after payment of all of our liabilities, subject to the rights of holders of Preference Shares.

Normal Course Issuer Bid

On August 1, 2018, we received approval from the Toronto Stock Exchange ("TSX") of our Notice of Intention to make a Normal Course Issuer Bid ("NCIB"). Pursuant to the NCIB, we were permitted to purchase for cancellation up to 3,580,668 of our common shares, or approximately 9.9% of common shares outstanding as of the date of the announcement, representing 10% of the public float. The NCIB commenced on August 8, 2018 and terminated on August 7, 2019. In 2019, we did not repurchase any common shares. In 2018, we repurchased and canceled 161,500 common shares at an average price of $19.32 per share. The excess purchase price over and above the average carrying value in the amount of $1,187 was charged to retained earnings in 2018.

Credit Facilities

We have a committed $30 million senior secured revolving credit facility (the "Revolving Facility") with the Canadian Imperial Bank of Commerce ("CIBC") as sole lender and as Administrative Agent. The Revolving Facility is secured by a pledge against substantially all of our assets and includes an accordion feature, which permits the Company to increase the aggregate revolving loan commitments thereunder on an uncommitted basis subject to certain conditions. The Revolving Facility matures on July 31, 2021 and will be used for general corporate purposes, including, but not limited to, capital expenditures, working capital requirements and/or certain acquisitions permitted under the Revolving Facility. As at December 31, 2019, there were no borrowings under the Revolving Facility.

Letters of Credit

We have access to a standby letter of credit facility of $1.5 million from Toronto Dominion Bank. The credit facility is used for the issuance of letters of credit and guarantees and is guaranteed by Export Development Canada. As of December 31, 2019, there were two letters of credit issued against the revolving standby letter of credit facility for a total value of $0.1 million.

Accounts Receivable Purchase Agreement

On June 26, 2019, we entered into an uncommitted Receivables Purchase Agreement (the "RPA") with CIBC to improve our liquidity during high working capital periods. Under the RPA, up to $75.0 million of Receivables may be sold and remain outstanding at any time. Eligible trade receivables are sold at 100% face value less discount with a 10% limited recourse to us arising from certain repurchase events. The RPA is on an uncommitted basis with no expiry date and carries a discount rate of CDOR (for purchased receivables in Canadian dollars) and LIBOR (for purchased receivables in U.S. dollars) plus an applicable margin. After the sale, we do not retain any interests in the Receivables, but continue to service and collect, in an administrative capacity, the outstanding receivables on behalf of CIBC.

We account for the sold Receivables as a sale in accordance with Financial Accounting Standards Board ("FASB") ASC 860, *Transfers and Servicing*. Net proceeds from the sale reflect the face value of the Receivables less discount fees charged by CIBC and one-time legal costs and are classified under operating activities in the consolidated statements of cash flows.

Pursuant to the RPA, the Company sold and de-recognized $36.1 million and $86.9 million Receivables during the three and twelve months ended December 31, 2019. As at December 31, 2019, $18.2 million remained outstanding to be collected from customers and remitted to CIBC. Discount fees of $0.4 million are included in *Other income (expense)* and legal costs of $0.1 million are included in *Administration* expense in the consolidated statements of operations. As at December 31, 2019, we collected $3.4 million from Receivables that we previously sold and that have not been remitted to CIBC due to timing of settlement dates. We recorded the amount in *Restricted cash* in the consolidated balance sheets with a corresponding increase in accrued liabilities.

MARKET FOR SECURITIES

Our Common Shares are listed on the TSX and trade under the symbol "SW", and on Nasdaq under the symbol "SWIR".

Trading Price and Volume

Set out below are the price ranges and volume of the Common Shares of Sierra Wireless, Inc. that traded on the TSX for the year ended December 31, 2019.

2019	**Low (Cdn$)**	**High (Cdn$)**	**Total Monthly Volume**
January	18.09	20.51	1,280,100
February	14.35	21.10	2,846,400
March	16.10	17.27	1,253,000
April	16.41	18.39	669,900
May	16.23	19.47	1,194,400
June	15.06	17.37	857,500
July	15.10	16.07	588,600
August	13.36	16.16	1,596,500
September	13.90	15.39	3,282,700
October	13.37	14.92	1,519,000
November	10.22	15.53	2,527,000
December	11.47	13.20	1,136,600

Set out below are the price ranges and volume of the Common Shares of Sierra Wireless, Inc. that traded on Nasdaq for the year ended December 31, 2019.

2019	**Low (US$)**	**High (US$)**	**Total Monthly Volume**
January	13.27	15.60	3,877,200
February	10.80	15.95	13,799,000
March	11.98	12.93	3,945,600
April	12.30	13.75	3,353,500
May	12.00	14.55	5,452,500
June	11.49	13.09	3,131,500
July	11.57	12.43	2,674,900
August	10.04	12.28	5,025,500
September	10.50	11.57	2,995,300
October	10.05	11.35	3,372,800
November	7.72	11.82	10,325,300
December	8.63	9.99	6,287,900

DIRECTORS AND EXECUTIVE OFFICERS

The tables set forth below list the directors and executive officers of the Company as at March 9, 2020, indicating their name, municipalities of residence, their respective positions and offices held with the Company, the length of service and their principal occupations within the five preceding years.

Each director is elected at our annual meeting of shareholders to serve until the next annual meeting or until a successor is elected or appointed, unless such director resigns or is removed earlier. To the knowledge of Sierra Wireless, the directors and executive officers as a group, beneficially own, directly or indirectly, or exercise control or direction over, 397,257 Common Shares (not including Common Shares issuable upon the exercise of stock options or undistributed restricted stock units), representing as of March 9, 2020 approximately 1.1**%** of the issued and outstanding Common Shares.

Directors

Name, Position and Residence	Principal Occupation or Employment in the Preceding Five Years [1]	Director Since
Gregory D. Aasen [3] Director British Columbia, Canada	Independent Outside Director	December 1997
Robin A. Abrams [2][4][5] Chair and Director California, U.S.A.	Independent Outside Director	March 2010
Paul G. Cataford [2][3] Director Alberta, Canada	Independent Outside Director; President and Chief Executive Officer of Zephyr Sleep Technologies, a Canadian designer, developer and manufacturer of medical devices for the diagnosis and treatment of sleep-disordered breathing, from April 2010 to present	July 1998
Joy Chik [3] Director Washington, U.S.A	Independent Outside Director; Corporate Vice President, Identity Division, Microsoft Corporation from October 2016 to present; Corporate Vice President and other senior Engineering roles, Microsoft Corporation from 2014 to 2016	October 2018
Russell N. Jones [2][4] Director Ontario, Canada	Independent Outside Director; CFO, Shopify Inc. from 2011 to 2018.	September 2018
Lori M. O'Neill [2][3] Director Ontario, Canada	Independent Outside Director; Consultant	September 2019
Thomas Sieber [2][4] Director Zurich, Switzerland	Independent Outside Director; Chairman of Axpo Holding AG, a Swiss energy utility, from March 2016 to present; and Chairman of Salt Mobile SA (formerly Orange Switzerland), a Swiss telecommunications carrier, 2012 to 2015	January 2014
Kent P. Thexton Director Ontario, Canada	President and Chief Executive Officer; General Partner of ScaleUP Ventures Inc. from April 2016 to October 2018; and Managing Director of OMERS Ventures from January 2014 to 2016	March 2005

Notes:

(1) The information as to "principal occupation" has been furnished by the respective directors
(2) Member of the Audit Committee
(3) Member of the Human Resources Committee
(4) Member of the Governance and Nominating Committee
(5) Ms. Abrams resigned from the Audit Committee effective December 31, 2019.

Executive Officers

Name, Position and Province or State and Country of Residence	Principal Occupation in the Preceding Five Years	Length of Service
Kent P. Thexton President and Chief Executive Officer Ontario, Canada	President and Chief Executive Officer from October 2018 to present; General Partner of ScaleUP Ventures Inc. from April 2016 to October 2018; and Managing Director of OMERS Ventures from January 2014 to 2016	2 year
Jason L. Krause Chief Operating Officer British Columbia, Canada	Chief Operating Officer from November 2018 to present; Senior Vice President and General Manager, Enterprise Solutions from 2015 to October 2018; Senior Vice President, Corporate Development and Marketing from 2011 to 2015	12 years
David G. McLennan Chief Financial Officer, Chief Transformation Officer, and Corporate Secretary British Columbia, Canada	Chief Financial Officer and Corporate Secretary from March 2004 to present and Chief Transformation Officer from November 2018 to present	16 years
Philippe Guillemette Chief Technology Officer British Columbia, Canada	Chief Technology Officer	11 years
Rene Link Chief Marketing Officer & Senior Vice President Corporate Strategy California, U.S.A.	Chief Marketing Officer & Senior Vice President Corporate Strategy from 2016 to present; and from 2013 to 2016, Strategic Advisor and Chief Marketing and Demand Officer at Aricent Inc., a global design and engineering company innovating for customers in the digital era	4 years
Mark Overton Chief Solutions Officer & Senior Vice President, EMEA Sales United Kingdom	Chief Solutions Officer from November 2018 to present and Senior Vice President, EMEA Sales from January 2020 to present; Senior Vice President and General Manager, IoT Services from 2017 to October 2018; Managing Director, Global Innovation at Cisco Jasper, a global IoT platform leader, from 2015 to 2017, and SVP and Co-GM, EMEA at First Data, a global leader in commerce-enabling technology from 2013 to 2015	3 years
Marc Osgoodby Vice President, Global Sales New Jersey, U.S.A	Vice President, Global Sales from January 2019 to February 2020; Vice President, Sales, Enterprise Solutions from December 2015 to January 2019; Mr. Osgoodby resigned from the Company effective February 14, 2020	5 years
James P. Ryan Senior Vice President, Strategic Partnerships & Senior Vice President, APAC Sales Georgia, U.S.A	Senior Vice President, Strategic Partnerships from May 2019 to present and Senior Vice President, APAC Sales from January 2020 to present; Consultant at Rightbrain Consulting from May 2014 to May 2019	1 year

None of the directors or executive officers of the Corporation is, as at the date of this AIF, or was within 10 years before the date of this AIF, a director, chief executive officer or chief financial officer of any company (including the Corporation) that:

a) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under securities legislation which, in each case, was in effect for a period of more than 30 consecutive days (each, an “order”) that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer, or

b) was subject to an order that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

No director or executive officer of Sierra Wireless or a shareholder holding a sufficient number of securities of Sierra Wireless to affect materially its control, except where otherwise specifically indicated:

a) is, as at the date of this AIF, or has been within the 10 years before the date of the AIF, a director or executive officer of any company (including Sierra Wireless) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets;

    Lori O’Neill was a director of DragonWave Inc. (“DragonWave”) from June 13, 2013 until July 31, 2017. Ms. O’Neill, together with all the then current directors of DragonWave, resigned from the board of DragonWave on July 31, 2017 upon the appointment by the Ontario Superior Court of Justice (Commercial List) of KSV Kofman Inc. as receiver over all of the property and assets of DragonWave on the application of DragonWave’s senior creditors. On July 20, 2017, the Investment Industry Regulatory Organization of Canada suspended trading of DragonWave’s common shares on the TSX and DragonWave’s delisting from the TSX was announced on August 1, 2017, effective August 30, 2017. DragonWave’s delisting from Nasdaq took effect on August 2, 2017.

b) has, within the 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder;

c) has been subject to:
    (i) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or

    (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

CODE OF BUSINESS CONDUCT

In 2003, the Board of Directors adopted a Code of Business Conduct applying to all directors, officers, employees and contractors of the Company and each affiliate and subsidiary of the Company, including the Company’s Chief Executive Officer, Chief Financial Officer and other senior officers, to ensure that we conduct our business in accordance with the highest standards of business conduct. The Board of Directors approved updated versions of the Code of Business Conduct in December 2005, October 2008, March 2011, February 2014, April 2016 and May

2017. There have been no waivers granted from the Code of Business Conduct since its adoption. The Code of Business Conduct is available on the Company’s website at www.sierrawireless.com or on SEDAR at www.sedar.com.

AUDIT COMMITTEE

Mandate of the Audit Committee

The full text of the Mandate of the Audit Committee is set out below.

1. Purpose and Scope

The audit committee **(“Committee””)** was established by the Board of Directors **(“Board”)** of Sierra Wireless Inc. **(“Company”)** to assist the Board in fulfilling its responsibilities for oversight of the following:

- the Company's systems of internal and disclosure controls;
- the Company's financial reporting process including the Company’s financial statements and other financial information provided by the company to its shareholders, the public and others in accordance with applicable securities and corporate legislation and the Company’s Disclosure Policy;
- the Company's compliance with financial, accounting, legal and regulatory requirements including the Company’s Code of Business Conduct;
- the appointment, compensation, independence, oversight, communication with, performance and change of the Company’s external and independent auditors (the “Auditors”);
- the Company’s process for identification of the principal risks of the Company’s business and ensuring that an appropriate process is in place to manage risks across the enterprise; and
- the fulfillment of the other responsibilities set forth in this Mandate.

2. Organization, Membership and Meetings

- Committee members shall meet the requirements of the Toronto Stock Exchange, the NASDAQ Exchange, the Securities and Exchange Commission, the securities commissions of each of the Provinces of Canada in which the Company is a reporting issuer and any other regulatory agency that may have jurisdiction over the operations of the Company from time to time.
- The Committee shall consist of three or more directors who are “independent” as defined by applicable law, regulations, guidelines and policies, and as determined by the Governance and Nominating Committee (“GNC”) of the Board.
- All members of the Committee shall be “financially literate”, and at least one member of the Committee shall be a “financial expert”. “Financially literate” and “financial expert” will have the respective meanings set out in applicable law, regulations, guidelines and policies.
- Members of the Committee shall be appointed annually by the Board on the recommendation of the GNC. Members may be replaced by the Board at any time, but shall otherwise serve until a successor has been named.
- No committee member may serve on the compensation committee of another company if any director of the Company is, or has been in the past three years, an employee of that other company.
- No member shall be affiliated with the Company or any subsidiary.
- The Committee shall meet from time to time, as it deems necessary, but at least four times per year.
- The presence in person or by telephone of a majority of Committee members shall constitute a quorum for any meeting of the Committee.
- The Committee may include management at its meetings, but shall also hold an executive session at each meeting at which only independent directors are present.

- The Committee shall maintain written minutes of its meetings, which minutes will be filed in the corporate minute book.

3. Authority and Responsibilities

3.1 External Audit:

- Recommend to the Board the appointment and compensation of the Auditors. Oversee the work of the Auditors (including resolution of disagreements between Management and the Auditors regarding financial reporting) for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for the Company.
- Review in advance and pre-approve all non-audit services to be provided to the Company or its subsidiaries by the Auditors, as permitted by applicable governance rules and in particular Section 10A of the Securities Exchange Act of 1934 and, in connection therewith, to approve all fees and other terms of engagement. The Committee shall also review and pre-approve all disclosures required to be included in any public filings with respect to non-audit services. The Committee may delegate to one or more members the authority to pre-approve non-audit services, provided a report is made to the Committee at its next scheduled meeting. The Committee may consult with Management but shall not delegate these responsibilities to Management.
- Communicate directly with the Auditors.
- Review the performance of the Auditors on at least an annual basis.
- On an annual basis, review and discuss with the Auditors all relationships the Auditors have with the Company in order to evaluate the Auditors' continued independence. The Committee: (i) shall ensure that the Auditors submit to the Committee on an annual basis a written statement delineating all relationships and services that may impact the objectivity and independence of the Auditors; (ii) shall discuss with the Auditors any disclosed relationship or services that may impact the objectivity and independence of the Auditors; and (iii) shall satisfy itself as to the Auditors' independence.
- At least annually, obtain and review an annual report from the Auditors describing (i) the Auditors' internal quality control procedures and (ii) any material issues raised by the most recent internal quality control review, or peer review, of the Auditors, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the Auditors, and any steps taken to deal with any such issues.
- Confirm that the rotation of the lead audit partner or the audit partner responsible for reviewing the audit (the concurring partner), for the Company's Auditors complies with the requirements of the Canadian and US regulatory authorities.
- Review, based upon the recommendation of the Auditors and Management, the scope and plan of the work to be done by the Auditors for each fiscal year.

3.2 Financial statements:

- Review and discuss with Management and the Auditors the Company's quarterly financial statements (including disclosures made in Management's Discussion and Analysis, as defined in Multilateral Instrument 51-102, and interim earnings press releases) prior to submission to shareholders, any governmental body, any stock exchange or disclosure to the public. Approve the interim financial statements and footnotes, MD&A and interim earnings press release.
- Review and discuss with Management and the Auditors the Company's annual audited financial statements (including disclosures made in Management's Discussion and Analysis and annual earnings press releases) prior to submission to shareholders, any governmental body, any stock exchange or disclosure to the public. Recommend to the Board approval of the annual audited financial statements and footnotes, MD&A and annual earnings press release.
- Recommend to the Board, if appropriate, that the Company's annual audited financial statements be included in the Company's annual report for filing with appropriate securities regulatory agencies.

- Review and approve any reports required to be included in the Company's annual meeting materials and any other Committee reports required by applicable securities laws or stock exchange listing requirements or rules.

3.3 Periodic and annual reviews:

- Periodically review with each of Management and the Auditors (i) any significant disagreement between Management and the Auditors in connection with the preparation of the financial statements, (ii) any difficulties encountered during the course of the audit or review (including any restrictions on the scope of work or access to required information), and (iii) Management's response to each.
- Periodically discuss with the Auditors, without Management being present (i) their judgments about the quality, appropriateness, and acceptability of the Company's accounting principles and financial disclosure practices, as applied in its financial reporting, and (ii) the completeness and accuracy of the Company's financial statements.
- Consider and approve, if appropriate, significant changes to the Company's accounting principles and financial disclosure practices as suggested by the Auditors or Management. Review with the Auditors and Management, at appropriate intervals, the extent to which any changes or improvements in accounting or financial practices, as approved by the Committee, have been implemented.
- Review with Management, the Auditors and the Company's counsel, as appropriate, any legal, regulatory or compliance matters that could have a significant impact on the Company’s financial statements, including significant changes in accounting standards or rules as promulgated by the Canadian Institute of Chartered Accountants, the securities regulators having jurisdiction over the Company or other regulatory authorities with relevant jurisdiction.
- Obtain and review an annual report from Management relating to the accounting principles used in preparation of the Company's financial statements (including those policies for which Management is required to exercise discretion or judgments regarding the implementation thereof).
- At least annually, obtain and review a report from Management summarizing the Company’s investments in cash or cash equivalents and marketable securities.
- On an annual basis, review the Company’s Treasury Investment Policy.

3.4 Discussions with Management:

- Review and discuss with Management the Company's annual and interim earnings press releases (including the use of “pro forma” or “adjusted” non-GAAP information), financial information and earnings guidance provided to analysts and rating agencies as well as all other material public disclosure documents such as the Company’s AIF, management information circular and any prospectuses.
- Review and discuss with Management all material off-balance sheet transactions, arrangements, obligations (including contingent obligations) and other relationships of the Company with unconsolidated entities or other persons, that may have a material current or future effect on financial condition, changes in financial condition, results of operations, liquidity, capital resources, capital reserves or significant components of revenues or expenses.
- Inquire about the application of the Company's accounting policies and their consistency from period to period, and the compatibility of these accounting policies with generally accepted accounting principles, and (where appropriate) the Company's provisions for liabilities that may have a material impact on the financial statements of the Company.
- Review and discuss with Management the Company's major financial risk exposures and the steps Management has taken to monitor and control such exposures (including Management's risk assessment and risk management policies).
- Review and discuss with Management all disclosures made by the Company concerning any material changes in the financial condition or operations of the Company.

- The Committee will meet periodically and separately with the Company's counsel to review material legal affairs of the Company and the Company's compliance with applicable law and listing standards.
- Review annually the Auditors' letter of the recommendations with respect to internal controls over financial reporting to Management and Management's response to such letter.
- Periodically review the Company's administration of equity awards under the Company's long-term incentive plans (stock option plan and restricted share unit plans) including without limitation: (i) the practices and procedures adhered to; and (ii) the accounting treatment of equity awards. In doing so, the Audit Committee shall: (i) have special regard to grants of equity awards to insiders of the Company; (ii) review individual equity awards on a "sample" basis; and (iii) assess the records retention relating to equity awards on a sample basis.

3.5 Internal controls and disclosure:

- In consultation with the Auditors and Management: (a) review the effectiveness of the Company's internal control structure and system including information technology security and control, and the procedures designed to ensure compliance with laws and regulations, and (b) discuss the responsibilities, budget and staffing needs of the Company's internal accounting department.
- Establish and review procedures for (i) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters, and (ii) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.
- Be satisfied that adequate procedures are in place for the review of the Company's public disclosure of financial information extracted or derived from the Company's financial statements and periodically assess the adequacy of those procedures.
- Be satisfied that record retention services provided by third parties are effective. (For example, that equity grants are appropriately recorded and that all information necessary for compliance with all relevant laws, regulations and Company policies is available for review when required).

3.6 Risk Management and Compliance:

- Ensure that in addition to the Committee's oversight of management's process to identify and manage key financial risks, the Company has in place a process for enterprise risk management whereby the Committee reviews the enterprise's most critical risks and tracks management's actions to manage such risks.
- Review with management and the senior risk management executive the charter, activities, staffing and organizational structure of the risk management function.
- On a periodic basis, but not less than once per year, report to the Board on the process for enterprise risk management, the company's most critical risks and management's actions to address such risks.
- Discuss with the senior risk management executive any issues that may have been brought forward concerning compliance with the Company's Code of Business Conduct.
- Ensure that there are no unjustified restrictions or limitations on the activities of the risk management function and review and concur in the appointment, replacement or dismissal of the senior risk management executive.
- On an annual basis, review the effectiveness of the risk management function
- On a regular basis, meet separately with the senior risk management executive to discuss any matters that the Committee or the senior risk management executive believes should be discussed.

3.7 Reporting obligations:

- Ensure that all reporting obligations related to the AIF (Form 40-F for US purposes) and management information circular under Part 5 of Multilateral Instrument 52-110 are fully complied with.

3.8 Other:

- Review and approve all related-party transactions.
- Review and approve the Company's hiring policies regarding partners, employees, and former partners and employees of the present and former external auditor of the Company.
- Review any Management decision to seek a second opinion from Auditors other than the Company's regular Auditors with respect to any significant accounting issue.
- Review with Management and the Auditors the sufficiency and quality of the financial and accounting personnel of the Company.
- Review and reassess the adequacy of this Mandate annually and recommend to the Board any changes the Committee deems appropriate.
- Conduct an annual performance evaluation of Committee operations.
- As necessary to carry out its duties, engage independent legal, accounting or other advisors to advise the Committee and set and pay the compensation for any such legal, accounting or other advisors employed by the Committee.
- Perform any other activities consistent with this Mandate, the Company's By-laws and governing law as the Committee or the Board deems necessary or appropriate.
- The Committee will have full access to all books, records, facilities and personnel of the Company.

4. External and Internal Linkages

- The Board
- The CEO and Senior Management
- The senior Risk Management executive
- The Company's External Auditors
- Outside Consultants and Advisors
- The Corporate Governance and Nominating Committee

Composition of the Audit Committee

We have a separately designated standing audit committee established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Paul G. Cataford (Chair), Russell N. Jones, Lori M. O'Neill and Thomas Sieber are the current members of the Audit Committee. Each of them is an independent director and is financially literate as such terms are defined by applicable Canadian and U.S. securities laws. Robin A. Abrams resigned from the Audit Committee effective December 31, 2019.

Relevant Education and Experience

Robin A. Abrams is an independent director. Ms. Abrams has extensive experience in governance and oversight over the financial matters of large, publicly traded entities including as the CEO of Zilog, Palm Computing, Inc. and VeriFone. Ms. Abrams has held internationally focused executive positions at Apple and Unisys. In addition, she has held CEO positions at start-up companies: Firefly Mobile, a mobile products company for the youth market and BlueKite, a leading provider of bandwidth optimization software for wireless operators. Ms. Abrams earned her B.A. and J.D. degrees from the University of Nebraska, and she serves on the board of directors of HCL Technologies, Lattice Semiconductor Corporation, Zephyr Sleep Technologies Inc., and FactSet Research Systems Inc. Previously, Ms. Abrams served on the board of trustees for the Anita Borg Institute for Women and Technology.

Paul G. Cataford is an independent director and has served on public and private boards for over 20 years. In addition to his board activities, Mr. Cataford is currently the Chief Executive Officer of Zephyr Sleep Technologies Inc., a private company in the medical device industry. Previously, he was the President and Chief Executive Officer of University Technologies Inc. (2004 to 2009) and prior to that: Executive Managing Director of BMO Nesbitt Burns Equity Partners Inc. (Private Equity); and Managing Director and President of BCE Capital Inc. (Venture Capital). Previously, Mr. Cataford served on the board of Defence Construction Canada (a Crown Corporation). Mr. Cataford has extensive knowledge and experience in: technology investing; building and scaling technology companies; corporate governance; public/private finance; and financial reporting. Mr. Cataford completed a Mechanical Engineering Degree at Queen's University (1987) and a Master of Business Administration specializing in finance and international business, at the Schulich School of Business (York University - 1991). Mr. Cataford has received the Institute of Corporate Directors certified designation (ICD.D) after attending the ICD-Rotman Directors Education Program (University of Toronto - 2002).

Russell N. Jones is an independent director. Mr. Jones has extensive experience as a technology industry executive with demonstrated experience in financial oversight and reporting. Prior to his retirement in 2018, Mr. Jones was CFO of Shopify Inc. He joined Shopify in early 2011 and took the company public in May 2015. Mr. Jones has also held senior executive roles at a number of companies including Mitel Corporation, Newbridge Networks, Watchfire and Quake Technologies. He also co-founded a CFO advisory firm focused on earlier stage technology companies. Mr. Jones is a director of CPA Ontario and sits on both its Human Resources and Finance and Audit Committees. He is a CPA, CA and holds a Bachelor of Commerce (Honours) from Carleton University and an ICD.D certification from the Institute of Corporate Directors.

Lori M. O'Neill is an independent director. Ms. O'Neill is a FCPA, FCA, corporate director and independent financial and governance consultant. She provides governance and financial consulting services to growth companies, after serving over 24 years with Deloitte LLP. As a partner at Deloitte LLP with various national and industry leadership roles, she focused on advising growth companies from start-ups to multinationals, supporting complex transactions, private and public equity offerings, mergers and acquisitions in Canada and the U.S. Ms. O'Neill is a board member for Constellation Software, as well as board member and chair of the Audit Committee for the Ontario Lottery and Gaming Corporation, Hydro Ottawa, University of Ottawa Heart Institute, and Tehema Group (formerly: Pythian Group, Inc.) and is chair of the Board of Governors for Ashbury College. Ms. O'Neill graduated from Carleton University with a Bachelor of Commerce (Highest Honors) in 1988, achieved her CPA, CA designation in 1990, her U.S. CPA designation in 2003, and completed the ICD Director Education Program attaining the ICD.D.

Thomas Sieber is an independent director. Mr. Sieber has extensive experience as a technology industry executive with demonstrated expertise in building pan-European enterprise sales channels. Mr. Sieber was the CEO of Salt Mobile SA (formerly Orange Switzerland) from 2009 to 2012, where he led a successful turnaround of the business and drove the sales process of the company to a new owner. He then served as Chairman until the end of 2015. Before joining Orange, Mr. Sieber was Executive Vice President of Sales for Fujitsu Siemens Computers. Mr. Sieber started his career at Hewlett-Packard, advancing to General Manager for Small and Medium Enterprise, EMEA, by the time he left the company in 2001. He studied Business Administration at the University of St.Gallen (HSG) in Switzerland, graduating in 1987. In March 2016, he was appointed as Chairman of the largest Swiss utility company, Axpo Holding AG. Mr. Sieber also currently serves on the board of directors of the Swiss software company Garaio AG and the Indian IT services company, HCL Technologies.

The Board of Directors has determined that Ms. Abrams, Mr. Cataford, Mr. Jones, Ms. O'Neill and Mr. Sieber are all Audit Committee financial experts within the meaning of General Instruction B(8)(b) of Form 40-F. Each member of the Audit Committee has extensive experience with oversight of the financial reporting of publicly traded companies including: (i) an understanding of generally accepted accounting principles and financial statements; (ii) the ability to assess the general application of such principles in connection with the accounting for estimates, accruals and reserves; (iii) experience actively supervising one or more persons engaged in such activities; (iv) an understanding of internal controls and procedures for financial reporting; and (v) an understanding of audit committee functions. Although Robin A. Abrams continues to serve as Chair of the Board of Directors, she resigned from the Audit Committee effective December 31, 2019 and therefore is no longer considered to be an Audit Committee financial expert as of such date.

The Securities and Exchange Commission ("SEC") has indicated that the designation or identification of a person as an audit committee financial expert does not make such person an "expert" for any purpose, impose any duties, obligations or liability on such person that are greater than those imposed on members of the audit committee or board of directors who do not carry this designation or identification, or affect the duties, obligations or liabilities of any other member of the audit committee or board of directors.

Reliance on Certain Exemptions

At no time since the commencement of the Company's most recently completed financial year has the Company relied upon any exemption from NI 52-110 provided therein.

Audit Committee Oversight

At no time since the commencement of the Company's most recently completed financial year was a recommendation of the Audit Committee to nominate or compensate an external auditor not adopted by the board of directors of the Company.

Pre-approval Policies and Procedures

The Audit Committee has the sole authority to review in advance and pre-approve all audit and non-audit services to be provided to the Company or its subsidiaries by the external auditor, as well as all fees and other terms of engagement. The Audit Committee may delegate to one or more members the authority to pre-approve non-audit services, provided a report is made to the Audit Committee at its next scheduled meeting. For the fiscal years ended December 31, 2019 and 2018, all of the audit and non-audit services below were pre-approved by the Audit Committee.

Auditor Independence

Sierra Wireless's Audit Committee has concluded that Ernst & Young LLP, the Company's independent registered chartered accountants ("Auditors"), is independent under applicable rules and guidelines and, in particular, that the Auditors are free from conflicts of interest that could impair their objectivity in conducting the audit of the Company's financial statements. The Audit Committee is required to approve all audit and non-audit related services performed by our Auditors, and our Auditors are not permitted to perform services for us prohibited for an independent auditor under applicable Canadian and United States regulations, including the Sarbanes-Oxley Act of 2002.

Auditors' Fees

	2019	2018
Audit fees	$ 1,017,000	$ 1,014,060
Audit-related fees	38,755	—
Tax fees	79,020	9,400
All other fees	—	—
Total	$ 1,134,775	$ 1,023,460

Audit Fees

Audit fees for 2019 and 2018 include fees related to the audit of our year-end financial statements, the audit of our internal control over financial reporting, review of our interim financial statements, statutory audits, consents and services that are normally provided by our Auditors in connection with statutory and regulatory filings or engagements for such year.

Audit-Related Fees

Audit-related fees for 2019 relate to due diligence related to an acquisition. Audit-related fees for 2018 was $nil.

Tax Fees

Tax fees for 2019 relate to tax advisory services related to an acquisition and tax compliance matters. Tax fees for 2018 relate to tax compliance matters.

All Other Fees

No other fees were billed by our Auditors in 2019 or 2018 for services other than those reported in the preceding paragraphs.

LEGAL PROCEEDINGS

We are engaged in certain claims, legal actions and arbitration matters, all in the ordinary course of business, that are described in our Management Discussion and Analysis for the year ended December 31, 2019, which can be found on our website at www.sierrawireless.com or at www.sedar.com, and filed as Exhibit 1.3 to our Annual Report on Form 40-F.

We are not aware at this time of any legal proceedings that are contemplated that are required to be disclosed under this section.

During the financial year ended December 31, 2019:

a) no penalties or sanctions were imposed against Sierra Wireless by a court relating to securities legislation or by a securities regulatory authority;

b) no penalties or sanctions were imposed by a court or regulatory body against Sierra Wireless that would likely be considered important to a reasonable investor in making an investment decision; and

c) no settlement agreements were entered into before a court relating to securities legislation or with a securities regulatory authority.

QUORUM EXEMPTION

The rules and regulations of the NASDAQ require each listed issuer to provide that a quorum for its shareholders' meetings be at least 33 1/3 percent of the issuer's outstanding shares. The Company has been granted an exemption from this requirement because it is contrary to generally accepted business practices in Canada, the Company's country of domicile. The Company has had the benefit of this exemption in the current year and prior years.

In determining whether a requirement is contrary to generally accepted business practices, the NASDAQ rules generally look to the requirements of the primary market in the issuer's country of domicile. The rules and policies of the TSX, the primary market in Canada, do not contain quorum requirements, and the *Canada Business Corporations Act*, the Corporation's governing statute, defers to the quorum requirements contained in an issuer's By-laws. Under the Company's By-laws, a quorum for a meeting of the Company's shareholders is two persons present in person, each being a shareholder entitled to vote thereat or a duly appointed proxyholder or representative for a shareholder so entitled.

REGISTRAR AND TRANSFER AGENT

The Registrar and Transfer Agent for the Common Shares in Canada is Computershare Investor Services Inc., 3rd Floor, 510 Burrard Street, Vancouver, British Columbia, V6C 3B9 and in the United States is Computershare Trust Company, N.A., 462 South 4th Street, Louisville, Kentucky. These offices and the principal offices of Computershare Investor Services Inc. in the City of Toronto maintain the register of Common Shares and can effect transfers and make deliveries of certificates for Common Shares.

MATERIAL CONTRACTS

The Company is not party to any material contracts as defined in National Instrument 51-102 - Continuous Disclosure Obligations.

EXPERTS

Our consolidated financial statements at December 31, 2019 and 2018 have been audited by Ernst & Young LLP, independent registered Chartered Professional Accountants, our external auditors. As set forth in their report, Ernst & Young have confirmed with respect to the Company, that they are independent within the meaning of the relevant rules and related interpretations prescribed by the relevant professional bodies in Canada and any applicable legislation or regulations and also that they are independent accountants with respect to the Entity under all relevant U.S. professional and regulatory standards.

ADDITIONAL INFORMATION

Additional information relating to the Company:

a. may be found on the System for Electronic Analysis and Retrieval ("SEDAR") at www.sedar.com and on the SEC's Electronic Document and Gathering Retrieval System ("EDGAR") at www.sec.gov;

b. including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and securities authorized for issuance under equity compensation plans, is contained in the Company's Information Circular for its most recent annual meeting of shareholders; and

c. is provided in the Company's audited financial statements and related management discussion and analysis for the years ended December 31, 2019 and 2018.

Exhibit 1.2

MANAGEMENT'S STATEMENT OF RESPONSIBILITIES

The accompanying consolidated financial statements have been prepared by management and approved by the Board of Directors of Sierra Wireless, Inc. The consolidated financial statements were prepared in accordance with accounting principles generally accepted in the United States and, where appropriate, reflect management's best estimates and judgments. Where alternative accounting methods exist, management has chosen those methods deemed most appropriate in the circumstances. Management is responsible for the accuracy, integrity and objectivity of the consolidated financial statements within reasonable limits of materiality. Financial information provided elsewhere in the Annual Report is consistent with that in the consolidated financial statements.

To assist management in the discharge of these responsibilities, the Company maintains a system of internal controls over financial reporting as described in *Management's Annual Report on Internal Control Over Financial Reporting* on page 46 of Management's Discussion and Analysis.

The Company's Audit Committee is appointed by the Board of Directors annually and is comprised exclusively of outside, independent directors. The Audit Committee meets with management as well as with the independent auditors to satisfy itself that management is properly discharging its financial reporting responsibilities and to review the consolidated financial statements and the independent auditors' report. The Audit Committee reports its findings to the Board of Directors for consideration in approving the consolidated financial statements for presentation to the shareholders. The Audit Committee considers, for review by the Board of Directors and approval by the shareholders, the engagement or reappointment of the independent auditors. Ernst & Young LLP has direct access to the Audit Committee of the Board of Directors.

The consolidated financial statements have been independently audited by Ernst & Young LLP, Chartered Professional Accountants, on behalf of the shareholders, in accordance with the standards of the Public Company Accounting Oversight Board (United States) with respect to the consolidated financial statements for the year ended December 31, 2019. Their report outlines the nature of their audit and expresses their opinion on the consolidated financial statements of the Company.

/s/ Kent P. Thexton
Kent P. Thexton
President and
Chief Executive Officer

/s/ David G. McLennan
David G. McLennan
Chief Financial Officer

March 10, 2020
Vancouver, Canada

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Sierra Wireless, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Sierra Wireless, Inc. (the Company) as of December 31, 2019 and 2018, the related consolidated statements of operations and comprehensive earnings (loss), equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated March 10, 2020 expressed an unqualified opinion thereon.

Adoption of New Accounting Standard

As discussed in Note 3 to the consolidated financial statements, the Company changed its method for accounting for leases in 2019.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP
Chartered Professional Accountants

We have served as the Company's auditor since 2016.

Vancouver, Canada
March 10, 2020

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Sierra Wireless, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Sierra Wireless, Inc.'s internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Sierra Wireless, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of Sierra Wireless, Inc. as of December 31, 2019 and 2018, the related consolidated statements of operations and comprehensive earnings (loss), equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes and our report dated March 10, 2020 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP
Chartered Professional Accountants

Vancouver, Canada
March 10, 2020

SIERRA WIRELESS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE EARNINGS (LOSS)

(In thousands of U.S. dollars, except where otherwise stated)

	Years ended December 31,		
	2019	2018	2017
Revenue (note 6)			
IoT Solutions	**$ 377,808**	$ 373,937	$ 303,057
Embedded Broadband	**335,705**	419,665	387,670
	713,513	793,602	690,727
Cost of Sales			
IoT Solutions	**237,650**	234,335	195,815
Embedded Broadband	**255,873**	294,696	260,673
	493,523	529,031	456,488
Gross margin	**219,990**	264,571	234,239
Expenses			
Sales and marketing	**92,093**	88,587	75,135
Research and development (note 7)	**86,473**	93,707	82,653
Administration	**48,827**	61,582	42,904
Restructuring (note 8)	**28,160**	7,115	1,076
Acquisition-related and integration	**974**	3,962	8,195
Impairment (note 19, 17)	**877**	—	3,668
Loss on disposal of iTank business (note 5*(a)*)	**—**	2,064	—
Amortization	**20,607**	25,829	20,508
	278,011	282,846	234,139
Earnings (loss) from operations	**(58,021)**	(18,275)	100
Foreign exchange gain (loss)	**(1,296)**	(5,470)	7,550
Other income (expense) (note 9)	**(301)**	51	67
Earnings (loss) before income taxes	**(59,618)**	(23,694)	7,717
Income tax expense (note 10)	**10,920**	916	3,199
Net earnings (loss)	**$ (70,538)**	$ (24,610)	$ 4,518
Other comprehensive income (loss):			
Foreign currency translation adjustments, net of taxes of $nil	**(4,070)**	(6,670)	11,950
Comprehensive earnings (loss)	**$ (74,608)**	$ (31,280)	$ 16,468
Net earnings (loss) per share (in dollars) (note 12)			
Basic	**$ (1.95)**	$ (0.68)	$ 0.14
Diluted	**(1.95)**	(0.68)	0.14
Weighted average number of shares outstanding (in thousands) (note 12)			
Basic	**36,166**	36,019	32,356
Diluted	**36,166**	36,019	32,893

The accompanying notes are an integral part of the consolidated financial statements.

SIERRA WIRELESS, INC.

CONSOLIDATED BALANCE SHEETS

(In thousands of U.S. dollars, except where otherwise stated)

	As at December 31,	
	2019	2018
Assets		
Current assets		
Cash and cash equivalents	**$ 75,454**	$ 89,076
Restricted cash	**3,629**	221
Accounts receivable (note 13)	**131,432**	171,725
Inventories (note 14)	**54,291**	50,779
Prepaids and other (note 15)	**19,256**	11,703
	284,062	323,504
Property and equipment, net (note 16)	**39,924**	39,842
Operating lease right-of-use assets (note 19)	**25,609**	—
Intangible assets, net (note 17)	**70,072**	84,890
Goodwill (note 18)	**207,595**	211,074
Deferred income taxes (note 10)	**2,096**	11,751
Other assets	**9,982**	12,855
	$ 639,340	$ 683,916
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities (note 20)	**$ 173,556**	$ 184,220
Deferred revenue	**10,610**	6,213
	184,166	190,433
Long-term obligations (note 21)	**43,774**	43,250
Operating lease liabilities (note 19)	**25,154**	—
Deferred income taxes (note 10)	**4,921**	6,103
	258,015	239,786
Equity		
Shareholders' equity		
Common stock: no par value; unlimited shares authorized; issued and outstanding: 36,233,361 shares (December 31, 2018 — 36,067,415 shares)	**435,532**	432,552
Preferred stock: no par value; unlimited shares authorized; issued and outstanding: nil shares	**—**	—
Treasury stock: at cost; 44,487 shares (December 31, 2018 — 119,584 shares)	**(370)**	(1,965)
Additional paid-in capital	**38,212**	30,984
Retained deficit	**(78,833)**	(8,295)
Accumulated other comprehensive loss (note 22)	**(13,216)**	(9,146)
	381,325	444,130
	$ 639,340	$ 683,916

Commitments and contingencies (note 27)

Subsequent event (note 28)

The accompanying notes are an integral part of the consolidated financial statements.

On behalf of the Board:

/s/ Robin A. Abrams
Robin A. Abrams
Director

/s/ Paul G. Cataford
Paul G. Cataford
Director

SIERRA WIRELESS, INC.
CONSOLIDATED STATEMENTS OF EQUITY
(in thousands of U.S. dollars, except where otherwise stated)

	Common Stock		Treasury Shares					
	# of shares	**$**	**# of shares**	**$**	**Additional paid-in capital**	**Retained earnings (deficit)**	**Accumulated other comprehensive income (loss)**	**Total**
Balance as at December 31, 2016	31,859,960	$ 342,450	355,471	$ (5,134)	$ 24,976	$ 13,938	$ (14,426)	$ 361,804
Common share cancellation	(170,217)	(1,825)	—	—	—	(954)	—	(2,779)
Stock option exercises (note 11)	500,184	8,122	—	—	(2,282)	—	—	5,840
Stock-based compensation (note 11)	—	—	—	—	10,341	—	—	10,341
Distribution of vested RSUs	90,751	1,788	(132,832)	1,918	(5,073)	—	—	(1,367)
Issue of shares on Numerex acquisition, net of share issue cost of $132 (note 5*(b)*)	3,580,832	77,213	—	—	—	—	—	77,213
Net earnings	—	—	—	—	—	4,518	—	4,518
Foreign currency translation adjustments, net of tax	—	—	—	—	—	—	11,950	11,950
Balance as at December 31, 2017	35,861,510	$ 427,748	222,639	$ (3,216)	$ 27,962	$ 17,502	$ (2,476)	$ 467,520
Common share cancellation (note 23)	(161,500)	(1,933)	—	—	—	(1,187)	—	(3,120)
Stock option exercises (note 11)	221,262	3,621	—	—	(985)	—	—	2,636
Stock-based compensation (note 11)	—	—	—	—	13,060	—	—	13,060
Purchase of treasury shares for RSU distribution	—	—	161,000	(2,808)	—	—	—	(2,808)
Distribution of vested RSUs	146,143	3,116	(264,055)	4,059	(9,053)	—	—	(1,878)
Net loss	—	—	—	—	—	(24,610)	—	(24,610)
Foreign currency translation adjustments, net of tax	—	—	—	—	—	—	(6,670)	(6,670)
Balance as at December 31, 2018	36,067,415	$ 432,552	119,584	$ (1,965)	$ 30,984	$ (8,295)	$ (9,146)	$ 444,130
Stock option exercises (note 11)	**47,231**	**690**	**—**	**—**	**(202)**	**—**	**—**	**488**
Stock-based compensation (note 11)	**—**	**—**	**—**	**—**	**12,930**	**—**	**—**	**12,930**
Purchase of treasury shares for RSU distribution	**—**	**—**	**68,500**	**(674)**	**—**	**—**	**—**	**(674)**
Distribution of vested RSUs	**118,715**	**2,290**	**(143,597)**	**2,269**	**(5,500)**	**—**	**—**	**(941)**
Net loss	**—**	**—**	**—**	**—**	**—**	**(70,538)**	**—**	**(70,538)**
Foreign currency translation adjustments, net of tax	**—**	**—**	**—**	**—**	**—**	**—**	**(4,070)**	**(4,070)**
Balance as at December 31, 2019	**36,233,361**	**$ 435,532**	**44,487**	**$ (370)**	**$ 38,212**	**$ (78,833)**	**$ (13,216)**	**$ 381,325**

The accompanying notes are an integral part of the consolidated financial statements.

SIERRA WIRELESS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands of U.S. dollars)

	Years ended December 31,		
	2019	2018	2017
Cash flows provided by (used in):			
Operating activities			
Net earnings (loss)	**$ (70,538)**	$ (24,610)	$ 4,518
Items not requiring (providing) cash			
Amortization	**33,177**	39,150	30,503
Stock-based compensation (note 11*(a)*)	**12,930**	13,060	10,341
Deferred income taxes (note 10)	**8,711**	(1,685)	824
Impairment (note 19, 17)	**877**	—	3,668
Loss on disposal of iTank business (note 5*(a)*)	**—**	2,064	—
Unrealized foreign exchange loss (gain)	**1,122**	5,973	(8,507)
Other	**1,218**	279	(55)
Changes in non-cash working capital			
Accounts receivable	**37,965**	(5,526)	(12,665)
Inventories	**(3,712)**	1,508	(6,806)
Prepaids and other	**(8,611)**	(3,525)	(5,334)
Accounts payable and accrued liabilities	**(12,069)**	21,944	(17,750)
Deferred revenue	**5,792**	(1,402)	335
Cash flows provided by (used in) operating activities	**6,862**	47,230	(928)
Investing activities			
Additions to property and equipment	**(16,494)**	(18,166)	(14,100)
Additions to intangible assets	**(3,779)**	(2,933)	(1,706)
Proceeds from sale of property and equipment	**98**	93	35
Proceeds from sale of investment	**3,303**	—	—
Proceeds from sale of iTank business (note 5(a))	**500**	5,000	—
Acquisitions, net of cash acquired:			
Numerex Corp. (note 5*(b)*)	**—**	—	(18,725)
GNSS business of GlobalTop (note 5*(c)*)	**—**	—	(3,145)
Cash flows used in investing activities	**(16,372)**	(16,006)	(37,641)
Financing activities			
Issuance of common shares, net of issuance cost	**488**	2,636	5,708
Repurchase of common shares for cancellation (note 23)	**—**	(3,120)	(2,779)
Purchase of treasury shares for RSU distribution	**(674)**	(2,808)	—
Taxes paid related to net settlement of equity awards	**(941)**	(1,878)	(1,367)
Payment for contingent consideration	**—**	(130)	(1,397)
Decrease in other long-term obligations	**(535)**	(627)	(436)
Cash flows used in financing activities	**(1,662)**	(5,927)	(271)
Effect of foreign exchange rate changes on cash and cash equivalents	**958**	(1,224)	1,292
Cash, cash equivalents and restricted cash, increase (decrease) in the year	**(10,214)**	24,073	(37,548)
Cash, cash equivalents and restricted cash, beginning of year	**89,297**	65,224	102,772
Cash, cash equivalents and restricted cash, end of year	**$ 79,083**	$ 89,297	$ 65,224

Supplemental cash flow information (note 24)

The accompanying notes are an integral part of the consolidated financial statements.

SIERRA WIRELESS, INC.

TABLE OF CONTENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. NATURE OF OPERATIONS

Sierra Wireless, Inc., together with its subsidiaries (collectively, "the Company", "we", "our") was incorporated under the Canada Business Corporations Act on May 31, 1993. Sierra Wireless is an Internet of Things ("IoT") pioneer that empowers businesses and industries to transform and thrive in the connected economy. Sierra Wireless provides integrated Device-To-Cloud IoT solutions that are comprised of our recurring connectivity services, our IoT cloud platform, and our embedded cellular modules and gateways. Enterprises, industrial companies and Original Equipment Manufacturers ("OEMs") worldwide rely on our expertise to deliver fully-integrated IoT solutions to reduce complexity, gather intelligent edge data and enable connected loT products and services.

We have sales, engineering, and research and development teams located in offices around the world. The primary markets for our products are North America, Europe and Asia Pacific.

Our segments have changed from those reported at December 31, 2018 when we previously reported three segments. We implemented a new organizational structure during the first quarter of 2019 to clearly delineate our Device-to-Cloud IoT solutions activities and now have two reportable segments effective first quarter of 2019: (i) the IoT Solutions segment and (ii) the Embedded Broadband segment. We have adjusted our comparative information to align with this new segmentation.

IoT Solutions	Integrated end-to-end IoT solutions that include recurring connectivity services, cloud management software, cellular modules and gateways targeted primarily at enterprises and OEMs in the IoT space.
Embedded Broadband	High-speed cellular embedded modules that are typically used in non-industrial applications, namely Automobile, Mobile Computing and Enterprise Networking markets.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Our consolidated financial statements and accompanying notes are prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP").

(a) Basis of consolidation

Our consolidated financial statements include the accounts of the Company and its subsidiaries, all of which are wholly-owned, from their respective dates of acquisition of control. All inter-company transactions and balances have been eliminated on consolidation.

(b) Use of estimates

The consolidated financial statements have been prepared in conformity with U.S. GAAP, which requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the year. On an ongoing basis, management reviews its estimates, including those related to revenue recognition, such as determining the nature and timing of satisfaction of performance obligations, determining the standalone selling price of performance obligations, and variable consideration; inventory obsolescence; estimated useful lives of long-lived assets; valuation of intangible assets; goodwill; royalty and warranty accruals; other liabilities; stock-based compensation; allowance for doubtful accounts receivable; income taxes; restructuring costs; contingent consideration and commitments and contingencies, based on currently available information. Actual amounts could differ from estimates.

(c) **Revenue recognition**

Product revenue includes sales from embedded cellular modules, short range and GNSS wireless modules, intelligent routers and gateways, asset tracking and vertical market smart devices, antennas and accessories, and Smart SIMs. Recurring and other services revenue includes sales from cloud services, cellular connectivity services, managed connectivity and application services, software licenses, technical support services, extended warranty services, solution design and consulting services.

We recognize revenues when we satisfy performance obligations by transferring the control of promised products or services to customers. Product revenue is recognized at a point in time when a good is shipped or delivered to the customer. Recurring and other services revenue is recognized over time as the service is rendered or at a point in time upon completion of a service. Our customer contracts can include various combinations of products and services, which are generally capable of being distinct and accounted for as separate performance obligations. Revenue is recognized net of allowances for returns and any taxes collected from customers.

Our products are generally highly dependent on, and interrelated with, the underlying firmware and cannot function without the firmware. In these cases, the hardware and the firmware are accounted for as a single performance obligation and revenue is recognized at the point in time when control is transferred to resellers and distributors, OEMs, or directly to end customers.

Certain customers may receive cash-based incentives or credits, which are accounted for as variable consideration. We estimate the amount of incentives or credits to be provided to customers and reduce revenue recognized. The variable consideration is included in the transaction price to the extent that a significant reversal in the amount of cumulative revenue recognized is not expected to occur when the uncertainty associated with the variable consideration is subsequently resolved.

The expected costs associated with assurance-type warranty are recognized as expense when products are sold. Warranty service that is in addition to the assurance that the product complies with agreed upon specifications is a separate performance obligation; its revenue is recognized ratably over the service period.

Cloud and connectivity services are provided on either a subscription or consumption basis. Revenue related to cloud and connectivity services provided on a subscription basis is recognized ratably over the contract period. Revenue related to cloud and connectivity services provided on a consumption basis is recognized based on the customer utilization of such resources. Revenues from SIM activation and initial application setup are deferred and recognized over the estimated customer life on a straight-line basis.

Licenses for on-premise software provide the customer with a right to use the software as it exists when made available to the customer. Revenue from distinct on-premise licenses are recognized upfront at the point in time when the software is made available to the customer. Revenue from software maintenance, unspecified upgrades and technical support contracts are recognized over the period such items are delivered or services are provided. Technical support contracts extending beyond the current period are deferred and revenue is recognized over the applicable earning period.

Revenue from solution design and consulting services are recognized as services are being provided.

Contract acquisition and fulfillment costs

We recognize an asset for the incremental costs of obtaining or fulfilling a contract with a customer if we expect the benefit of those costs to be longer than one year. We have determined that certain sales incentive bonuses and initial setup costs of managed IoT services meet the requirements to be capitalized. We applied a practical expedient to expense costs as incurred for costs to obtain a contract with a customer when the amortization period would have been one year or less.

The incremental costs of obtaining or fulfilling a contract with a customer are deferred and amortized over the estimated life of the customer relationship. We classify these deferred contract costs as current or non-current based on the timing of when we expect to recognize the expense. The current and non-current portions of deferred contract costs are included in *Prepaids and other* current assets and *Other assets* respectively in our consolidated balance sheets.

Significant judgment

We determine the transaction price of a customer contract by multiplying the unit price of a good or service with the committed order volume or service period.

Certain customers may receive cash-based incentives or credits, which are accounted for as variable consideration. We estimate the expected amount to be provided to customers and exclude it from the transaction price. Sales credits are included in *Accounts payable and accrued liabilities* in our consolidated balance sheets.

Our customer contracts can include various combinations of products and services. When a customer contract includes multiple performance obligations, we allocate the transaction price to each performance obligation on a relative standalone selling price basis. We generally determine standalone selling prices based on the price charged to customers or a combination of expected cost, plus a margin and residual methods.

Product revenue is recognized at a point in time when a good is shipped or delivered to the customer as it represents the transfer of control of the promised good to a customer. Cloud, connectivity, and managed service revenues are recognized over time as the customer simultaneously receives and consumes the benefits provided by our performance as we perform. Other service revenue is recognized at a point in time upon completion of a service.

Contract Balances

Receivables - We recognize a right to consideration as a receivable when only the passage of time is required before payment of that consideration is due.

Contract Assets - We recognize a right to consideration in exchange for goods or service that we have transferred to a customer as contract assets. Contract assets are comprised mainly of accrued revenue related to monthly IoT service subscriptions, which may include connectivity, cloud applications, and managed services. Contract assets are included in *Accounts receivable* in our consolidated balance sheet.

(In thousands of U.S. dollars, except where otherwise stated)

Deferred Revenue - We recognize an obligation to transfer goods or services to a customer for which we have received consideration from the customer as deferred revenue. Deferred revenue consists of advance payments and billings in excess of revenue recognized, which includes support, extended warranty, cloud application services, and activation fees.

Payment terms and conditions vary by contract type, although terms generally include a requirement of payment within 30 to 60 days.

The following table provides the changes in contract balances:

	As at December 31,		Change
	2019	2018	
Contract assets	**$ 1,688**	$ 1,953	$ (265)
Deferred revenue - current	**10,610**	6,213	4,397
Deferred revenue - noncurrent	**8,078**	6,317	1,761

For the year ended December 31, 2019, $6,085 of deferred revenue was recognized in revenue that was included in the contract liability balance as of December 31, 2018 (2018 - $5,476).

(d) **Research and development costs**

Research and development costs are expensed as they are incurred, with the exception of certain software development costs principally related to software coding, designing system interfaces and installation, and testing of the software, that we capitalize once technological feasibility is reached.

We follow the cost reduction method of accounting for certain agreements, including government research and development funding, whereby the benefit of the funding is recognized as a reduction in the cost of the related expenditure when certain criteria stipulated under the terms of those funding agreements have been met, and there is reasonable assurance the research and development funding will be received.

(e) **Warranty costs**

Warranty costs are accrued upon the recognition of related revenue, based on our best estimates, with reference to past and expected future experience. Warranty obligations are included in accounts payable and accrued liabilities in our consolidated balance sheet.

(f) **Royalty costs**

We have intellectual property license agreements which generally require us to make royalty payments based on a combination of fixed fees and percentage of the revenue generated by sales of products incorporating the licensed technology. We recognize royalty obligations in accordance with the terms of the respective royalty agreements. Royalty costs are recorded as a component of cost of goods sold in the period when incurred.

Where agreements are not in place, we recognize our current best estimate of the royalty obligation in cost of goods sold, accrued liabilities and long-term liabilities. We base our estimate on the smallest saleable unit (“SSU”) principle (i.e., the principle that any royalty obligations should be no more than a portion of the profits for a component within the product that implements the patented technology) as the appropriate methodology for determining FRAND standard essential patent ("SEP") royalties. Using this principle, the royalty accrual on our products is based on the value of the patented technology in the chipset, representing the SSU that implements the technology.

(g) **Market development costs**

Market development costs are charged to sales and marketing expense to the extent that the benefit is separable from the revenue transaction and the fair value of that benefit is determinable. To the extent that such costs either do not provide a separable benefit, or the fair value of the benefit cannot be reliably estimated, such amounts are recorded as a reduction of revenue.

(h) **Income taxes**

Income taxes are accounted for using the asset and liability method. Deferred income tax assets and liabilities are based on temporary differences (differences between the accounting basis and the tax basis of the assets and liabilities), non-capital loss, capital loss, and tax credits carry-forwards are measured using the enacted tax rates and laws expected to apply when these differences reverse. Deferred tax benefits, including non-capital loss, capital loss, and tax credits carry-forwards, are recognized to the extent that realization of such benefits is considered more likely than not. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in earnings in the period that enactment occurs.

We include interest and penalties related to income taxes, including unrecognized tax benefits, in *Income tax expense.*

Liabilities for uncertain tax positions are recorded based on a two-step process. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon settlement. We regularly assess the potential outcomes of examinations by tax authorities in determining the adequacy of our provision for income taxes. We continually assess the likelihood and amount of potential adjustments and adjust the income tax provision, income taxes payable and deferred taxes in the period in which the facts that give rise to a revision become known.

We recognize the tax effects related to share-based payments at settlement or expiration in *Income tax expense*.

(i) **Stock-based compensation and other stock-based payments**

Stock options and restricted share units granted to the Company's key officers, directors and employees are accounted for using the fair value-based method. Under this method, compensation cost for stock options is measured at fair value at the date of grant using the Black-Scholes valuation model and is expensed over the awards' vesting period using the straight-line method. Any consideration paid by plan participants on the exercise of stock options or the purchase of shares is credited to common stock together with any related stock-based compensation expense. Compensation cost for restricted share units is measured at fair value at the date of grant which is the market price of the underlying security and is expensed over the awards' vesting period using the straight-line method. Compensation cost for performance-based restricted share units is measured using a Monte Carlo valuation model. We account for forfeitures in compensation expense when they occur.

(j) **Earnings (loss) per common share**

Basic earnings (loss) per share is computed by dividing net earnings (loss) for the period by the weighted average number of company common shares outstanding during the reporting period. Diluted earnings (loss) per share is computed using the treasury stock method. When the effect of options and other securities convertible into common shares is anti-dilutive, including when the Company has incurred a loss for the period, basic and diluted earnings (loss) per share are the same.

Under the treasury stock method, the number of dilutive shares, if any, is determined by dividing the average market price of shares for the period into the net proceeds of in-the-money options.

(k) **Translation of foreign currencies**

Our functional and reporting currency is the U.S. dollar.

Revenue and expense items denominated in foreign currencies are translated at exchange rates prevailing during the period. Monetary assets and liabilities denominated in foreign currencies are translated at the period-end exchange rates. Non-monetary assets and liabilities are translated at exchange rates in effect when the assets are acquired or the obligations are incurred. Foreign exchange gains and losses are reflected in *Net earnings (loss)* for the period.

We have foreign subsidiaries that are considered self-contained and integrated within their foreign jurisdiction, and accordingly, use the respective local currency as their functional currency. The assets and liabilities of the foreign subsidiaries, including goodwill and fair value adjustments arising on acquisition, are translated at exchange rates at the balance sheet dates, equity is translated at historical rates, and revenue and expenses are translated at exchange rates prevailing during the period. The foreign exchange gains and losses arising from the translation are reported as a component of other comprehensive income (loss), as presented in note 22, *Accumulated other comprehensive loss*.

(l) **Cash and cash equivalents**

Cash and cash equivalents include cash and short-term deposits with original maturities of three months or less. The carrying amounts approximate fair value due to the short-term maturities of these instruments.

(m) **Allowance for doubtful accounts receivable**

We maintain an allowance for our accounts receivable for estimated losses that may result from our customers' inability to pay. We determine the amount of the allowance by analyzing known uncollectible accounts, aged receivables, economic conditions, historical losses, insured amounts, if any, and changes in customer payment cycles and credit-worthiness. Amounts later determined and specifically identified to be uncollectible are charged against this allowance. If the financial condition of any of our customers deteriorates resulting in an impairment of their ability to make payments, we may increase our allowance.

(n) **Financing receivables**

We lease certain hardware devices to a small number of hardware distributors under sales-type leases which have terms ranging from 10 months to 48 months and bear interest at 2%.

We evaluate the credit quality of our financing receivables on an ongoing basis utilizing an aging of the accounts and write-offs, customer collection experience, the customer's financial condition, known risk characteristics impacting the respective customer base, and other available economic conditions, to determine the appropriate allowance.

(o) **Derivatives**

Derivatives, such as foreign currency forward contracts, may be used to hedge the foreign exchange risk on cash flows from commitments denominated in a foreign currency. Derivatives are recorded in *Accounts receivable* or *Accounts payable and accrued liabilities* and measured at fair value at each balance sheet date. Any resulting gains and losses from changes in the fair value are recorded in *Foreign exchange gain (loss)*.

(p) **Inventories**

Inventories consist of electronic components and finished goods and are valued at the lower of cost or estimable realizable value, determined on a first-in-first-out basis. Cost is defined as all costs that relate to bringing the inventory to its present condition and location under normal operating conditions.

We review the components of our inventory and our inventory purchase commitments on a regular basis for excess and obsolete inventory based on estimated future usage and sales. Write-downs in inventory value or losses on inventory purchase commitments depend on various items, including factors related to customer demand, economic and competitive conditions, technological advances and new product introductions that vary from current expectations. We believe that the estimates used in calculating the inventory provision are reasonable and properly reflect the risk of excess and obsolete inventory. If customer demands for our inventory are substantially less than our estimates, additional inventory write-downs may be required.

(q) **Property and equipment**

Property and equipment are stated at cost, less accumulated depreciation and amortization. We amortize our property and equipment on a straight-line basis over the following estimated economic lives:

Furniture and fixtures	3-5 years
Research and development equipment	3-10 years
Production equipment	2-7 years
Tooling	1.5-3 years
Computer equipment	1-5 years
Software	1-5 years
Office equipment	3-5 years
Monitoring equipment	3-5 years
Network equipment	3-7 years

Research and development equipment related amortization is included in *Research and development* expense. Tooling, production, monitoring and certain network equipment related amortization is included in cost of goods sold. All other amortization is included in *Amortization* expense.

Leasehold improvements and leased vehicles are amortized on a straight-line basis over the lesser of their expected average service life or term of the lease.

When we sell property and equipment, we net the historical cost less accumulated depreciation and amortization against the sale proceeds and include the difference in *Other income (expense).*

(r) **Intangible assets**

The estimated useful life of intangible assets with definite lives is the period over which the assets are expected to contribute to our future cash flows. When determining the useful life, we consider the expected use of the asset, useful life of any related intangible asset, any legal, regulatory or contractual provisions that limit the useful life, any legal, regulatory, or contractual renewal or extension provisions without substantial costs or modifications to the existing terms and conditions, the effects of obsolescence, demand, competition and other economic factors, and the expected level of maintenance expenditures relative to the cost of the asset required to obtain future cash flows from the asset.

We amortize our intangible assets on a straight-line basis over the following specific periods:

Patents and trademarks	—	3-5 years
Licenses	—	over the shorter of the term of the license or an estimate of their useful life, ranging from three to ten years
Intellectual property and customer relationships	—	3-13 years
Brand	—	over the estimated life
In-process research and development	—	over the estimated life

In-process research and development (“IPRD”) are intangible assets acquired as part of business combinations. Prior to their completion, IPRD are intangible assets with indefinite life and they are not amortized but subject to impairment test on an annual basis.

Research and development related amortization is included in *Research and development* expense. All other amortization is included in *Amortization* expense.

(s) **Leases**

At inception of a contract, we apply judgment in assessing whether a contract is or contains a lease. This assessment involves determining whether we have control over the identified asset for a period of time in exchange for consideration. Operating leases are included in *Operating lease right-of-use ("ROU") assets, Accounts payable and accrued liabilities*, and *Operating lease liabilities* in our consolidated balance sheets. Finance leases are included in *Property and equipment, Accounts payable and accrued liabilities, and Long-term obligations* in our consolidated balance sheets.

ROU assets represent our right to use an underlying asset for the lease term. Lease liabilities represent our obligation to make lease payments arising from the lease. We recognize operating lease right-of-use assets and liabilities at commencement date based on the present value of lease payments over the lease term. We use the incremental borrowing rate as the discount rate for leases as the rates implicit in our leases are not readily determinable. Our incremental borrowing rate is estimated to approximate the interest on a collateralized basis with similar terms and payments and in economic environments where the leased asset is located. The operating lease ROU asset also includes any prepaid lease payments, initial direct costs and lease incentives. Our lease terms include non-cancelable periods and include options to renew the lease when it is reasonably certain that we will exercise that option.

Operating lease cost for lease payments is recognized on a straight-line basis over the term of the lease. Our lease agreements have lease and non-lease components, which we have elected to account for as a single lease cost.

We have elected not to record right-of-use assets and lease liabilities for short-term leases with a term of 12 months or less and recognize these short term leases to profit or loss on a straight-line basis over the lease term.

(t) **Goodwill**

Goodwill represents the excess of the purchase price of an acquired business over the fair value assigned to assets acquired and liabilities assumed in a business combination.

Goodwill has an indefinite life, is not amortized, and is subject to a two-step impairment test on an annual basis, on October 1 of every year, at the reporting unit level. Goodwill is tested for impairment between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value. The first step compares the fair value of the reporting unit to its carrying amount, which includes the goodwill. When the fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is considered not to be impaired and the second step of the impairment test is unnecessary. If the carrying amount exceeds the implied fair value of the goodwill, the second step measures the amount of the impairment loss. If the carrying amount exceeds the fair value of the goodwill, an impairment loss is recognized equal to that excess.

(u) **Impairment of long-lived assets**

Long-lived assets, including property and equipment, and intangible assets other than goodwill, are assessed for potential impairment when there is evidence that events or changes in circumstances indicate that the carrying amount of an asset may not be recovered. An impairment loss is recognized when the carrying amount of the long-lived asset is not recoverable and exceeds its fair value. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. Any required impairment loss is measured as the amount by which the carrying amount of a long-lived asset exceeds its fair value and is recorded as a reduction in the carrying value of the related asset and a charge to operating results. Intangible assets with indefinite lives are tested annually for impairment and in interim periods if certain events occur indicating that the carrying value of the intangible assets may be impaired.

(v) **Comprehensive income (loss)**

Comprehensive income (loss) includes net earnings (loss) as well as changes in equity from other non-owner sources. The other changes in equity included in comprehensive income (loss) are comprised of foreign currency cumulative translation adjustments.

(w) **Investment tax credits**

In Canada and the United States, investment tax credits are accounted for using the flow-through method whereby such credits are accounted for as a reduction of income tax expense in the period in which the credit arises. In France, the investment tax credits are reported as a reduction of cost as the credits are refundable irrespective of taxable income.

(x) **Comparative figures**

Certain figures presented in the consolidated financial statements have been reclassified to conform to the current year presentation.

3. RECENTLY IMPLEMENTED ACCOUNTING STANDARDS

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* and subsequent amendments to the initial guidance: ASU 2017-13, ASU 2018-10, ASU 2018-11, ASU 2018-20 and ASU 2019-01 (collectively, Topic 842). This update is to improve transparency and comparability among organizations by requiring lessees to recognize ROU assets and lease liabilities on the balance sheet and requiring additional disclosure about leasing arrangements. The standard is effective for fiscal years beginning after December 15, 2018. We adopted the standard effective January 1, 2019, applying the optional transition method permitted under ASU 2018-11, which relieves entities from restating comparative financial statements, allowing entities to apply and adopt the new lease standard as at the effective date, rather than as of the first date of the earliest period presented. We elected the package of practical expedients provided under the guidance, which applies to expired or existing leases and allows the Company not to reassess whether a contract contains a lease, the lease classification, and any initial direct costs incurred. We also elected the practical expedient to expense short term leases (12 months or less) on a straight-line basis over the lease term, and to not separate the lease and non-lease components for all of our leases. Refer to Note 19 Leases.

Upon adoption of Topic 842 effective January 1, 2019, we recognized operating lease liabilities of $31.5 million and corresponding ROU assets of $27.0 million. The $4.5 million difference between operating lease liabilities and right-of-use assets recognized is due to deferred rent and exit cost accruals recorded under prior lease accounting standards. Topic 842 requires such balances to be reclassified against ROU assets at transition. In future periods such balances will not be presented separately. Our accounting for finance leases remains substantially unchanged.

4. CHANGES IN FUTURE ACCOUNTING STANDARDS

In June 2016, the FASB issued ASU 2016-13, Financial Instruments - *Credit Losses (Topic 326)*. This update will replace the incurred loss impairment methodology for credit losses on financial instruments with a methodology that requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The standard is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. The Company will adopt the new standard in its first quarter of 2020. We are currently assessing the impact of the new standard on our financial statements.

(In thousands of U.S. dollars, except where otherwise stated)

In January 2017, FASB issued ASU 2017-04, *Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*. This new guidance simplifies the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. Under the new guidance, entities will perform goodwill impairment tests by comparing fair value of a reporting unit with its carrying amount and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. The standard is effective after December 15, 2019. The Company will adopt this standard in the first quarter of 2020. After the adoption of this standard, which will be applied prospectively, we will follow a one-step model for goodwill impairment. We do not anticipate this pronouncement to have a significant impact on our consolidated financial statements.

5. ACQUISITIONS AND DISPOSALS

(a) Disposal of Remote Tank Monitoring Business

On December 31, 2018, we completed the sale of substantially all of the assets and liabilities of our remote tank monitoring business ("iTank") for total proceeds of $6.0 million, as it was not deemed to be either a core business or part of our strategic focus. The Company received $5.0 million in cash consideration at closing with the remaining $1.0 million held in escrow. The amount in escrow was to be held up to 12 months with $0.8 million contingent on meeting certain milestone events and the remaining $0.2 million to secure the purchaser's rights of indemnification under the asset sale agreement.

In 2018, the Company recognized a loss of $2.1 million, which is included in *Loss on disposal of iTank business* in the Company's consolidated statements of operations, net of $0.2 million in transaction related costs. Prior to the disposal, iTank was part of our IoT Solutions reporting segment and $2.1 million of goodwill was de-recognized and included within the net assets disposed of.

During the year ended December 31, 2019, we received $0.5 million of escrow payments. As of December 31, 2019, $0.5 million continues to be held in escrow. However, the release of a portion of this amount is under dispute with the purchaser.

(b) Acquisition of *Numerex Corp.*

On December 7, 2017, we completed the stock-for-stock merger transaction to acquire Numerex Corp. ("Numerex"). In accordance with the Agreement and Plan of Merger dated August 2, 2017, by and among the Company, Numerex and Wireless Acquisition Sub, Inc. we issued 3,580,832 common shares as merger consideration in exchange for all of the outstanding shares of Numerex common stock and certain outstanding Numerex equity awards and warrants. Additionally, approximately $20.2 million in aggregate was paid at closing to retire outstanding Numerex debt.

Total consideration for the acquisition is as follows:

Issuance of common shares	$	**77,346**
Debt extinguishment		**20,155**
	$	**97,501**

We accounted for the transaction using the acquisition method and accordingly, recorded the tangible and intangible assets acquired and liabilities assumed on the basis of our estimates of their respective fair values as at December 7, 2017. The excess of the purchase price over the final value assigned to the net assets acquired was recorded as goodwill.

(In thousands of U.S. dollars, except where otherwise stated)

The allocation of the purchase price to goodwill was completed as of September 30, 2018.

The following table summarizes the final values assigned to the assets acquired and liabilities assumed at the acquisition date:

Cash	$	**1,430**
Deferred income tax asset		**1,049**
Property and equipment		**7,244**
Identifiable intangible assets		**45,890**
Goodwill		**51,658**
Other working capital		**(8,623)**
Long-term obligations		**(1,147)**
Fair value of net assets acquired	$	**97,501**

Goodwill of $51.7 million resulting from the acquisition consists largely of the expectation that the acquisition will expand our position as a leading global IoT pure-play and significantly increase our subscription-based recurring services revenue. Goodwill is assigned to the IoT Solutions segment and approximately $4.0 million is deductible for tax purposes.

The following table provides the components of the identifiable intangible assets acquired that are subject to amortization:

	Estimated useful life		**Amount**
Customer relationships	**9 years**	$	**26,390**
Existing technology	**3 years**		**10,220**
Brand	**13 years**		**9,280**
		$	**45,890**

The following table presents the unaudited pro forma results for the year ended December 31, 2017 and 2016. The pro forma financial information combines the results of operations of Sierra Wireless, Inc. and Numerex as though the businesses had been combined as of the beginning of fiscal 2016. The pro forma financial information is presented for informational purposes only and is not indicative of the results of operations that would have been achieved if the acquisition had taken place at the beginning of fiscal 2016. The unaudited pro forma financial information presented includes amortization charges for acquired tangible and intangible assets, and related tax effects.

	Year ended December 31,			
		2017		2016
Pro forma information				
Revenue	$	**747,719**	$	686,252
Loss from operations		**(8,973)**		(5,205)
Net loss		**(3,577)**		(7,334)
Basic and diluted loss per share (in dollars)	$	**(0.10)**	$	(0.21)

(In thousands of U.S. dollars, except where otherwise stated)

(c) Acquisition of *GNSS business of GlobalTop*

On March 31, 2017, we completed the acquisition of substantially all of the assets of the Global Navigation Satellite System ("GNSS") embedded module business of GlobalTop Technology Inc. ("GlobalTop") for total cash consideration of $3.1 million. GlobalTop is a Taiwan-based business that specializes in the development and manufacture of a wide variety of GNSS modules and serves customers around the world.

The acquisition builds on our strategy to expand our product offerings beyond cellular, Wi-Fi and Bluetooth, servicing customers in the automotive, telematics and asset tracking markets.

We accounted for the transaction using the acquisition method and accordingly, we have recorded the tangible and intangible assets acquired and liabilities assumed on the basis of their respective fair values as at March 31, 2017. The excess of the purchase price over the final value assigned to the net assets acquired was recorded as goodwill.

The following table summarizes the final values assigned to the assets acquired at the acquisition date:

Assets acquired		
Inventory	$	**604**
Property and equipment		**175**
Identifiable intangible assets		**1,160**
Goodwill		**1,206**
Fair value of net assets acquired	**$**	**3,145**

Goodwill of $1.2 million resulting from the acquisition consists largely of the expectation that the acquisition will expand our embedded solution portfolio for OEM customers in the key markets we serve. Goodwill is deductible for tax purposes.

The following table provides the components of the identifiable intangible assets acquired:

	Estimated useful life		Amount
Customer Relationships	**5 years**	$	**640**
Existing Technology	**3 years**		**410**
Backlog	**11 months**		**110**
		$	**1,160**

The amount of revenue and net earnings from the GNSS business included in our consolidated statements of operations from the acquisition date, through the year ended December 31, 2017, was $3.4 million and $nil, respectively. There was no significant impact on the Company's revenue and net earnings on a pro forma basis for all periods presented.

(In thousands of U.S. dollars, except where otherwise stated)

6. SEGMENTED INFORMATION

Our segments have changed from those reported at December 31, 2018 when we previously reported three segments. We implemented a new organizational structure during the first quarter of 2019 to clearly delineate our Device-to-Cloud IoT solutions activities and now have two reportable segments effective the first quarter of 2019. We have reclassified our comparative information.

IoT Solutions

Our IoT Solutions segment is focused on integrated end-to-end IoT solutions that include recurring connectivity services, cloud platform, software and devices (cellular modules or cellular gateways) targeted primarily at enterprises and OEM in the IoT space. In this segment, we have the opportunity to provide connectivity services and solutions to the customer along with our cloud platform, devices and management tools.

Embedded Broadband

Our Embedded Broadband segment is comprised of our high-speed cellular embedded modules that are typically used in non-industrial applications, namely Automobile, Mobile Computing and Enterprise Networking markets. The products in this segment are typically high-speed fourth generation ("4G") Long-Term Evolution ("LTE") and LTE-Advanced cellular modules. In this segment, we do not have the opportunity to provide connectivity services or fully-integrated IoT solutions to the OEM customer. Our Embedded Broadband business is expected to transition over time from 4G LTE to fifth generation ("5G") technology.

As our chief operating decision maker does not evaluate the performance of our operating segments based on segment assets, management does not classify asset information on a segmented basis.

We disaggregate our revenue from contracts with customers into reportable segments, type and geographical region.

REVENUE BY TYPE

	2019	2018	2017
Revenue			
Product	**$ 614,384**	$ 699,158	$ 645,402
Recurring and other services	**99,129**	94,444	45,325
	$ 713,513	$ 793,602	$ 690,727

(In thousands of U.S. dollars, except where otherwise stated)

REVENUE BY GEOGRAPHICAL REGION

		2019		2018		2017
Americas	**$**	**300,104**	$	314,169	$	227,905
Europe, Middle East and Africa		**147,091**		167,812		168,400
Asia-Pacific		**266,318**		311,621		294,422
	$	**713,513**	$	793,602	$	690,727

PROPERTY AND EQUIPMENT BY GEOGRAPHICAL REGION

		2019		2018
Americas	**$**	**27,168**	$	26,045
Europe, Middle East and Africa		**5,594**		9,027
Asia-Pacific		**7,162**		4,770
	$	**39,924**	$	39,842

7. RESEARCH AND DEVELOPMENT

The components of research and development costs consist of the following:

		2019		2018		2017
Gross research and development	**$**	**86,726**	$	94,352	$	83,538
Government tax credits		**(253)**		(645)		(885)
	$	**86,473**	$	93,707	$	82,653

8. RESTRUCTURING

April 2019

On April 30, 2019, we announced two initiatives related to the acceleration of our transformation to a Device-to-Cloud IoT solutions company:

1) Consolidation of engineering resources and the transfer of certain functions to lower cost locations resulting in a significant reduction in our engineering team in Issy-Les-Moulineaux, outside of Paris, France. Following a detailed process, the majority of employees impacted by this program have been notified and the program was largely completed by the end of 2019. Our sales and customer support capability in Issy-Les-Moulineaux will remain unchanged and our teams in Toulouse and Sophia Antipolis will continue to provide key technical capability for our cloud and services offerings; and

2) Outsourcing of a select group of general and administrative transaction-based activities to a global outsourcing partner. Transition activities commenced in the third quarter of 2019 and we expect the activities to be fully transitioned by mid-2020.

These two initiatives have impacted approximately 128 positions of which 97 positions were in France. During the year ended December 31, 2019, we recorded $18.6 million in severance and $7.9 million in transitional costs related to these two initiatives. As at December 31, 2019, outstanding liability of $8.7 million relating to these initiatives is included in *Accounts payable and accrued liabilities* and the majority of the amount is expected to be paid by the end of June 2020.

(In thousands of U.S. dollars, except where otherwise stated)

November 2018

To accelerate our transformation to a Device-to-Cloud IoT solutions company, we initiated certain organizational structure changes during November 2018. This initiative affected 76 employees in various locations and functions within the Company.

In 2019, we continued with certain organizational structure changes within various locations and functions of the Company that we initiated during November 2018, including the realignment of our sales resources into a single sales organization to enable a unified approach to sales. During the year ended December 31, 2019, we recorded $1.5 million in severance and other related costs (2018 - $2.3 million). As at December 31, 2019, we have incurred total costs of $3.8 million. As at December 31, 2019, there was no liability outstanding related to this initiative.

March 2018

In the first quarter of 2018, we commenced various initiatives focused on capturing synergies related to the integration of Numerex into the existing operations and efficiency gains in other areas of the business. In total, these initiatives affected 61 employees in various locations and functions within the Company. During the year ended December 31, 2019, we recorded $0.1 million in severance and other related costs associated with this initiative (2018 - $4.8 million). As at December 31, 2019, we have incurred total costs of $5.0 million related to this initiative and do not expect to incur any additional costs. As at December 31, 2019, there was no liability outstanding related to this initiative.

The following table provides the activity in the restructuring liability:

	2019	2018
Balance, beginning of period	**$ 2,486**	$ 540
Reclassification from long-term obligations	**1,617**	—
Expensed in period	**28,160**	7,115
Disbursements	**(23,424)**	(5,081)
Foreign exchange	**(184)**	(88)
	$ 8,655	$ 2,486
Classification:		
Accounts payable and accrued liabilities (note 20)	**8,655**	2,486
	$ 8,655	$ 2,486
By restructuring initiative:		
March 2018	**$ —**	$ 842
November 2018	**—**	1,644
April 2019	**8,655**	—
	$ 8,655	$ 2,486

(In thousands of U.S. dollars, except where otherwise stated)

9. OTHER INCOME (EXPENSE)

The components of other income (expense) for the years ended December 31 were as follows:

	2019	2018	2017
Interest income	**$ 429**	$ 253	$ 245
Interest expense	**(263)**	(156)	(159)
Discount fees (note 25*(d)*)	**(347)**	—	—
Other	**(120)**	(46)	(19)
	$ (301)	$ 51	$ 67

10. INCOME TAXES

The components of earnings (loss) before income taxes consist of the following:

	2019	2018	2017
Canadian	**$ (23,901)**	**$ 10,880**	$ 7,205
Foreign	**(35,717)**	**(34,574)**	512
Earnings (loss) before income taxes	**$ (59,618)**	**$ (23,694)**	$ 7,717

The income tax expense (recovery) consists of:

	2019	2018	2017
Canadian:			
Current	**$ 126**	$ 101	$ 28
Deferred	**8,706**	(4,508)	1,665
	$ 8,832	$ (4,407)	$ 1,693
Foreign:			
Current	**$ 2,083**	$ 2,500	$ 2,347
Deferred	**5**	2,823	(841)
	$ 2,088	$ 5,323	$ 1,506
Total:			
Current	**$ 2,209**	$ 2,601	$ 2,375
Deferred	**8,711**	(1,685)	824
	$ 10,920	$ 916	$ 3,199

(In thousands of U.S. dollars, except where otherwise stated)

The reconciliation of income taxes calculated at the statutory rate to the actual income tax provision for the years ended December 31 was as follows:

	2019	2018	2017
Income tax expense (recovery) at Canadian statutory income tax rates of 26.99% (2018 - 26.99%; 2017 - 26.01%)	**$ (16,080)**	$ (6,330)	$ 1,979
Increase (decrease) in income taxes for:			
Permanent and other differences	**(1,363)**	2,173	(1,452)
Change in statutory/foreign tax rates and foreign exchange rates	**1,073**	4,238	1,049
Change in valuation allowance	**26,741**	1,041	1,571
Stock-based compensation expense	**1,287**	1,973	1,633
Adjustment to prior years	**(738)**	(2,179)	(1,581)
Income tax expense	**$ 10,920**	$ 916	$ 3,199

Deferred tax assets and liabilities

The tax effects of temporary differences that give rise to significant deferred tax assets and deferred tax liabilities were as follows at December 31:

	2019	2018
Deferred income tax assets (liabilities)		
Property and equipment	**$ (3,320)**	$ 1,289
Non capital loss carry-forwards	**93,729**	89,499
Capital loss carry-forwards	**3,314**	3,195
Scientific research and development expenses and credits	**25,437**	20,004
Reserves and other	**19,869**	16,044
Investments	**(1,106)**	(801)
Acquired intangibles	**(6,591)**	(10,022)
Lease liabilities	**6,144**	—
	137,476	119,208
Valuation allowance	**140,301**	113,560
	$ (2,825)	$ 5,648

	2019	2018
Classification:		
Assets		
Non-current	**$ 2,096**	$ 11,751
Liabilities		
Non-current	**(4,921)**	(6,103)
	$ (2,825)	$ 5,648

At December 31, 2019, we have provided for a valuation allowance on our deferred tax assets of $140,301 (2018 - $113,560).

At December 31, 2019, we have Canadian net operating loss carry-forwards of $1,808 that expire in 2039 to offset future Canadian taxable income, and allowable capital loss carry-forwards of $11,917 that are available, indefinitely, to be deducted against future Canadian taxable capital gains. In addition, we have investment tax credits of $22,585 and $10,109 available to offset future Canadian federal and provincial income taxes payable, respectively. The investment tax credits expire between 2030 and 2039. At December 31, 2019, our U.S. subsidiary has $6,445 of California research & development tax credits which may be carried forward indefinitely.

(In thousands of U.S. dollars, except where otherwise stated)

At December 31, 2019, net operating loss carry-forwards for our foreign subsidiaries were $65,489 for U.S. income tax purposes, of which, $9,860 may be carried forward indefinitely, and $55,629 expires between 2021 and 2037, $6,531 for Sweden income tax purposes, $25 for Norway income tax purposes, $60,294 for Luxembourg income tax purposes, and $231,025 for French income tax purposes. The Sweden, Norway, Luxembourg and French net operating loss carry-forward may be carried forward indefinitely. Our foreign subsidiaries may be limited in their ability to use foreign net operating losses in any single year depending on their ability to generate significant taxable income. In addition, the utilization of the U.S. net operating losses is also subject to ownership change limitations provided by U.S. federal and specific state income tax legislation. The amount of French net operating losses deducted each year is limited to €1.0 million plus 50% of French taxable income in excess of €1.0 million. Our French net operating losses carry-forward is subject to the "continuity of business" requirement. Our French subsidiaries also have research tax credit carried forward of $3,627 and employment tax credit carried forward of $184 as at December 31, 2019. The French tax credits may be used to offset against corporate income tax and if any tax credits are not fully utilized within a three-year period following the year the tax credits are earned, it may be refunded by the French tax authorities. Tax loss and tax credits carry-forwards are denominated in the currency of the countries in which the respective subsidiaries are located and operate. Fluctuations in currency exchange rates could reduce the U.S. dollar equivalent value of these tax loss and research tax credit carry forwards in future years.

In assessing the realizability of our deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during periods in which temporary differences become deductible and the loss carry-forwards or tax credits can be utilized. Management considers projected future taxable income and tax planning strategies in making our assessment.

Accounting for uncertainty in income taxes

At December 31, 2019, we had gross unrecognized tax benefits of $4,628 (2018 — $4,482). Of this total, $447 (2018 — $652) represents the amount of unrecognized tax benefits that, if recognized, would favorably impact our effective tax rate.

Below is a reconciliation of the total amounts of unrecognized tax benefits for the years ended December 31:

		2019		2018
Unrecognized tax benefits, beginning of year	**$**	**4,482**	$	4,418
Increases — tax positions taken in prior periods		**49**		3
Increases — tax positions taken in current period		**—**		—
Settlements and lapses of statute of limitations		**97**		61
Unrecognized tax benefits, end of year	**$**	**4,628**	$	4,482

We recognize interest expense and penalties related to unrecognized tax benefits within the provision for income tax expense on the consolidated statement of operations. At December 31, 2019, we had increased $56 (2018 - increased $29) for accruals of interest and penalties.

(In thousands of U.S. dollars, except where otherwise stated)

In the normal course of business, we are subject to audit by the Canadian federal and provincial taxing authorities, by the U.S. federal and various state taxing authorities and by the taxing authorities in various foreign jurisdictions. Tax years ranging from 2006 to 2019 remain subject to examination in Canada, the United States, the United Kingdom, France, Germany, Australia, China, Hong Kong, Brazil, South Africa, Japan, Korea, Taiwan, Italy, Sweden, Norway, India, Spain, and Luxembourg.

The Company regularly engages in discussions and negotiations with tax authorities regarding tax matters in various jurisdictions. The Company believes it is reasonably possible that certain tax matters may be concluded in the next 12 months. The Company estimates that the unrecognized tax benefits at December 31, 2019 could reduce by approximately $234 in the next 12 months.

Deferred taxes on foreign earnings

No provision for taxes has been provided on undistributed foreign earnings, as it is the Company's intention to indefinitely reinvest undistributed earnings of its foreign subsidiaries. It is not practical to estimate the income tax liability that might be incurred if there is a change in management's intention in the event that a remittance of such earnings occur in the future.

11. STOCK-BASED COMPENSATION PLANS

(a) Stock-based compensation expense:

	2019	2018	2017
Cost of goods sold	**$ 167**	$ 491	$ 461
Sales and marketing	**3,750**	2,784	2,503
Research and development	**2,752**	2,274	2,038
Administration	**6,261**	7,511	5,339
	$ 12,930	$ 13,060	$ 10,341
Stock option plan	**2,890**	3,350	3,297
Restricted stock plan	**10,040**	9,710	7,044
	$ 12,930	$ 13,060	$ 10,341

(b) Stock option plan

Under the terms of our Stock Option Plan (the "Plan"), our Board of Directors may grant options to employees, officers and directors. The maximum number of shares issuable pursuant to the Plan is the lesser of 8.1% of the number of issued and outstanding common shares from time to time or 7,000,000 common shares. In addition, the maximum number of shares issuable pursuant to the Plan, together with any shares issuable pursuant to other security-based compensation arrangements, shall not exceed 8.1% of the number of issued and outstanding common shares from time to time. Based on the number of shares outstanding as at December 31, 2019, stock options exercisable into 1,064,026 common shares are available for future allocation under the Plan.

The Plan provides that the exercise price of an option will be determined on the date of grant and will not be less than the closing market price of our stock at that date. Options generally vest over four years, with the first 25% vesting at the first anniversary date of the grant and the balance vesting in equal amounts at the end of each month thereafter. We determine the expiry date of each option at the time it is granted, which cannot be more than five years after the date of the grant.

(In thousands of U.S. dollars, except where otherwise stated)

The fair value of share options was estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions:

	2019	2018	2017
Risk-free interest rate	**2.03%**	2.22%	1.37%
Annual dividends per share	**Nil**	Nil	Nil
Expected stock price volatility	**54%**	55%	55%
Expected option life (in years)	**4.0**	4.0	4.0
Average fair value of options granted (in dollars)	**$5.38**	$7.02	$11.09

There is no dividend yield because we do not pay, and do not plan to pay, cash dividends on our common shares. The expected stock price volatility is based on the historical volatility of our average monthly stock closing prices over a period equal to the expected life of each option grant. The risk-free interest rate is based on yields from risk-free instruments with a term equal to the expected term of the options being valued. The expected life of options represents the period of time that the options are expected to be outstanding based on historical data of option holder exercise and termination behavior. Forfeitures are accounted for in compensation expense as they occur.

The following table presents stock option activity for the years ended December 31:

	Number of	**Weighted Average Exercise Price**		**Weighted Average Remaining Contractual Life**	**Aggregate Intrinsic Value**
	Options	**Cdn.$**	**U.S.$**	**In Years**	**U.S.$**
Outstanding, December 31, 2016	1,315,623	19.65	14.61	2.9	4,687
Granted	685,936	32.16	25.58		
Exercised	(500,184)	14.91	11.86		6,997
Forfeited	(37,894)	24.58	19.55		
Outstanding, December 31, 2017	1,463,481	26.38	20.98	3.2	4,788
Granted	343,173	21.47	15.75		
Exercised	(221,262)	16.10	11.81		1,222
Forfeited	(207,044)	34.24	25.10		
Outstanding, December 31, 2018	1,378,348	26.79	19.64	2.8	822
Granted	**462,937**	**16.07**	**12.34**		
Exercised	**(47,231)**	**13.58**	**10.43**		**80**
Forfeited	**(205,911)**	**26.45**	**20.31**		
Outstanding, December 31, 2019	**1,588,143**	**23.62**	**18.14**	**2.6**	**30**

The intrinsic value of outstanding and exercisable stock options is calculated as the quoted market price of the stock at the balance sheet date, or date of exercise, less the exercise price of the option. For the year ended December 31, 2019, the aggregate intrinsic value of stock options exercised was $80 (2018 - $1,222).

(In thousands of U.S. dollars, except where otherwise stated)

The following table summarizes the stock options outstanding and exercisable at December 31, 2019:

	Options Outstanding				Options Exercisable		
Range of	Number of	Weighted Average Remaining Option Life	Weighted Average Exercise Price		Number of Options	Weighted Average Exercise Price	
Exercise Prices	Options	(years)	Cdn.$	U.S.$	Exercisable	Cdn.$	U.S.$
$8.46 - $12.21 U.S. $11.01 - $15.90 Cdn	278,373	1.9	13.79	10.59	201,595	13.98	10.74
$12.22 - $13.02 U.S. $15.91 - $16.95 Cdn	356,236	4.1	16.45	12.64	—	—	—
$13.03 - $16.37 U.S. $16.96 - $21.31 Cdn	319,452	3.2	20.50	15.75	139,133	20.70	15.90
$16.38 - $25.23 U.S. $21.32 - $32.85 Cdn	232,072	2.1	30.56	23.48	163,836	30.46	23.40
$25.24 - $32.29 U.S. $32.86 - $42.03 Cdn	402,010	1.5	35.24	27.07	319,509	35.85	27.54
	1,588,143	2.6	23.62	18.14	824,073	26.87	20.64

The options outstanding at December 31, 2019 expire between March 3, 2020 and November 8, 2024.

As at December 31, 2019, the unrecognized stock-based compensation cost related to the non-vested stock options was $4,548 (2018 — $5,451; 2017 — $7,879), which is expected to be recognized over a weighted average period of 2.6 years (2018 — 2.3 years; 2017 — 2.8 years).

(c) Restricted share plans

We have two market based restricted share unit plans: one for U.S. employees and one for all non-U.S. employees, and a treasury based restricted share unit plan (collectively, the “RSPs”). The RSPs support our growth and profitability objectives by providing long-term incentives to certain executives and other key employees and also encourage our objective of employee share ownership through the granting of restricted share units (“RSUs”). There is no exercise price or monetary payment required from the employees upon the grant of an RSU or upon the subsequent delivery of our common shares (or, in certain jurisdictions, cash in lieu at the option of the Company) to settle vested RSUs. The form and timing of settlement is subject to local laws.

The maximum number of shares issuable pursuant to outstanding awards under the treasury based restricted share unit plan is 3.7% of the number of issued and outstanding shares and the maximum number of shares issuable pursuant to all of our security-based compensation arrangements is 8.1% of the number of issued and outstanding shares. Based on the number of shares outstanding as at December 31, 2019, 282,733 share units are available for future allocation under the treasury based restricted share unit plan. With respect to the two market based RSPs, independent trustees purchase Sierra Wireless common shares over the facilities of the Toronto Stock Exchange ("TSX") and Nasdaq, which are used to settle vested RSUs. The existing trust funds are variable interest entities and are included in these consolidated financial statements as treasury shares held for RSU distribution.

In January 2018, the Board of Directors approved a proposal to include a performance-based component to certain grants of units under our RSPs ("PSUs"). The current outstanding PSUs (market condition) have a performance-based three year cliff-vesting criteria measured against a benchmark index. The fair value of the PSUs at date of grant are determined using the Monte Carlo simulation model.

(In thousands of U.S. dollars, except where otherwise stated)

In February 2019, the Board of Directors approved the issuance of PSUs that are measured against an internal performance benchmark based on achieving service revenue targets or cost savings initiatives as well as PSUs measured against a benchmark index. The fair value of the PSUs (performance condition) that are measured against an internal performance benchmark based on achieving service revenue targets or cost savings initiatives is the Company's stock price on the date of grant. The fair value of the PSUs that are measured against a benchmark index at date of grant is determined using the Monte Carlo simulation model. These outstanding PSUs have a performance-based three year cliff-vesting criteria measured against a benchmark index, service revenue or cost savings targets and the associated performance conditions are probable of being achieved.

Generally, non-performance based RSUs vest over three years, in equal one-third amounts on each anniversary date of the grant and some cliff vest in one year. RSU grants to employees who are resident in France for French tax purposes will not vest before the second anniversary from the date of grant, and any shares issued are subject to an additional two year tax hold period.

The intrinsic value of outstanding RSUs is calculated as the quoted market price of the stock at the balance sheet date, or date of vesting.

The following table summarizes the RSU activity for the years ended December 31:

	Number of	Weighted Average Grant Date Fair Value		Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value
	RSUs	Cdn.$	U.S.$	In years	U.S.$
Outstanding, December 31, 2016	745,974	22.59	16.81	2.1	11,689
Granted	454,685	32.02	25.47		
Vested / settled	(284,888)	22.86	18.18		6,098
Forfeited	(39,030)	21.10	16.77		
Outstanding, December 31, 2017	876,741	26.80	21.31	2.1	17,919
Granted	754,452	23.78	17.44		
Vested / settled	(520,660)	25.69	18.84		8,876
Forfeited	(64,258)	25.73	18.86		
Outstanding, December 31, 2018	1,046,275	26.23	19.24	2.6	13,289
Granted	**1,222,131**	**16.20**	**12.44**		
Vested / settled	**(333,865)**	**23.71**	**18.22**		**4,607**
Forfeited	**(118,782)**	**19.80**	**15.20**		
Outstanding, December 31, 2019	**1,815,759**	**20.08**	**15.42**	2.3	**17,310**
Outstanding – vested and not settled	**165,409**				
Outstanding – unvested	**1,650,350**				
Outstanding, December 31, 2019	**1,815,759**				

As at December 31, 2019, the total remaining unrecognized compensation cost associated with the RSUs totaled $14,871 (2018 — $11,530; 2017 — $9,346), which is expected to be recognized over a weighted average period of 1.9 years (2018 — 1.9 years; 2017 — 1.6 years).

(In thousands of U.S. dollars, except where otherwise stated)

12. EARNINGS (LOSS) PER SHARE

The following table provides the reconciliation between basic and diluted earnings (loss) per share:

	2019	2018	2017
Net earnings (loss)	**$ (70,538)**	$ (24,610)	$ 4,518
Weighted average shares used in computation of:			
Basic	**36,166**	36,019	32,356
Assumed conversion	**—**	—	537
Diluted	**36,166**	36,019	32,893
Net earnings (loss) per share (in dollars):			
Basic	**$ (1.95)**	$ (0.68)	$ 0.14
Diluted	**(1.95)**	(0.68)	0.14

As the Company incurred losses for the years ended December 31, 2019 and 2018, all equity awards for those years were anti-dilutive and were excluded from the diluted weighted average shares.

13. ACCOUNTS RECEIVABLE

The components of accounts receivable at December 31 were as follows:

	2019	2018
Trade receivables	**$ 118,349**	$ 154,593
Less: allowance for doubtful accounts	**(3,170)**	(2,968)
	115,179	151,625
Sales taxes receivable	**3,739**	3,016
R&D tax credits	**3,816**	3,783
Financing receivables	**959**	1,876
Contract assets (note *2(c)*)	**1,688**	1,953
Other receivables	**6,051**	9,472
	$ 131,432	$ 171,725

The movement in the allowance for doubtful accounts during the years ended December 31 were as follows:

	2019	2018	2017
Balance, beginning of year	**$ 2,968**	$ 1,827	$ 2,486
Bad debt expense (recovery)	**490**	1,159	(535)
Write-offs and settlements	**(285)**	9	(194)
Foreign exchange	**(3)**	(27)	70
	$ 3,170	$ 2,968	$ 1,827

(In thousands of U.S. dollars, except where otherwise stated)

14. INVENTORIES

The components of inventories at December 31 were as follows:

		2019		2018
Electronic components	$	30,149	$	28,849
Finished goods		24,142		21,930
	$	54,291	$	50,779

15. PREPAIDS AND OTHER

The components of prepaids and other at December 31 were as follows:

		2019		2018
Inventory advances	$	10,418	$	3,851
Insurance and licenses		309		846
Deposits		2,231		1,921
Contract acquisition and fulfillment costs		1,529		880
Other		4,769		4,205
	$	19,256	$	11,703

In 2019, $357 of deferred contract acquisition and fulfillment costs were expensed to *Sales and marketing and Cost of sales* (2018 - $959).

16. PROPERTY AND EQUIPMENT

The components of property and equipment at December 31 were as follows:

	2019					
		Cost		Accumulated amortization		Net book value
Furniture and fixtures	$	3,189	$	1,948	$	1,241
Research and development equipment		42,596		30,309		12,287
Production equipment and tooling		46,637		29,549		17,088
Computer equipment		9,592		8,044		1,548
Software		9,854		7,727		2,127
Leasehold improvements		7,319		5,124		2,195
Leased vehicles		584		560		24
Office equipment		1,408		1,195		213
Monitoring equipment		1,852		1,117		735
Network equipment		6,780		4,314		2,466
	$	129,811	$	89,887	$	39,924

(In thousands of U.S. dollars, except where otherwise stated)

	2018		
	Cost	Accumulated amortization	Net book value
Furniture and fixtures	$ 3,089	$ 1,634	$ 1,455
Research and development equipment	38,761	28,361	10,400
Production equipment and tooling	43,860	26,427	17,433
Computer equipment	9,099	7,464	1,635
Software	8,180	6,287	1,893
Leasehold improvements	6,754	4,489	2,265
Leased vehicles	983	688	295
Office equipment	1,533	1,162	371
Monitoring equipment	1,821	905	916
Network equipment	6,262	3,083	3,179
	$ 120,342	**$ 80,500**	**$ 39,842**

Amortization expense relating to property and equipment was $16,257, $18,204, and $14,032 for the years ended December 31, 2019, 2018, and 2017, respectively.

17. INTANGIBLE ASSETS

The components of intangible assets at December 31 were as follows:

	2019		
	Cost	**Accumulated amortization**	**Net book value**
Patents and trademarks	**$ 15,416**	**$ 13,540**	**$ 1,876**
Licenses	**52,517**	**48,912**	**3,605**
Intellectual property	**27,824**	**22,326**	**5,498**
Customer relationships	**116,576**	**69,883**	**46,693**
Brand	**14,613**	**3,727**	**10,886**
In-process research and development	**10,274**	**8,760**	**1,514**
	$ 237,220	**$ 167,148**	**$ 70,072**

	2018		
	Cost	Accumulated amortization	Net book value
Patents and trademarks	$ 15,163	$ 13,328	$ 1,835
Licenses	50,740	49,112	1,628
Intellectual property	28,277	18,671	9,606
Customer relationships	118,741	61,993	56,748
Brand	14,854	2,536	12,318
In-process research and development	10,521	7,766	2,755
	$ 238,296	$ 153,406	$ 84,890

(In thousands of U.S. dollars, except where otherwise stated)

Estimated annual amortization expense for the next 5 years ended December 31 are as follows:

2020	13,590
2021	9,360
2022	8,311
2023	8,009
2024	7,960

In the first quarter of 2017, we recorded an impairment charge of $3,668 related to an intangible asset recorded on the acquisition of Maingate as a result of a decision to terminate a service offering that was superseded by a more technologically advanced offering in our IoT Solutions business.

Amortization expense relating to intangible assets was $16,920, $20,946, and $16,471 for the years ended December 31, 2019, 2018, and 2017, respectively.

The weighted-average remaining useful lives of intangible assets was 5.9 years as at December 31, 2019.

At December 31, 2019 and 2018, all intangible assets were subject to amortization. At December 31, 2017, a net carrying amount of $313 included in intangible assets was not subject to amortization.

18. GOODWILL

The changes in the carrying amount of goodwill for the years ended December 31 were as follows:

		2019		2018
Balance at beginning of year	**$**	**211,074**	$	218,516
Goodwill acquired (note 5*(c)* and 5*(d)*)		**—**		1,016
Disposal of assets of a business unit		**—**		(2,073)
Foreign currency translation adjustments		**(3,479)**		(6,385)
	$	**207,595**	$	211,074
IoT Solutions	**$**	**121,429**	$	123,213
Embedded Broadband		**86,166**		87,861
	$	**207,595**	$	211,074

During the first quarter of 2019, the Company implemented certain strategic and organizational structure changes that resulted in the change of our reporting units. Effective March 31, 2019, we have two reportable segments and two reporting units: (a) IOT Solutions and (b) Embedded Broadband. As a result, we reassigned our assets and liabilities and goodwill to the two new reporting units. Goodwill has been reassigned to the new reporting units using a fair value allocation approach, i.e. discounted cash flow analysis. We have reclassified our comparative information.

We assessed the recoverability of goodwill as at October 1, 2019 for each of the identified reporting units and determined that the fair value of each of the two reporting units exceeded its carrying value. Therefore, the second step of the impairment test that measures the amount of an impairment loss by comparing the implied fair market value with the carrying amount of goodwill for each reporting unit was not required.

There was no impairment of goodwill during the years ended December 31, 2019, 2018 and 2017.

(In thousands of U.S. dollars, except where otherwise stated)

19. LEASES

The components of lease expenses were as follows:

		2019
Operating lease cost	$	**9,610**
Finance lease cost		**345**
Short-term lease cost		**1,961**
ROU asset impairment		**877**
Sublease income		**(1,032)**
Total lease expenses	$	**11,761**

We have operating leases for offices, data centers and certain office equipment. Our leases have remaining lease terms of 0.2 year to 12.0 years. We sublease certain offices to third parties.

In the fourth quarter of 2019, we recorded a right-of-use asset impairment related to our office in France that we partially cease to use and sublease.

Supplemental Balance Sheet information related to leases was as follows:

		2019
Operating Leases		
Operating lease right-of-use assets	$	**25,609**
Accounts payable and accrued liabilities	$	**5,933**
Operating lease liabilities		**25,154**
Total operating lease liabilities	$	**31,087**
Finance Leases		
Property and equipment, gross	$	**1,383**
Accumulated depreciation		**(1,194)**
Property and equipment, net	$	**189**
Accounts payable and accrued liabilities	$	**379**
Long-term obligations		**208**
Total finance lease liabilities	$	**587**
Weighted Average Remaining Lease Term		
Operating leases		**7.1**
Finance leases		**1.6**
Weighted Average Discount Rate		
Operating leases		**2.6%**
Finance leases		**3.5%**

(In thousands of U.S. dollars, except where otherwise stated)

Supplemental cash flow information related to leases was as follows:

		2019
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	$	7,860
Financing cash flow from finance leases		535
New lease assets obtained in exchange for lease liabilities (non-cash):		
Operating leases	$	6,782
Financing leases		38

Maturities of lease liabilities were as follows:

		Operating Leases		Finance Leases		Total
2020	$	6,069	$	331	$	6,400
2021		6,340		248		6,588
2022		4,985		8		4,993
2023		3,066		8		3,074
2024		2,191		3		2,194
Thereafter		12,014		—		12,014
Total lease payments		34,665		598		35,263
Less: imputed interest		(3,578)		(11)		(3,589)
Total lease liabilities	$	31,087	$	587	$	31,674

20. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

The components of accounts payable and accrued liabilities at December 31 were as follows:

		2019		2018
Trade payables and accruals	$	75,057	$	95,701
Inventory commitment reserve		1,430		843
Accrued royalties		11,870		14,348
Accrued payroll and related liabilities		15,093		18,115
Professional services		4,481		6,702
Taxes payable (including sales taxes)		4,904		4,957
Product warranties (note *27(a)(iii)*)		8,927		7,914
Sales credits		8,814		7,055
Restructuring liability (note 8)		8,655		2,486
Operating lease liabilities (note 19)		5,933		—
Finance lease liabilities (note 19)		379		533
Other		28,013		25,566
	$	173,556	$	184,220

(In thousands of U.S. dollars, except where otherwise stated)

21. LONG-TERM OBLIGATIONS

The components of long-term obligations at December 31 were as follows:

		2019		2018
Accrued royalties	$	**30,988**	$	28,181
Deferred revenue		**8,078**		6,317
Finance lease liabilities (note 19)		**208**		558
Other		**4,500**		8,194
	$	**43,774**	$	43,250

Remaining performance obligations

As of December 31, 2019, we had $24,173 of remaining performance obligations to be recognized (December 31, 2018 - $20,820), of which we expect to recognize approximately 41% in 2020, 31% in 2021, and 28% in subsequent years.

We do not disclose the value of remaining performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which we recognize revenue at the amount to which we have the right to invoice for services performed.

22. ACCUMULATED OTHER COMPREHENSIVE LOSS

The components of accumulated other comprehensive loss at December 31, net of taxes, were as follows:

		2019		2018
Balance, beginning of period	$	**(9,146)**	$	(2,476)
Foreign currency translation adjustments		**(3,241)**		(4,226)
Loss on long term intercompany balances		**(829)**		(2,444)
Balance, end of period	$	**(13,216)**	$	(9,146)

23. SHARE CAPITAL

On August 1, 2018, we received approval from the TSX of our Notice of Intention to make a Normal Course Issuer Bid ("NCIB"). Pursuant to the NCIB, we may purchase for cancellation up to 3,580,668 of our common shares, or approximately 9.9% of the common shares outstanding as of the date of the announcement, representing 10% of the public float. The NCIB commenced on August 8, 2018 and terminated on August 7, 2019. During the year ended December 31, 2019, we did not repurchase any common shares. During the year ended December 31, 2018, we purchased and canceled 161,500 common shares at an average price of $19.32 per share under the NCIB. The excess purchase price over an above the average carrying value in the amount of $1,187 was charged to retained earnings in 2018.

(In thousands of U.S. dollars, except where otherwise stated)

24. SUPPLEMENTAL CASH FLOW INFORMATION

The following table summarizes supplemental cash flow information and non-cash activities:

	2019	2018	2017
Net income taxes paid	**$ 616**	$ 1,105	$ 6,100
Net Interest (received) paid	**(202)**	118	105
Discount fees paid (note 25 *(d)*)	**347**	—	—
Non-cash property and equipment additions	**485**	231	—
Non-cash additions related to asset retirement obligations	**—**	—	75

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the statement of financial position that sum to the total of the same such amounts shown in the statement of cash flows:

	2019	2018	2017
Cash and cash equivalents	**$ 75,454**	$ 89,076	$ 65,003
Restricted cash	**3,629**	221	221
Total cash, cash equivalents, and restricted cash shown in the statement of cash flows	**$ 79,083**	$ 89,297	$ 65,224

As at December 31, 2019, restricted cash of $221 is held in escrow related to certain vendor obligations. We collected $3,408 from trade receivables sold to CIBC under our Accounts Receivable Purchase Agreement which have not been remitted to CIBC as at December 31, 2019. See note 25(d).

25. FAIR VALUE MEASUREMENT

(a) Fair value presentation

An established fair value hierarchy requires the Company to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. A financial instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is available and significant to the fair value measurement. There are three levels of inputs that may be used to measure fair value:

Level 1 - Quoted prices in active markets for identical assets or liabilities.

Level 2 - Observable inputs other than quoted prices in active markets for identical assets and liabilities, such as quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 - Inputs that are generally unobservable and are supported by little or no market activity and that are significant to the fair value determination of the assets or liabilities.

The carrying value of cash and cash equivalents, restricted cash, accounts receivable, accounts payable and accrued liabilities approximate their fair value due to the immediate or short-term maturity of these financial instruments. Based on borrowing rates currently available to us for loans with similar terms, the carrying values of our obligations under capital leases, long-term obligations and other long-term liabilities approximate their fair values.

Derivatives, such as foreign currency forward contracts, may be used to hedge the foreign exchange risk on cash flows from commitments denominated in a foreign currency. Derivatives are recorded in *Accounts receivable* or *Accounts payable and accrued liabilities* and measured at fair value at each balance sheet date. Any resulting gains and losses from changes in the fair value are recorded in *Foreign exchange gain (loss)*.

Fair value of the foreign currency forward contracts are based on observable market inputs such as forward rates in active markets, which represents a Level 2 measurement within the fair value hierarchy.

As at December 31, 2019, we were committed to foreign currency forward contracts totaling $8.4 million Canadian dollars with an average forward rate of 1.3447, maturing between January to June 2020. We recorded unrealized gain of $1,421 in *Foreign exchange gain (loss)* for those outstanding contracts in the year ended December 31, 2019 (2018 — Foreign exchange loss of $1,201).

(b) Credit Facilities

In July, 2018, we entered into a committed $30 million senior secured revolving term credit facility ("Revolving Facility") with the Canadian Imperial Bank of Commerce as a sole lender and as Administrative Agent. The Revolving Facility is secured by a pledge against substantially all of our assets and includes an accordion feature, which permits the Company to increase the aggregate revolving loan commitments thereunder on an uncommitted basis subject to certain conditions. The Revolving Facility matures on July 31, 2021 and will be used for general corporate purposes, including, but not limited to, capital expenditures, working capital requirements and/or certain acquisitions permitted under the Revolving Facility. As at December 31, 2019, there were no borrowings under the Revolving Facility (2018 — nil).

(c) Letters of credit

We have access to a standby letter of credit facility of $1.5 million from Toronto Dominion Bank. The credit facility is used for the issuance of letters of credit and guarantees and is guaranteed by Export Development Canada. As at December 31, 2019, there were two letters of credit issued against the revolving standby letter of credit facility for a total value of $0.1 million (2018 — $0.1 million).

(d) Accounts Receivable Purchase Agreement

On June 26, 2019, the Company entered into an uncommitted Receivables Purchase Agreement (the “RPA”) with CIBC, as Purchaser, to improve its liquidity during high working capital periods. Under the RPA, the Company may offer to sell certain eligible accounts receivable (the “Receivables”) to CIBC, which may accept such offer, and purchase the offered Receivables. Under the RPA, up to $75.0 million of Receivables may be sold and remain outstanding at any time. Eligible trade receivables are sold at 100% face value less discount with a 10% limited recourse to the Company arising from certain repurchase events. The RPA is on an uncommitted basis with no expiry date and carries a discount rate of CDOR (for purchased receivables in CAD) and LIBOR (for purchased receivables in USD) plus an applicable margin. After the sale, the Company does not retain any interests in the Receivables, but continues to service and collect, in an administrative capacity, the outstanding receivables on behalf of CIBC.

The Company accounts for the sold Receivables as a sale in accordance with FASB ASC 860, *Transfers and Servicing*. Proceeds from the sale reflect the face value of the Receivables less discount fees charged by CIBC and one-time legal costs. The discount fees are recorded in *Other income (expense)* in the Company’s consolidated statements of operations. Net proceeds are classified under operating activities in the consolidated statements of cash flows.

Pursuant to the RPA, the Company sold and de-recognized $86,856 Receivables in 2019. As at December 31, 2019, $18,174 remained outstanding to be collected from customers and remitted to CIBC. Discount fees of $347 are included in *Other income (expense)* and legal costs of $129 are included in *Administration* expense in the consolidated statements of operations. As at December 31, 2019, we collected $3,408 from Receivables that we previously sold and that have not been remitted to CIBC due to timing of settlement dates. We recorded the amount in *Restricted cash* in the consolidated balance sheets with a corresponding increase in accrued liabilities.

26. FINANCIAL INSTRUMENTS

Financial Risk Management

Financial instruments consist primarily of cash and cash equivalents, accounts receivable, derivatives such as foreign currency forward and option contracts, accounts payable and accrued liabilities.

We have exposure to the following business risks:

We maintain substantially all of our cash and cash equivalents with major financial institutions or invest in government instruments. Our deposits with banks may exceed the amount of insurance provided on such deposits.

We outsource manufacturing of our products to third parties and, accordingly, we are dependent upon the development and deployment by third parties of their manufacturing abilities. The inability of any supplier or manufacturer to fulfill our supply requirements could impact future results. We have supply commitments to our contract manufacturers based on our estimates of customer and market demand. Where actual results vary from our estimates, whether due to execution on our part or market conditions, we are at risk.

Financial instruments that potentially subject us to concentrations of credit risk are primarily accounts receivable. We perform on-going credit evaluations of our customer's financial condition and require letters of credit or other guarantees whenever deemed appropriate.

Although a significant portion of our revenues are in U.S. dollars, we incur operating costs that are denominated in other currencies. Fluctuations in the exchange rates between these currencies could have a material impact on our business, financial condition and results of operations.

To manage our foreign currency risks, we may enter into foreign currency forward and options contracts should we consider it to be advisable to reduce our exposure to future foreign exchange fluctuations.

We are subject to risks typical of an international business including, but not limited to, differing economic conditions, changes in political climate, differing tax structures, other regulations and restrictions and foreign exchange rate volatility. Accordingly, our future results could be materially affected by changes in these or other factors.

(In thousands of U.S. dollars, except where otherwise stated)

27. COMMITMENTS AND CONTINGENCIES

(a) Contingent liability on sale of products

(i) Under license agreements, we are committed to make royalty payments based on the sales of products using certain technologies. We recognize royalty obligations as determinable in accordance with agreement terms. Where agreements are not in place, we have recognized our current best estimate of the obligation under accrued liabilities and long-term obligations. When agreements are finalized or the obligation becomes statute barred, the estimate will be revised accordingly.

(ii) We are a party to a variety of agreements in the ordinary course of business under which we may be obligated to indemnify a third party with respect to certain matters. Typically, these obligations arise as a result of contracts for sale of our products to customers where we provide indemnification against losses arising from matters such as potential intellectual property infringements and product liabilities. The impact on our future financial results is not subject to reasonable estimation because considerable uncertainty exists as to whether claims will be made and the final outcome of potential claims. To date, we have not incurred material costs related to these types of indemnifications.

(iii) We accrue product warranty costs, when we sell the related products, to provide for the repair or replacement of defective products. Our accrual is based on an assessment of historical experience and on management's estimates. Changes in the liability for product warranties were as follows:

		2019		2018
Balance, beginning of year	**$**	**7,914**	$	8,159
Provisions		**3,686**		3,351
Expenditures		**(2,673)**		(3,596)
Balance, end of year	**$**	**8,927**	$	7,914

(b) Other commitments

We have purchase commitments totaling approximately $128,146 net of related electronic components inventory of $7,207 (December 31, 2018 — $147,029, net of electronic components inventory of $5,008), with certain contract manufacturers and suppliers under which we have committed to buy a minimum amount of designated products between January 2020 and June 2020. In certain of these agreements, we may be required to acquire and pay for such products up to the prescribed minimum or forecasted purchases.

We also have purchase commitments totaling approximately $7,110 (December 31, 2018 — $8,952) with certain mobile network operators, under which we have committed to buy a minimum amount of wireless data and wireless data services between January 2020 and October 2022.

During the second quarter of 2019, we entered into a purchase commitment totaling approximately $3,192 with a supplier under which we have committed to buy a minimum amount of cloud computing services between January 2020 and May 2022.

(c) Legal proceedings

We are from time to time involved in litigation, certain other claims and arbitration matters arising in the ordinary course of our business. We accrue for a liability when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Significant judgment is required in both the determination of probability and the determination as to whether a loss is reasonably estimable. These accruals are reviewed at least quarterly and adjusted to reflect the impacts of negotiations, settlements, rulings, advice of legal counsel and technical experts and other information and events pertaining to a particular matter. To the extent there is a reasonable possibility (within the meaning of ASC 450, *Contingencies*) that the losses could exceed the amounts already accrued for those cases for which an estimate can be made, management believes that the amount of any such additional loss would not be material to our results of operations or financial condition.

In some instances, we are unable to reasonably estimate any potential loss or range of loss. The nature and progression of litigation can make it difficult to predict the impact a particular lawsuit will have on the Company. For instance, in the case of patent litigation, there are many reasons why we cannot make these assessments, including, among others, one or more of the following: in the early stage of a proceeding, the claimant is not required to specifically identify the manner in which the patent has allegedly been infringed; damages sought that are unspecified, unsupportable, unexplained or uncertain; discovery not having been started or being incomplete; the complexity of the facts that are in dispute (e.g., the analysis of the patent and a comparison to the activities of the Company is a labor-intensive and highly technical process); the difficulty of assessing novel claims; the parties not having engaged in any meaningful settlement discussions; the possibility that other parties may share in any ultimate liability; and the often slow pace of patent litigation.

We are required to apply judgment with respect to any potential loss or range of loss in connection with litigation. While we believe we have meritorious defenses to the claims asserted against us in our currently outstanding litigation, and intend to defend ourselves vigorously in all cases, in light of the inherent uncertainties in litigation there can be no assurance that the ultimate resolution of these matters will not significantly exceed the reserves currently accrued by us for those cases for which an estimate can be made. Losses in connection with any litigation for which we are not presently able to reasonably estimate any potential loss or range of loss could be material to our results of operations and financial condition.

In November 2019, Stormborn Technologies LLC filed a patent infringement lawsuit in the United States District Court for the District of Delaware, which lawsuit makes certain allegations concerning our FX and GL series devices. The lawsuit is in the initial pleadings stage.

In June 2019, Inventergy LBS, LLC filed a patent infringement lawsuit in the United States District Court of the Northern District of Georgia, which lawsuit makes certain allegations concerning our Uplink GPS Asset Tracking devices. The lawsuit has been dismissed with prejudice.

In January 2017, Koninklijke KPN N.V. filed a patent infringement lawsuit in the United States District Court for the District of Delaware asserting patent infringement by us and our U.S. subsidiary. The lawsuit makes certain allegations concerning the alleged use of data transmission error checking technology in our wireless products. In March 2018, the Court granted our motion for judgment on the pleadings that the plaintiff's patent is invalid. The plaintiff appealed this invalidity ruling to the Federal Circuit, and in November 2019, the Federal Circuit reversed the District Court's invalidity ruling. In District Court, we are continuing to pursue our counterclaims alleging that the plaintiff has breached its commitments to standard setting organizations. A summary judgement hearing has occurred, and a decision of the court is pending. Following the reversal of the invalidity ruling, the District Court has scheduled the matter for trial, coordinating the case with several other pending cases involving the plaintiff and the patent-in-suit and setting the first trial with an unspecified defendant for January 2021. In April 2019, the United States Patent and Trial Appeal Board rendered its final decision in our petition for *Inter Partes* Review of the patent-in-suit, and the instituted claims were not proved to be unpatentable.

In August 2014, M2M Solutions LLC filed a patent infringement lawsuit against us in the District Court for the District of Delaware asserting patent infringement by us and our US subsidiary. The lawsuit makes certain allegations concerning our wireless products with respect to US Patent No. 8,648,717. In March 2017, the United States Patent and Trial Appeal Board issued its decisions in the instituted *Inter Partes* Review proceedings filed by us and other defendants, invalidating all independent claims and several dependent claims in the single patent-in-suit. In April 2017, M2M Solutions assigned the patent-in-suit to Blackbird Tech LLC ("Blackbird"), and they became a plaintiff in the lawsuit in June of that year. In September 2018, the court denied a motion to dismiss the lawsuit. Blackbird was granted leave to identify additional asserted claims and accused products with respect to the patent-in-suit. In November 2019, the Judge issued a claim construction order finding two of the remaining five claims in the patent-in-suit to be indefinite and therefore invalid. The lawsuit is currently nearing the end of the discovery stage. Trial in our case has been scheduled for January 2021.

Intellectual Property Indemnification Claims

We have been notified by certain of our customers in the following matter that we may have an obligation to indemnify them in respect of the products we supply to them:

In June 2019, Sisvel International S.A. and 3G Licensing S.A. (together, "Sisvel"), filed patent infringement lawsuits in the United States District Court for the District of Delaware against one or more of our customers alleging patent infringement with respect to a portfolio of 12 patents purportedly owned by Sisvel and obtained from Nokia Corporation (5 patents) and Blackberry, Ltd. (7 patents), that Sisvel alleges relate to technology for cellular communications networks including, but not limited to 2G, 3G and 4G/LTE. The allegations have been made in relation to certain of our customer's products, which may include products which utilize modules sold to them by us. The lawsuits are in the initial pleadings stage. Several defendants have filed motions to dismiss the lawsuits for failure to state a claim for which relief can be granted, which motion have been granted in February 2020 with leave given to the plaintiff to amend its pleadings.

Although there can be no assurance that an unfavorable outcome would not have a material adverse effect on our operating results, liquidity or financial position, we believe the claims made in the foregoing legal proceedings are without merit and intend to defend ourselves and our products vigorously in all cases.

We are engaged in certain other claims, legal actions and arbitration matters, all in the ordinary course of business, and believe that the ultimate outcome of these claims, legal actions and arbitration matters will not have a material adverse effect on our operating results, liquidity or financial position.

28. SUBSEQUENT EVENT

On January 7, 2020, we completed the acquisition of M2M group of companies ("M2M Group") in Australia. Total cash consideration paid to the shareholders of M2M Group was $19.6 million for 100% of the equity plus approximately $1.4 million for the retirement of certain obligations, subject to normal working capital adjustments. The M2M Group is focused on IoT connectivity services and cellular devices in Australia, and the acquisition expands the Company's IoT Solutions business in the Asia-Pacific region.

The Company has not disclosed its purchase price allocation as it has not had sufficient time between the acquisition date and the date these financial statements were issued to obtain and review information regarding the completeness and measurement of the identifiable assets acquired and liabilities assumed.

Exhibit 1.3

SIERRA WIRELESS, INC.
MANAGEMENT'S DISCUSSION AND ANALYSIS

For the Fiscal Year Ended December 31, 2019

DATED March 10, 2020

MANAGEMENT'S DISCUSSION AND ANALYSIS

Table of Contents

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") provides information for the years ended December 31, 2019, 2018 and 2017 and up to and including March 10, 2020. This MD&A should be read together with our audited consolidated financial statements and the accompanying notes for the year ended December 31, 2019 ("the consolidated financial statements"). The consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States ("U.S. GAAP" or "GAAP"). Except where otherwise specifically indicated, all amounts in this MD&A are expressed in United States dollars.

We have prepared this MD&A with reference to National Instrument 51-102 "Continuous Disclosure Obligations" of the Canadian Securities Administrators. Under the U.S./Canada Multijurisdictional Disclosure System, we are permitted to prepare this MD&A in accordance with the disclosure requirements of Canada, which requirements are different than those of the United States.

Certain statements in this MD&A constitute forward-looking statements or forward-looking information within the meaning of applicable securities laws. You should carefully read "Cautionary Note Regarding Forward-Looking Statements" in this MD&A and should not place undue reliance on any such forward-looking statements.

Throughout this document, references are made to certain non-GAAP financial measures that are not measures of performance under U.S. GAAP. Management believes that these non-GAAP financial measures provide useful information to investors regarding our results of operations as they provide additional measures of our performance and assist in comparisons from one period to another. These non-GAAP financial measures do not have any standardized meaning prescribed by U.S. GAAP and are therefore unlikely to be comparable to similar measures presented by other issuers. These non-GAAP financial measures are defined and reconciled to their nearest GAAP measure in "Non-GAAP Financial Measures".

In this MD&A, unless the context otherwise requires, references to "the Company", "Sierra Wireless", "we", "us" and "our" refer to Sierra Wireless, Inc. and its subsidiaries.

Additional information about our company, including our most recent consolidated financial statements and our Annual Information Form, is available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov.

Cautionary Note Regarding Forward-looking Statements

This MD&A contain certain statements and information that are not based on historical facts and constitute forward-looking statements or forward-looking information within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and Canadian securities laws (collectively, "forward-looking statements") and may include statements and information relating to our 2019 corporate update; financial guidance for our fiscal year 2020; expectations regarding the Company's cost savings initiatives; expectations regarding expected earnings of the M2M Group and ability to expand our market presence in Australia and Southern Asia; the potential impact of the coronavirus on customer demand, our supply chain, manufacturing capacity and our ability to meet customer demand; our business outlook for the short and long term; statements regarding our strategy, plans, goals, objectives, expectations and future operating performance; the Company's liquidity and capital resources; the Company's financial and operating objectives and strategies to achieve them; general economic conditions; estimates of our expenses, future revenues, non-GAAP earnings per share and capital requirements; our expectations regarding the legal proceedings we are involved in; statements with respect to the Company's estimated working capital; expectations with respect to the adoption of Internet of Things ("IoT") solutions; expectations regarding trends in the IoT market and wireless module market; expectations regarding product and price competition from other wireless device manufacturers and solution providers; our ability to implement effective control procedures; and expectations regarding the launch of fifth generation cellular embedded modules. Forward-looking statements are provided to help you understand our views of our short and long term plans, expectations and prospects. We caution you that forward-looking statements may not be appropriate for other purposes.

Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often, but not always, identified by words or phrases such as "outlook", "expects", "is expected", "anticipates", "believes", "plans", "projects", "estimates", "assumes", "intends", "strategy", "goals", "objectives", "potential", "possible", or variations thereof, or stating that certain actions, events, conditions or results "may", "could", "would", "should", "might" or "will" be taken, occur or be achieved, or the negative of any of these terms and similar expressions) are not statements of historical fact and may be forward-looking statements. Forward-looking statements are not promises or guarantees of future performance. They represent our current views and may change significantly. Forward-looking statements are based on a number of material assumptions, including, but not limited to, those listed below, which could prove to be significantly incorrect:

- *expected component supply constraints and manufacturing capacity;*
- *our ability to continue to sell our products and services in the expected quantities at the expected prices and expected times;*
- *our ability to effect and to realize the anticipated benefits of our business transformation initiatives, and the timing thereof;*
- *our ability to develop, manufacture and sell new products and services that meet the needs of our customers and gain commercial acceptance;*
- *expected macro-economic business conditions;*
- *expected cost of sales;*
- *our ability to win new business;*
- *our ability to integrate acquired businesses and realize expected benefits;*
- *our ability to renew or obtain credit facilities when required;*
- *expected deployment of next generation networks by wireless network operators;*
- *our operations not being adversely disrupted by other developments, operating, cyber security, litigation, or regulatory risks;*
- *expected tax and foreign exchange rates; and*
- *our ability to recruit a new Chief Financial Officer.*

Forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors that could cause actual events or results to differ significantly from those expressed or implied in our forward-looking statements, including, without limitation:

- *competition from new or established competitors or from those with greater resources;*
- *natural catastrophes or public health epidemics could impact customer demand, result in production disruption and impact our ability to meet customer demand or capacity to continue critical operations;*
- *the loss of, or significant demand fluctuations from, any of our significant customers;*
- *our financial results being subject to fluctuation;*
- *our business transformation initiatives may result in disruptions to our business and may not achieve the anticipated benefits;*
- *our ability to respond to changing technology, industry standards and customer requirements;*
- *failures of our products or services due to design flaws and errors, component quality issues, manufacturing defects, network service interruptions, cyber-security vulnerabilities or other quality issues;*
- *deterioration in macro-economic conditions could adversely affect our operating results and financial conditions;*
- *our ability to attract or retain key personnel and the impact of organizational change on our business;*
- *cyber-attacks or other breaches of our information technology security;*
- *risks related to the transmission, use and disclosure of user data and personal information;*
- *disruption of, and demands on, our ongoing business and diversion of management's time and attention in connection with acquisitions or divestitures;*
- *risks that the acquisition of M2M Group (as defined below) or our investments and partnerships may fail to realize the expected benefits;*
- *risks related to infringement on intellectual property rights of others;*
- *our ability to obtain necessary rights to use software or components supplied by third parties;*
- *our ability to enforce our intellectual property rights;*
- *our reliance on single source suppliers for certain components used in our products;*
- *our dependence on a limited number of third party manufacturers;*
- *unanticipated costs associated with litigation or settlements;*
- *our dependence on mobile network operators to promote and offer acceptable wireless data services;*
- *risks related to contractual disputes with counterparties;*
- *risks related to governmental regulation;*
- *risks inherent in foreign jurisdictions; and*
- *risks related to tariffs or other trade restrictions.*

This list is not exhaustive of the factors that may affect any of our forward-looking statements. Forward-looking statements are statements about the future and are inherently uncertain, and our actual achievements or other future events or conditions may differ materially from those reflected in the forward-looking statements due to a variety of risks, uncertainties and other factors, including, without limitation, those referred to below under "Risks and Uncertainties" and those referred to in our other regulatory filings with the U.S. Securities and Exchange Commission (the "SEC") in the United States and the provincial securities commissions in Canada.

Our forward-looking statements are based on the beliefs, expectations and opinions of management on the date the statements are made, and we do not assume any obligation to update forward-looking statements if circumstances or management's beliefs, expectations or opinions should change, except as required by applicable law. For the reasons set forth above, investors should not place undue reliance on forward-looking statements.

OVERVIEW

Business Overview

Sierra Wireless is an Internet of Things ("IoT") pioneer that empowers businesses and industries to transform and thrive in the connected economy.

We provide integrated Device-to-Cloud IoT solutions that are comprised of our recurring connectivity services, our IoT cloud platform, and our embedded cellular modules and gateways. Enterprises, industrial companies and Original Equipment Manufacturers ("OEMs") worldwide rely on our expertise to deliver fully-integrated IoT solutions to reduce complexity, gather intelligent edge data and enable connected IoT products and services.

To accelerate our transformation to a fully-integrated Device-to-Cloud IoT solutions company, we launched certain strategic and organizational structure changes in late 2018. Since then, we have designed and commenced implementation of a variety of cost reduction initiatives broadly across the Company, including moving certain positions to lower cost geographies, outsourcing a variety of finance, human resources, IT and operations functions, exiting numerous facilities, as well as the renegotiation of certain supplier contracts. Organizationally, we have combined three development teams into a single research and development ("R&D") entity to improve efficiency. Similarly, we have combined product management into one centralized team. We also re-organized our Go-To-Market team with a strong focus on leveraging our IoT device leadership position to focus on Device-to-Cloud IoT solutions and driving recurring revenue. In conjunction with this cost reduction and organizational activity, we have also made investments in people, products, processes and systems designed to underpin and accelerate our transformation to a IoT solutions company.

Based on the organizational changes we made in the first quarter of fiscal 2019, our segments have changed from those reported at December 31, 2018, when we previously reported three segments. Our new organizational structure clearly delineates our Device-to-Cloud IoT solutions activities and we now have two reportable segments effective the first quarter of 2019: (i) the IoT Solutions segment and (ii) the Embedded Broadband segment. We have adjusted our comparative information to align with this new segmentation.

IoT Solutions

Our IoT Solutions segment is focused on integrated end-to-end IoT solutions that include recurring connectivity services, cloud management software, and cellular modules and gateways targeted primarily at enterprises and OEMs in the IoT space. Our primary focus is on three key markets: (i) Industrial Edge for manufacturing asset monitoring; (ii) Mobile Edge for mobile asset tracking; and (iii) Infrastructure Edge for commercial infrastructure and building monitoring. We believe the IoT opportunities we are focusing on have a high potential to generate recurring services to the customer along with our cloud platform, devices and management tools. This segment is comprised of our former IoT Services and Enterprise Solutions segments, as well as a portion of our former OEM Solutions segment.

In this segment, we provide Device-to-Cloud IoT solutions that include: (i) our global cellular connectivity services, which are subscription-based and include our flexible Smart SIM and core network platforms; (ii) our cloud platform services, which provide a secure and scalable cloud platform for deploying and managing IoT subscriptions, over-the-air updates, devices and applications; and (iii) our managed broadband cellular services, which include a combination of hardware, managed high speed connectivity and cloud services. We also provide unified data orchestration to provide enhanced data management from the edge of the network to the cloud. This service, which is called Octave, securely integrates edge device, network and cloud application programming interfaces into a single platform.

Our embedded devices in this reporting segment are comprised of IoT embedded cellular wireless modules that include Low Power Wide Area technologies ("LPWA"), second generation ("2G"), third generation ("3G"), and fourth generation ("4G") Long-Term Evolution ("LTE") products. We are currently working on the development of fifth generation ("5G") cellular embedded modules for anticipated launch in 2020. We also provide 3G and 4G cellular gateways and routers that are complemented by cloud-based services and on-premise software for secure device and network management.

Our gateway solutions address a broad range of vertical market applications within the mobility, industrial and enterprise market segments. Our AirLink gateways and routers have strong brand recognition with network operators, distributors, value added resellers and end customers. Our products are known for their high reliability and technical capability in mission-critical applications. These gateways and routers leverage our expertise in wireless technologies and offer the latest capabilities in LTE networking, including FirstNet solutions as well as Wi-Fi, Bluetooth and Global Navigation Satellite System ("GNSS") technologies. We also provide our customers with AirLink Management Services through our IoT platform and have introduced new advanced reporting and analytics to our portfolio.

Embedded Broadband

Our Embedded Broadband segment is comprised of our high-speed cellular embedded modules that are typically used in non-industrial applications, namely Automobile, Mobile Computing and Enterprise Networking markets. The products in this segment are typically high-speed 4G LTE and LTE-Advanced cellular modules that are ordered in larger volumes. In this segment, we have limited opportunities to provide connectivity services or fully-integrated IoT solutions to the OEM customer. We have a strong customer base in the Embedded Broadband business that is expected to transition over time from 4G LTE to 5G cellular technology.

As a leading embedded module vendor, we make it simple for our customers to embed high-speed cellular technologies and manage these devices through our IoT cloud platform. The design cycles in this business segment can range from two to three years in the Automotive market to 12 to 18 months in the Mobile Computing market. We are currently working on a number of potential 5G design opportunities with existing customers and new customers. Our portfolio also includes cloud-based remote device and data management capability, as well as support for our embedded application framework called Legato, which is an open source, Linux-based platform.

Additionally, we continue to seek opportunities to partner, acquire or invest in businesses, products and technologies that will help us drive our growth strategy forward and expand our position in the IoT market.

Our Mission, Vision and Values

Our mission is to be the preferred IoT solutions provider for leading brands, combining devices, software and services to accelerate digital transformation and our vision is to enable the connected world with intelligent wireless solutions and enable businesses to reimagine their future in the connected world.

Our core values are:

- Innovation: We develop intelligent IoT solutions based on superior technology that provides value to our customers.
- Execution: We deliver on our commitments together as a team, and focus on quality and excellence in everything we do.
- Trust: We are responsive and collaborative with our customers to help them grow their businesses.

Our Strategy

The global IoT market is growing significantly and new IoT applications are helping people and organizations to lower operating costs and generate new revenue streams by providing new or evolved value-added services to their customers. An integral factor in the growth of IoT applications is cellular connectivity, which enables the transmission of data from connected devices (things) at the edge, through advanced mobile networks to cloud services such as advanced analytics and enterprise applications. Cellular connectivity supports applications such as the connected car, connected industrial assets, smart buildings and cities, and the smart electrical grid, to name just a few. Adoption of IoT solutions is driven by a number of factors, including lower wireless connectivity costs, higher wireless connection speeds, new wireless technologies designed specifically for the IoT, lower computational and data storage costs, new tools to simplify application development and higher levels of focus on data analytics, artificial intelligence and machine learning.

We believe these factors will continue to create attractive growth opportunities for the Company going forward. We are widely recognized as an innovation leader in the IoT sector. We are also a leading provider of gateway and router solutions for industrial, enterprise and mobile applications.

We are seeking to leverage our strong position in cellular embedded modules and gateways to grow and enhance our IoT connectivity and services business and accordingly, our corporate strategy is to drive growth and value creation by:

- Solidifying our leadership position in IoT devices;
- Accelerating our IoT connectivity and cloud businesses by growing subscription-based recurring revenue globally; and
- Leveraging our leading position in IoT devices to build and scale our Device-to-Cloud solutions business.

In 2019, we continued to deliver on our corporate strategy by:

- Continuing to deploy our first embedded cellular modules for the Low Power Wide Area ("LPWA') market;
- Deploying our Smart SIM technology to enable the delivery of highly differentiated connectivity services;
- Launching our Octave all-in-one, edge-to-cloud data orchestration solution for connecting IoT industrial assets;
- Launching our Ready-To-Connect technology that equips our wireless cellular modules with out-of-the-box connectivity;
- Securing new recurring revenue wins with Industrial and Enterprise customers primarily in Europe and North America;
- Increasing our total number of IoT connected devices, including our cloud management platform;
- Completing significant restructuring activities in the first year of a two-year restructuring program;
- Combining our R&D function into a centralized group and re-organizing our Go To Market group into a single organization;
- Securing new ecosystem partners, including a preferred partnership with Microsoft Azure to collaborate on IoT solutions; and
- Continuing to invest in leading edge embedded modules, gateways and routers, including cellular embedded 5G technology.

Annual Overview — Financial Highlights

Our 2019 revenue was $713.5 million compared to $793.6 million in 2018, a decrease of 10.1%. The decrease in revenue was driven by lower revenues from our Embedded Broadband segment, which experienced weaker demand from mobile computing and networking customers as we complete certain programs with these customers, partially offset by higher automotive revenue. IoT Solutions segment revenue improved as a result of stronger sales of Enterprise gateway products, as well as growth in recurring and other services revenue, partially offset by lower revenue from Integrated IoT solutions modules.

Product revenue was $614.4 million in 2019 and $699.2 million in 2018, representing a year-over-year decrease of 12.1%. Recurring and other services revenue was $99.1 million in 2019 and $94.4 million in 2018, representing a year-over-year increase of 5.0%. Recurring and other services revenue represented 13.9% of our total revenue in 2019, compared to 11.9% in 2018.

Gross margin was 30.8% in 2019 compared to 33.3% in 2018. The decrease was primarily due to unfavorable product and customer mix in our Embedded Broadband segment, which resulted in lower sales of higher margin mobile computing and networking embedded modules and greater sales of lower margin automotive embedded modules. Our automotive embedded module gross margins were also negatively affected by certain warranty and inventory provisions expensed during 2019. Gross margin percentage of 37.1% in our IoT Solutions segment in 2019 was consistent with 2018.

Net loss was $70.5 million in 2019 compared to $24.6 million in 2018. The increase in net loss of $45.9 million was primarily attributable to lower revenue and gross margin, higher restructuring expense, higher income tax expense, partially offset by lower administration and R&D expense due to various cost initiatives, as well as lower acquisition-related and integration expense.

Foreign exchange rate changes impact our foreign currency denominated revenue and operating expenses. We estimate that changes in foreign exchange rates in 2019 negatively impacted our gross margin by $0.9 million and positively impacted our operating expenses by $3.7 million, resulting in a net positive impact on operating income of approximately $2.8 million.

On April 30, 2019, we announced two initiatives related to the acceleration of our transformation to a Device-to Cloud IoT solutions company:

1) Consolidation of engineering resources and the transfer of certain functions to lower cost locations resulting in a significant reduction in our engineering team in Issy-Les-Moulineaux, outside of Paris, France. Following a detailed process, the majority of employees impacted by this program have been notified. The program was substantially completed by the end of 2019. Our sales and customer support capability in Issy-Les-Moulineaux will remain unchanged and our teams in Toulouse and Sophia Antipolis will continue to provide key technical capability for our cloud and services offerings; and

2) Outsourcing of a select group of general and administrative transaction-based activities to a global outsourcing partner. Transition activities commenced in the third quarter of 2019 and we expect the activities to be fully transitioned by mid-2020.

These two initiatives have impacted approximately 128 positions, of which 97 positions were in France. In 2019, we recorded $18.6 million in severance and $7.9 million in transitional costs relating to these two initiatives.

GAAP

- Revenue was $713.5 million compared to $793.6 million in 2018.
- Gross margin was 30.8% compared to 33.3% in 2018.
- Loss from operations was $58.0 million compared to $18.3 million in 2018.

- Net loss was $70.5 million, or $1.95 per diluted share compared to $24.6 million, or $0.68 per diluted share, in 2018.
- Cash and cash equivalents were $75.5 million at the end of 2019 compared to $89.1 million in December 31, 2018.

Non-GAAP[(1)]

- Gross margin was 30.9% compared to 33.4% in 2018.
- Operating expenses were $217.7 million compared to $229.7 million in 2018.
- Earnings from operations were $2.4 million compared to $35.3 million in 2018.
- Adjusted EBITDA was $21.1 million compared to $55.9 million in 2018.
- Net Loss was $0.3 million, or $0.01 per diluted share, compared to net earnings of $32.4 million or $0.90 per diluted share, in 2018.

[(1)]Non-GAAP financial measures exclude the impact of stock-based compensation expense and related social taxes, acquisition-related amortization, impairment, acquisition-related costs, integration costs, restructuring costs, certain other nonrecurring costs or recoveries, foreign exchange gains or losses on translation of balance sheet accounts, unrealized foreign exchange gains and losses on forward contracts and certain tax adjustments. Refer to the section titled "Non-GAAP Financial Measures" for additional details and reconciliations to the applicable U.S. GAAP financial measures.

We adopted the new accounting standard for revenue recognition effective January 1, 2018. Our 2017 financial results reflect the adoption of this new standard and prior periods have been adjusted accordingly. See Note 3 of our audited annual consolidated financial statements for the year ended December 31, 2018 for more details.

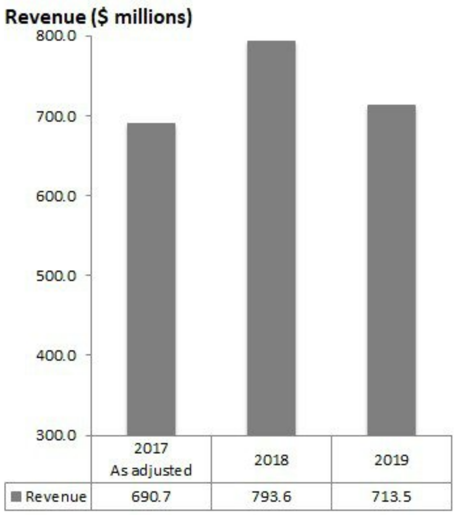
We adopted the new accounting standard for lease accounting effective January 1, 2019. See "Impact of Accounting Pronouncements Affecting Current Periods" and Note 2 and 19 of our audited annual consolidated financial statements for the year ended December 31, 2019 for more details.

Acquisition of M2M Group

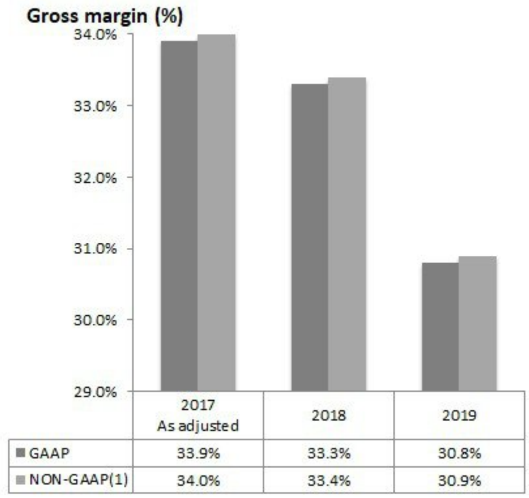
On January 7, 2020, we completed the acquisition of M2M group of companies ("M2M Group") in Australia. Total cash consideration paid to the shareholders of M2M Group was $19.6 million for 100% of the equity plus approximately $1.4 million for the retirement of certain obligations, subject to normal working capital adjustments. The M2M Group is focused on IoT connectivity services and cellular devices in Australia, and the acquisition expands the Company's IoT Solutions business in the Asia-Pacific region. We believe that the business is an excellent strategic fit with our IoT Solutions business with slightly more than half of the M2M Group's revenue comprised of subscription-based recurring revenue, and representing a segment of the business that has been growing rapidly over the last several years. The M2M Group's revenue in the last twelve months was US$17.9 million, of which $9.2 million was recurring subscription-based revenue. We expect the acquisition to be accretive to earnings immediately following closing. We believe the M2M Group has a solid platform for us to increase our IoT services and solutions in Australia and Southeast Asia.

The Company has not disclosed its purchase price allocation as it has not had sufficient time between the acquisition date and the date these financial statements were issued to obtain and review information regarding the completeness and measurement of the identifiable assets acquired and liabilities assumed.

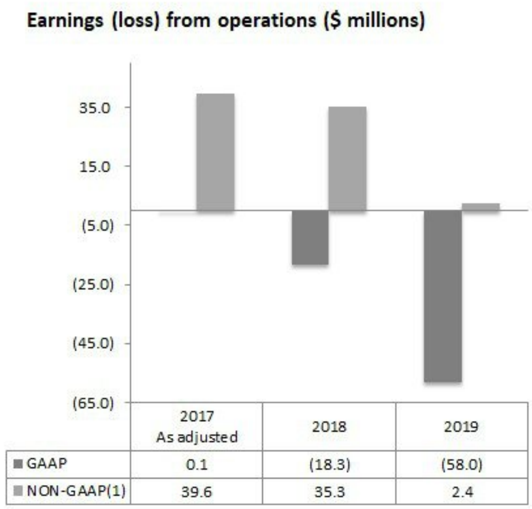
Select Annual Consolidated Financial Highlights



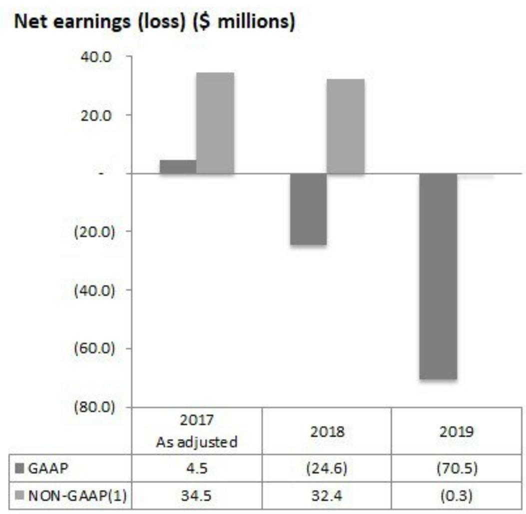
	2017 As adjusted	2018	2019
Revenue	690.7	793.6	713.5



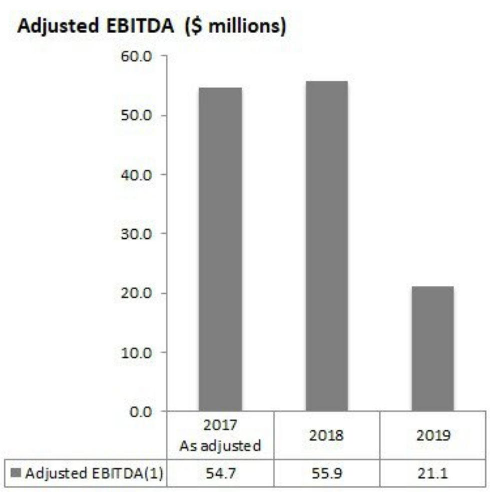
	2017 As adjusted	2018	2019
GAAP	33.9%	33.3%	30.8%
NON-GAAP(1)	34.0%	33.4%	30.9%



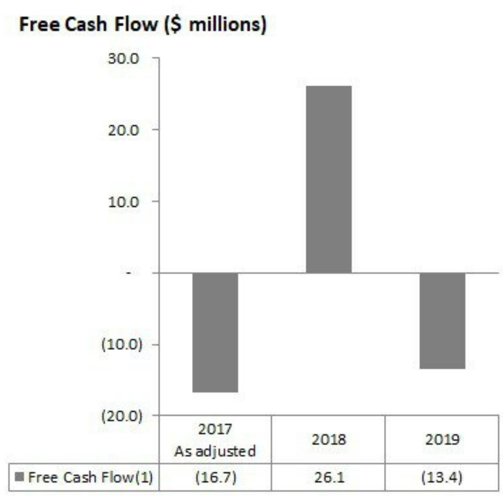
	2017 As adjusted	2018	2019
GAAP	0.1	(18.3)	(58.0)
NON-GAAP(1)	39.6	35.3	2.4



	2017 As adjusted	2018	2019
GAAP	4.5	(24.6)	(70.5)
NON-GAAP(1)	34.5	32.4	(0.3)



	2017 As adjusted	2018	2019
Adjusted EBITDA(1)	54.7	55.9	21.1



	2017 As adjusted	2018	2019
Free Cash Flow(1)	(16.7)	26.1	(13.4)

[(1)]Non-GAAP financial measures exclude the impact of stock-based compensation expense and related social taxes, acquisition-related amortization, impairment, acquisition-related costs, integration costs, restructuring costs, certain other nonrecurring costs or recoveries, foreign exchange gains or losses on translation of balance sheet accounts, unrealized foreign exchange gains or losses on forward contracts and certain tax adjustments. Refer to the section titled "Non-GAAP Financial Measures" for additional details and reconciliations to the applicable U.S. GAAP financial measures.

Selected Annual Consolidated Financial information:

(In thousands of U.S. dollars, except where otherwise stated)	**2019**	2018	2017 As adjusted
Statement of Operations data:			
Revenue	**$ 713,513**	$ 793,602	$ 690,727
Gross Margin			
- GAAP	**$ 219,990**	$ 264,571	$ 234,239
- Non-GAAP [(1)]	**220,153**	265,025	234,723
Gross Margin %			
- GAAP	**30.8%**	33.3%	33.9%
- Non-GAAP [(1)]	**30.9%**	33.4%	34.0%
Earnings (loss) from operations			
- GAAP	**$ (58,021)**	$ (18,275)	$ 100
- Non-GAAP [(1)]	**2,414**	35,306	39,636
Adjusted EBITDA	**$ 21,077**	$ 55,881	$ 54,653
Net earnings (loss)			
- GAAP	**$ (70,538)**	$ (24,610)	$ 4,518
- Non-GAAP [(1)]	**(305)**	32,427	34,519
Revenue by Segment:			
IoT Solutions	**$ 377,808**	$ 373,937	$ 303,057
Embedded Broadband	**335,705**	419,665	387,670
Revenue by Type:			
Product	**$ 614,384**	$ 699,158	$ 645,402
Recurring and other services	**99,129**	94,444	45,325
Share and per share data:			
Diluted earnings (loss) per share (in dollars)			
- GAAP	**$ (1.95)**	$ (0.68)	$ 0.14
- Non-GAAP [(1)]	**$ (0.01)**	$ 0.90	$ 1.05
Common shares (in thousands)			
At period-end	**36,233**	36,067	35,862
Weighted average - basic	**36,166**	36,019	32,356
Weighted average - diluted	**36,166**	36,019	32,893
Balance sheet data (end of period):			
Cash and cash equivalents	**$ 75,454**	$ 89,076	$ 65,003
Total assets	**639,340**	683,916	694,644
Total long-term obligations	**43,774**	43,250	36,637

[(1)]Non-GAAP financial measures exclude the impact of stock-based compensation expense and related social taxes, acquisition-related amortization, impairment, acquisition-related costs, integration costs, restructuring costs, certain other nonrecurring costs or recoveries, foreign exchange gains or losses on translation of balance sheet accounts, unrealized foreign exchange gains or losses on forward contracts and certain tax adjustments. Refer to the section titled "Non-GAAP Financial Measures" for additional details and reconciliations to the applicable U.S. GAAP financial measures.

See discussion under "Consolidated Annual Results of Operations" for factors that have caused period to period variations.

Key highlights for the year ended December 31, 2019:

Corporate

- We continued with our cost reduction initiatives we announced in late 2018 and commenced various initiatives in 2019, including consolidation of engineering resources, the transfer of certain functions to lower cost locations and outsourcing of a select group of business processes in finance, IT and human resources. In addition, we continued to work on purchasing initiatives and have renegotiated certain supplier agreements with contract manufacturers in an effort to better manage our costs.

- Mr. Jim Ryan was appointed Senior Vice President, Strategic Partner Growth, focusing on acquiring, aligning and maximizing the impact of our strategic partnerships in the Cloud, Analytics and System Integrator ecosystem. Mr. Ryan has more than 20 years of senior leadership experience in global telecoms and early stage IoT environments, including Zipit Wireless and AT&T and Sprint in the United States and O2 in Europe.

- Ms. Lori O'Neill was appointed to the Company's Board of Directors. Ms. O'Neill is an experienced independent corporate director, financial executive and advisor to growth-oriented companies. She started her career with Deloitte & Touche LLP in 1988 and served as Audit Partner from 1996 to 2012. She is a board member for Constellation Software, as well as a board member and chair of the Audit Committee for the Ontario Lottery and Gaming Corporation, Hydro Ottawa and the University of Ottawa Heart Institute. Ms. O'Neill also serves as chair of the Board of Governors for Ashbury College. She graduated from Carleton University with a Bachelor of Commerce (Highest Honors).

- Mr. David McLennan has decided to retire from his position as Chief Financial Officer after 16 years of dedicated service. By providing a lengthy notice period, Mr. McLennan will be assisting the Company's transition to a new Chief Financial Officer. The Company has engaged a global executive search firm and a formal process has commenced to recruit a replacement. The Company expects to complete the transition by the middle of 2020.

- The Company has completed the previously announced acquisition of the M2M Group in Australia. See "Annual Overview" for details.

IoT Solutions

- In early 2019, we announced mass production of our award-winning Ready-to-Connect solutions. Ready-to-Connect delivers all the key elements needed for an IoT application - cellular module, integrated SIM that's pre-connected to global mobile networks and IoT platform for device and subscription management and simplified operations - in one integrated bundle.

- MANN + HUMMEL, a leading global expert for filtration solutions, selected our Smart SIMs and AirVantage® IoT Platform to connect and mange global deployments of Senzit, MANN + HUMMEL's new predictive maintenance platform developed to increase uptime for industrial and agricultural fleets.

- Unimar, a worldwide supplier of tower and obstruction lighting products, has selected our device-to-cloud solution, including AirLink® RV50 industrial LTE gateways and SIMs, configured and managed over the air using the AirVantage® IoT Platform, to connect and manage critical lighting and control systems along flight paths.

- Together with Duke Energy and Open Energy Solutions, we have developed a next-generation intelligent edge platform to run more complex, centrally managed and containerized edge applications to enable more resilient, efficient and secure smart grids.

- Nimb selected our Ready-to-Connect cellular modules for its smart safety ring, designed to alert emergency contacts with a press of a hidden panic button, to develop a fully autonomous safety system that does not need to be paired with another mobile device.

- Annexia International Inc., an expert in ultra-low-power asset devices, selected our Smart IoT Connectivity for global deployment of its NStar™ asset tracking and management solution to turn traditional equipment into connected, data-rich transportation assets that generate additional revenue for their customers, as well as deploy their solutions globally without having to manage multiple carrier agreements.

- AirLink® Complete is a new comprehensive management and support service that delivers a best-in-class experience by combining cloud-based management, security monitoring, 24/7 technical support and extended warranty. Every purchase of eligible AirLink routers and gateways will now include one complimentary year of AirLink Complete.

- NurtureWatch selected our IoT connectivity solution to enable tracking and communication for its NurtureWatch, a wearable device that helps elderly people stay safe, healthy and independent.

- Stone Technologies, a supplier of intelligent monitoring solutions, chose our Uplink remote monitoring solution and connectivity services to expand its traditional monitoring business with a managed service for industrial monitoring.

- We commenced a strategic collaboration with Microsoft to develop one of the industry's first full-stack IoT solutions. We believe our new Octave edge data orchestration solution integrated with Microsoft Azure IoT Central will simplify and accelerate time-to-value for enterprise IoT projects.

- We announced general availability of our Octave all-in-one edge-to-cloud solution for connecting industrial assets to the cloud. Octave integrates edge devices, network, and interfaces to all major cloud service providers into an all-in-one solution that securely extracts, orchestrates and acts on data from remote assets at the edge to the cloud. Octave will help industrial companies accelerate IoT development, de-risk their IoT deployments and free them to focus on their IoT data rather than the infrastructure.

- We released our Omnilink OM500 ankle bracelet, an advanced offender monitoring solution with LTE connectivity and voice commands that enables law enforcement agencies to better manage pre-trial detainees, individuals under house arrest, probationers and parolees.

- Our smart IoT connectivity solution is enabling global communications for France Televisions, the main public broadcaster in France, ensuring global connectivity for its broadcast journalists around the world. Sierra's smart IoT connectivity solution automatically connects to the best available 2G, 3G, or LTE network in a given region, without the need for installing a local SIM card and configuring the equipment.

- We launched our AirLink Managed Network Service with embedded FirstNet connectivity. This bundled solution will help public safety agencies of all sizes take advantage of the benefits and capabilities enabled by FirstNet-connected solutions.

- Our AirLink® MG90 High Performance Multi-Network Vehicle Router is now certified and approved for use on the UK's Emergency Services Network, a dedicated network for emergency services that provides secure and resilient mobile broadband data for routine and mission-critical emergency services use and is expected to be the future platform for communications in the emergency services.

- We announced our Ready-to-Connect RC Series of embedded modules to simplify IoT development, reduce costs and accelerate time to market. The RC Series modules deliver all of the key elements needed for an IoT application - cellular module, integrated SIM that's pre-connected to global mobile networks, IoT management platform and end-to-end security - in one integrated bundle.

Embedded Broadband:

- We unveiled the industry's first 5G mechanical module sample at Mobile World Congress 2019. Based on the M.2 form factor, the connectorized AirPrime module will enable OEMs and system integrators requiring the highest possible speeds to deploy 5G on their mobile computing, networking and IoT platforms worldwide.

- We expanded our portfolio of mobile broadband embedded modules for mobile computing, routers, gateways, industrial automation, and new IoT applications, such as robotics, drones and private networks. Sierra's first-to-market 5G EM919x and 4G LTE Cat-20 EM769x embedded modules are sampling to OEMs and system integrators requiring secure connectivity and the highest possible speeds to deploy cellular on their mobile computing, networking and IoT platforms worldwide.

Outlook

In 2020, we expect annual revenue to be between $690 million to $710 million and Adjusted EBITDA to be between $10 million and $15 million. On a reporting segment basis, our expectation is that IoT Solutions revenue will grow 7% to 10% year-over-year and Embedded Broadband revenue will decline by 12% to 15% year-over-year. See "Non-GAAP Financial Measures".

This non-GAAP guidance constitutes "forward-looking statements" within the meaning of applicable securities laws and reflects current business indicators and expectations. These statements are based on management's current beliefs and assumptions, which could prove to be significantly incorrect. Forward-looking statements, particularly those that relate to longer periods of time, are subject to substantial known and unknown risks and uncertainties that could cause actual events or results to differ significantly from those expressed or implied by our forward-looking statements, including those described under "Cautionary Note Regarding Forward-Looking Statements" and "Risks and Uncertainties".

We believe that the market for wireless IoT solutions has strong long-term growth prospects. We anticipate strong long-term growth in the number of devices being wirelessly connected, driven by key enablers, such as lower wireless connectivity costs, faster wireless connection speeds, new wireless technologies designed specifically for the IoT, new devices and tools to simplify the development of IoT applications, and increased focus and investment from large ecosystem players. More importantly, we see emerging customer demand in many of our target verticals driven by increasing recognition of the value created by deploying IoT solutions, such as new revenue streams and cost efficiencies.

Key factors that we expect will affect our results in the near term are:

- our ability to manage component supply issues when they arise;
- manufacturing capacity at our various manufacturing sites;
- our ability to achieve the anticipated benefits of our business transformation initiatives;
- the strength of our competitive position in the market;
- the timely ramp up of sales of our new products recently launched or currently under development;
- contributions to our operating results from our acquisitions;
- the level of success our customers achieve with sales of connected solutions;
- fluctuations in customer demand and inventory levels, particularly large customers;
- general economic conditions in the markets we serve;
- our ability to successfully integrate M2M Group and realize the anticipated benefits of the acquisition
- our ability to attract and retain effective channel partners;

- the timely launch and ramp up of new customer programs;
- our ability to secure future design wins with both existing and new customers;
- the end-of-life of existing customer programs;
- our ability to manage component and product quality compliance;
- fluctuations in foreign exchange rates;
- tariffs and other trade restrictions; and
- seasonality in demand.

We expect that product and price competition from other wireless device manufacturers and solution providers will continue to play a role in the IoT market. As a result of these factors, we may continue to experience volatility in our results on a quarter-to-quarter basis. For example, our gross margin percentage may fluctuate from quarter-to-quarter depending on product and customer mix, average selling prices and product costs.

See "Cautionary Note Regarding Forward-Looking Statements" and "Risks and Uncertainties".

CONSOLIDATED ANNUAL RESULTS OF OPERATIONS

(In thousands of U.S. dollars, except where otherwise stated)	2019		2018		2017 As adjusted	
	$	**% of Revenue**	**$**	**% of Revenue**	**$**	**% of Revenue**
Revenue						
IoT Solutions	377,808	*53.0 %*	373,937	*47.1 %*	303,057	*43.9%*
Embedded Broadband	335,705	*47.0 %*	419,665	*52.9 %*	387,670	*56.1%*
	713,513	*100.0 %*	793,602	*100.0 %*	690,727	*100.0%*
Cost of sales						
IoT Solutions	237,650	*33.3 %*	234,335	*29.5 %*	195,815	*28.3%*
Embedded Broadband	255,873	*35.9 %*	294,696	*37.1 %*	260,673	*37.7%*
	493,523	*69.2 %*	529,031	*66.7 %*	456,488	*66.1%*
Gross margin	219,990	*30.8 %*	264,571	*33.3 %*	234,239	*33.9%*
Expenses						
Sales and marketing	92,093	*12.9 %*	88,587	*11.2 %*	75,135	*10.9%*
Research and development	86,473	*12.1 %*	93,707	*11.8 %*	82,653	*12.0%*
Administration	48,827	*6.8 %*	61,582	*7.8 %*	42,904	*6.2%*
Restructuring	28,160	*3.9 %*	7,115	*0.9 %*	1,076	*0.2%*
Acquisition-related and integration	974	*0.1 %*	3,962	*0.5 %*	8,195	*1.2%*
Impairment	877	*0.1 %*	—	*— %*	3,668	*0.5%*
Loss on disposal of iTank business	—	*— %*	2,064	*0.3 %*	—	*—%*
Amortization	20,607	*2.9 %*	25,829	*3.3 %*	20,508	*3.0%*
	278,011	*39.0 %*	282,846	*35.6 %*	234,139	*33.9%*
Earnings (loss) from operations	(58,021)	*(8.1)%*	(18,275)	*(2.3)%*	100	*—%*
Foreign exchange gain (loss)	(1,296)		(5,470)		7,550	
Other income (expense)	(301)		51		67	
Earnings (loss) before income taxes	(59,618)		(23,694)		7,717	
Income tax expense	10,920		916		3,199	
Net earnings (loss)	(70,538)		(24,610)		4,518	
Net earnings (loss) per share - basic (in dollars)	(1.95)		(0.68)		0.14	
Net earnings (loss) per share - diluted (in dollars)	(1.95)		(0.68)		0.14	

Fiscal Year 2019 Compared to Fiscal Year 2018

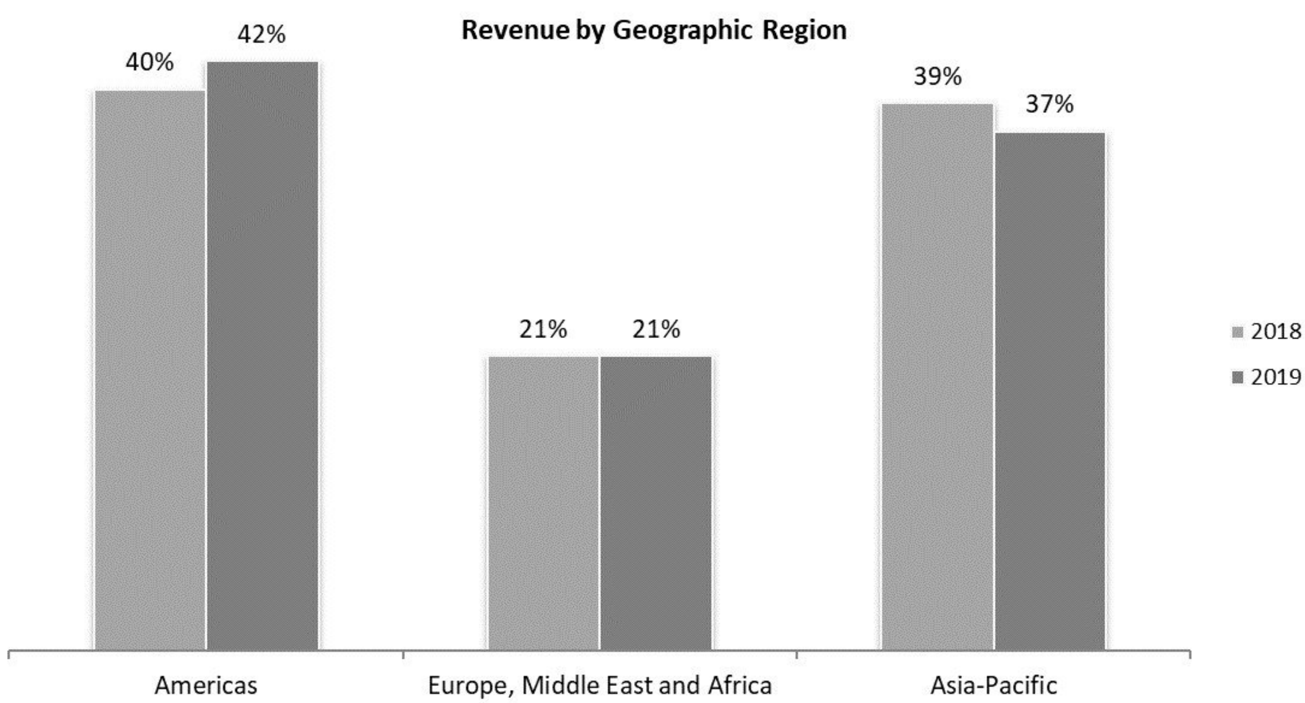
Revenue

Revenue decreased by $80.1 million, or 10.1%, in 2019 compared to 2018. This decrease was primarily attributable to reduced revenue from our Embedded Broadband segment, partially offset by modest growth in our IoT Solutions segment:

- Embedded Broadband experienced weaker demand from mobile computing and networking customers as we completed certain programs with these customers, partially offset by slightly higher revenue from automotive customers.
- IoT Solutions experienced strong contributions from our recurring and other services, as well as our Enterprise gateway products, partially offset by lower revenue from 2G/3G Integrated IoT solutions modules as these technologies are preparing for sunset.

Product revenue decreased by $84.8 million, or 12.1%, in 2019 compared to 2018. The decrease was primarily due to lower revenue from mobile computing and networking customers and lower revenue from 2G/3G Integrated IoT solutions modules, offset by higher revenue from Enterprise gateway products. Recurring and other services revenue increased by $4.7 million, or 5.0% ($6.8 million, or 7.4%, excluding iTank which was sold at the end of 2018), in 2019 compared to 2018.

Our geographic revenue mix for the years ended December 31, 2019 and 2018 was as follows:



During the years ended December 31, 2019 and 2018, no customer accounted for more than 10% of our aggregated revenue.

Gross margin

Gross margin was 30.8% of revenue in 2019 compared to 33.3% in 2018. In 2019, gross margin was impacted by unfavorable product and customer mix in our Embedded Broadband segment which resulted in lower sales of higher margin mobile computing and networking embedded modules and greater sales of lower margin automotive embedded modules. Our automotive embedded module gross margins were also negatively affected by certain warranty and inventory provisions beyond routine levels which were expensed in 2019. Gross margin percentage of our IoT Solutions segment was consistent year-over-year.

Gross margin included stock-based compensation expense and related social taxes of $0.2 million and $0.5 million in 2019 and 2018, respectively.

Sales and marketing
Sales and marketing expense increased by $3.5 million, or 4.0%, in 2019 compared to 2018, primarily driven by higher investments in our sales force and corporate marketing initiatives to accelerate our transformation to a Device-to-Cloud IoT solutions company.

Sales and marketing expense included stock-based compensation and related social taxes of $3.9 million in 2019 compared to $2.9 million in 2018.

Research and development
Research and development ("R&D") expense decreased by $7.2 million, or 7.7%, in 2019 compared to 2018. This decrease was mainly driven by various cost reduction initiatives we commenced in the fourth quarter of 2018 and through 2019 to accelerate our transformation to a Device-to-Cloud IoT solutions company, combined with lower certification costs and the completion of certain large development projects in 2019.

R&D expense included stock-based compensation and related social taxes of $2.9 million in 2019 compared to $2.4 million in 2018. R&D expense also included acquisition-related amortization of $0.3 million in each of 2019 and 2018.

Administration
Administration expense decreased by $12.8 million, or 20.7%, in 2019 compared to 2018. Administration expense in 2018 included one-time separation costs related to our former CEO's retirement, including higher stock-based compensation in connection with accelerated vesting of equity awards and higher consulting fees.

Administration expense included stock-based compensation and related social taxes of $6.3 million in 2019 compared to $7.2 million in 2018.

Restructuring
In late 2018 and the second quarter of 2019, we commenced various initiatives to accelerate our transformation to a Device-to-Cloud IoT solutions company, including consolidation of our engineering programs and sites, consolidation of product management resources, outsourcing activities of certain general and administrative functions, and certain organizational structure changes. In 2019, we recorded $28.2 million in severance and other related costs associated with these initiatives. In 2018, we recorded $2.3 million in severance and other related costs associated with these initiatives.

In the first quarter of 2018, we commenced various efficiency and effectiveness initiatives focused on capturing synergies related to the integration of Numerex into our business as well as other initiatives designed to produce efficiency gains in other areas of our business. In 2018, we recorded $4.8 million in severance and other related costs associated with this initiative.

Acquisition-related and integration
Acquisition-related and integration costs decreased by $3.0 million, or 75.4%, in 2019 compared to 2018. The decrease in integration costs reflect lower levels of integration activities for Numerex as we substantially completed the integration in the second quarter of 2019. In the fourth quarter of 2019, we recorded acquisition costs of $0.1 million related to the acquisition of M2M Group which we completed in January 2020.

Impairment
We recorded a right-of-use asset impairment of $0.9 million in 2019 related to an office lease in France as we cease to use and then sublease part of the building. No impairment charges were recorded in 2018.

Loss on disposal
In 2018, we recorded a loss on disposal of $2.1 million from the sale of our remote tank monitoring business, iTank.

Amortization
Amortization expense decreased by $5.2 million, or 20.2%, in 2019 compared to 2018 due to completion of amortization on certain older acquisition-related intangible assets and other assets. Amortization expense in 2019 included $14.3 million of acquisition-related amortization compared to $18.3 million in 2018.

Foreign exchange gain (loss)
Foreign exchange loss was $1.3 million in 2019 compared to $5.5 million in 2018. The foreign exchange loss decreased in 2019 due to strengthening of the value of the Euro compared to the U.S. dollar compared to 2018.

Income tax expense (recovery)
Income tax expense increased by $10.0 million in 2019 compared to 2018 due to changes in the realizability of tax assets in certain jurisdictions.

Net earnings (loss)
Net loss was $70.5 million in 2019 compared to $24.6 million in 2018. This increase was primarily attributable to lower revenue and gross margin, higher restructuring expense and higher income tax expense, partially offset by lower administration and R&D expense.

Net loss in 2019 included stock-based compensation expense and related social taxes of $13.2 million and acquisition-related amortization of $14.5 million. Net loss in 2018 included stock-based compensation expense and related social taxes of $13.0 million and acquisition-related amortization of $18.6 million.

Weighted average number of shares
The weighted average basic and diluted shares outstanding were 36.2 million for the year ended December 31, 2019 and 36.0 million for the year ended December 31, 2018.

The number of shares outstanding was 36.2 million at December 31, 2019, compared to 36.1 million at December 31, 2018.

Fiscal Year 2018 Compared to Fiscal Year 2017

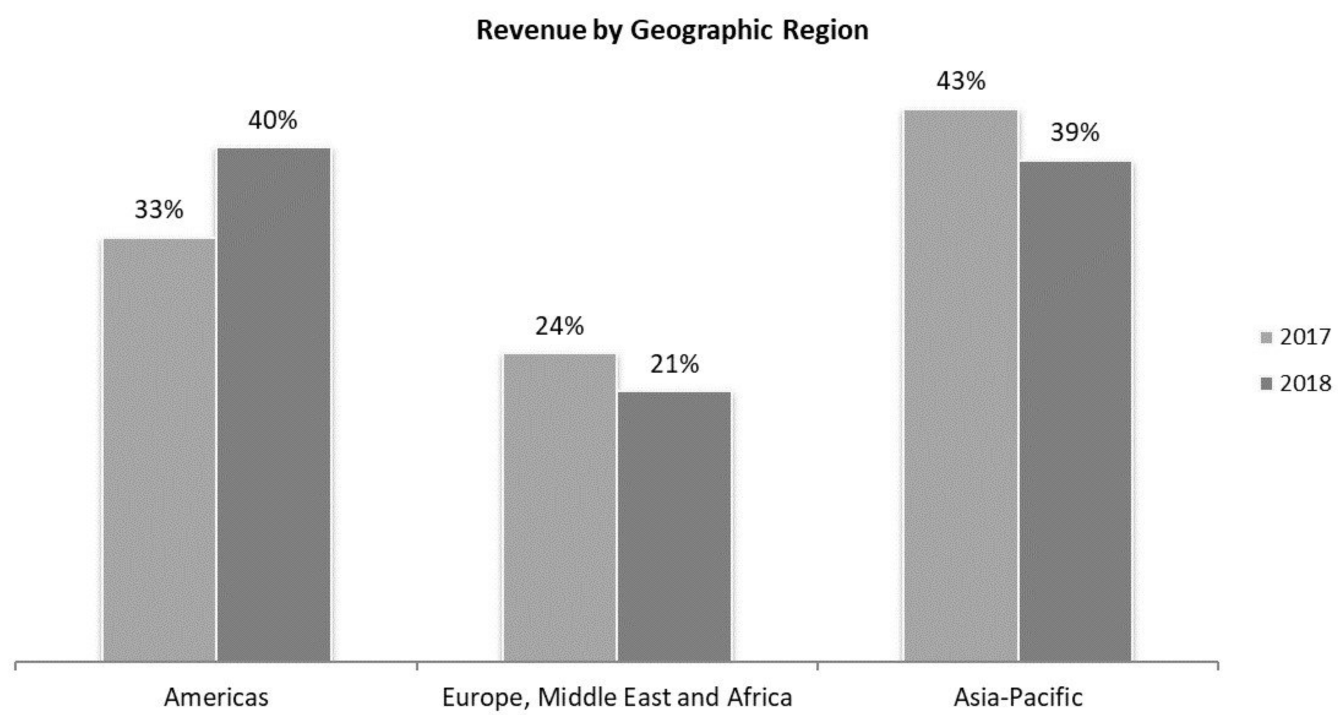
Revenue

Revenue increased by $102.9 million, or 14.9% in 2018, compared to 2017. This increase was driven by organic growth in both of our reportable segments, which experienced solid year-over-year growth, as well as growth resulting from the acquisition of Numerex:

- Embedded Broadband experienced notable year-over-year increases in revenue earned from automotive, networking and distribution customers;
- IoT Solutions experienced strong growth from our Airlink gateway products and related services; contribution from the addition of Numerex, acquired in December 2017, as well as solid subscriber growth in cloud and connectivity services.

Product revenue increased by $53.8 million, or 8.3%, in 2018 compared to 2017. The increase was primarily driven by growth in revenue from automotive, networking and distribution customers and Airlink gateway products. Recurring and other services revenue increased by $49.1 million, or 108.4%, in 2018 compared to 2017, primarily driven by contribution from Numerex as well as organic growth in subscribers.

Our geographic revenue mix for the years ended December 31, 2018 and 2017 was as follows:



During the years ended December 31, 2018 and 2017, no customer accounted for more than 10% of our aggregated revenue.

Gross margin

Gross margin was 33.3% of revenue in 2018 compared to 33.9% in 2017. In 2018, gross margin was impacted by unfavorable product and customer mix, including the effects of higher automotive volumes at lower gross margin, offset by improved sales of higher margin gateway products and related services and the addition of higher margin services contributed by Numerex in our IoT Solutions segment.

Gross margin included stock-based compensation expense and related social taxes of $0.5 million in each of 2018 and 2017.

Sales and marketing
Sales and marketing expenses increased by $13.5 million, or 17.9%, in 2018 compared to 2017, primarily driven by costs added as a result of the Numerex acquisition, higher revenue, and the unfavorable impact of foreign exchange, partly offset by lower professional fees.

Sales and marketing expenses include stock-based compensation and related social taxes of $2.9 million in 2018 compared to $2.5 million in 2017.

Research and development
Research and development expenses increased by$11.1 million, or 13.4%, in 2018 compared to 2017. This increase was mainly driven by costs added as a result of the Numerex acquisition and unfavorable impact of foreign exchange, offset partly by lower development and certification costs.

R&D expenses included stock-based compensation and related social taxes of $2.4 million in 2018 compared to $2.0 million in 2017. R&D expenses also included acquisition-related amortization of $0.3 million in 2018 compared to $0.4 million in 2017.

Administration
Administration expenses increased by $18.7 million, or 43.5%, in 2018 compared to 2017. This increase was mainly driven by one-time separation costs related to our former CEO's retirement, including higher stock-based compensation expense in connection with accelerated vesting of equity awards, higher consulting fees, as well as costs added as a result of the Numerex acquisition.

Administration expenses included stock-based compensation expense and related social taxes of $7.2 million in 2018 compared to $5.3 million in 2017.

Restructuring
In the first quarter of 2018, we commenced various efficiency and effectiveness initiatives focused on capturing synergies as we integrated Numerex into our business as well as efficiency gains in other areas of our business. In 2018, we recorded $4.8 million in severance and other related costs associated with this initiative.

In the fourth quarter of 2018, we initiated certain organizational changes to accelerate our transformation to a device-to-cloud IoT solutions company. In the three months and year ended December 31, 2018, we recorded $2.3 million in severance and other related costs associated with this initiative.

Restructuring costs of $1.1 million in 2017 were related to the relocation of our IoT Solutions customer support operations from Sweden to France and the United States.

Acquisition-related and integration
Acquisition-related and integration costs decreased by $4.2 million, or 51.7%, in 2018 compared to 2017. Higher expenses in 2017 reflect the Numerex acquisition and accruals of acquisition-related contingent consideration.

Loss on disposal
On December 31, 2018, we completed the sale of substantially all of the assets and liabilities of our remote tank monitoring business, for total proceeds of $6.0 million. We received $5.0 million in cash consideration at closing with the remaining $1.0 million held in escrow. The amount in escrow was to be held for up to the next 12 months with $0.8 million contingent on meeting certain milestone events and the remaining $0.2 million to secure the purchaser's rights of indemnification under the asset sale agreement. We recognized a loss on disposal of $2.1 million. In 2019, we received $0.5 million of escrow payments. As of December 31, 2019, $0.5 million continues to be held in escrow; however, the release of a portion of this amount is under dispute with the purchaser.

Impairment
No impairment charges were recorded in 2018. The impairment charge of $3.7 million recorded in 2017 related to an intangible asset recorded on our acquisition of Wireless Maingate AB. The charge was recorded due to the decision to terminate a service offering that was superseded by a more technologically advanced offering in our integrated IoT Services segment.

Amortization
Amortization expense increased by $5.3 million, or 25.9%, in 2018 compared to 2017 primarily due to higher acquisition-related amortization. Amortization expense in 2018 included $18.3 million of acquisition-related amortization compared to $15.1 million in 2017.

Foreign exchange gain (loss)
Foreign exchange loss was $5.5 million in 2018 compared to a gain of $7.6 million in 2017. The loss in 2018 was primarily driven by a decrease in the value of the Euro compared to the U.S. dollar.

Income tax expense (recovery)
Income tax expense was $0.9 million in 2018 compared to $3.2 million in 2017. This decrease was primarily driven by a shift of earnings between jurisdictions, offset by changes in the realizability of certain tax assets.

Net earnings (loss)
We incurred a net loss of $24.6 million in 2018 compared to net earnings $4.5 million in 2017. The decrease in earnings reflected higher operating expenses combined with higher restructuring expense, consulting fees, separation costs on the retirement of our former CEO, loss on disposal of our remote tank monitoring business, the unfavorable impact of foreign exchange, offset by lower acquisition costs, absence of impairment loss, and lower income tax expense.

Net loss in 2018 included stock-based compensation expense and related social taxes of $13.0 million and acquisition-related amortization of $18.6 million. Net earnings in 2017 included stock-based compensation expense and related social taxes of $10.4 million and acquisition-related amortization of $15.1 million.

Weighted average number of shares
The weighted average basic and diluted shares outstanding were 36.0 million for the year ended December 31, 2018. For the year ended December 31, 2017, the weighted average basic and diluted shares outstanding were 32.4 million and 32.9 million, respectively.

The number of shares outstanding was 36.1 million at December 31, 2018, compared to 35.9 million at December 31, 2017. The increase in the number of shares outstanding was primarily due to the issuance of common shares as a result of stock option exercises and restricted share unit releases offset by the impact of share repurchases made under our Normal Course Issuer Bid ("NCIB") program (see "Liquidity and Capital Resources" section below).

SEGMENTED INFORMATION

IoT Solutions

(In thousands of U.S. dollars, except where otherwise stated)	2019	2018	2017 As adjusted	% change 2019 vs 2018	% change 2018 vs 2017
Revenue	$ 377,808	$ 373,937	$ 303,057	*1.0%*	*23.4%*
Cost of goods sold	237,650	234,335	195,815	*1.4%*	*19.7%*
Gross margin	$ 140,158	$ 139,602	$ 107,242	*0.4%*	*30.2%*
Gross margin %	*37.1%*	*37.3%*	*35.4%*		
Non-GAAP [(1)]					
Gross Margin	$ 140,222	$ 139,818	$ 107,454	*0.3%*	*30.1%*
Gross Margin %	*37.1%*	*37.4%*	*35.5%*		

[(1)] See section titled "Non-GAAP Financial Measures" for additional details and a reconciliation to the applicable U.S. GAAP financial measure.

Fiscal Year 2019 compared to 2018

Revenue increased by $3.9 million, or 1.0%, in 2019 compared to 2018. This increase was primarily due to strong contributions from our recurring and other services, as well as our Enterprise gateway products, partially offset by lower revenue from 2G/3G Integrated IoT solutions modules. Within the IoT Solutions segment, excluding iTank, which was sold at the end of 2018, recurring and other services revenue was up $6.8 million, or $7.4%.

Gross margin for IoT Solutions of 37.1% in 2019 was comparable to the same period in 2018.

Fiscal Year 2018 compared to 2017

Revenue increased by $70.9 million, or 23.4%, in 2018, compared to 2017. This increase was primarily driven by the addition of Numerex, acquired in December 2017, organic subscriber growth in cloud and cellular connectivity services, strong sales of AirLink gateway products, including RV50, MG90 and MP70 gateway products, and related support and services revenue, partly offset by lower sales of mid-tier telematics gateways.

Gross margin for IoT Solutions was 37.3% in 2018 compared to 35.4% in 2017. This increase in gross margin was was mainly due to favorable product mix related to increased sales of higher margin AirLink gateway products and related services, and lower sales of our mid-tier telematics gateways. The addition of Numerex revenue reduced gross margin percentage in 2018 within the segment, partly as a result of network upgrade costs incurred in the first quarter of 2018 as well as contractual minimums incurred in 2018.

Embedded Broadband

(In thousands of U.S. dollars, except where otherwise stated)	2019	2018	2017 As adjusted	*% change* 2019 vs 2018	*% change* 2018 vs 2017
Revenue	$ 335,705	$ 419,665	$ 387,670	*(20.0)%*	*8.3 %*
Cost of goods sold	255,873	294,696	260,673	*(13.2)%*	*13.1 %*
Gross margin	$ 79,832	$ 124,969	$ 126,997	*(36.1)%*	*(1.6)%*
Gross margin %	*23.8%*	*29.8%*	*32.8%*		
Non-GAAP [1]					
Gross Margin	$ 79,931	$ 125,207	$ 127,269	*(36.2)%*	*(1.6)%*
Gross Margin %	*23.8%*	*29.8%*	*32.8%*		

[1] *See section titled "Non-GAAP Financial Measures" for additional details and a reconciliation to the applicable U.S. GAAP financial measure.*

Fiscal Year 2019 compared to 2018

Revenue decreased by $84.0 million, or 20.0%, in 2019 compared to 2018, primarily due to weaker demand from mobile computing and networking customers as we complete certain programs with these customers, partially offset by slightly higher revenue from automotive customers.

Gross margin for Embedded Broadband was 23.8% in 2019 compared to 29.8% in 2018. This decrease was mainly driven by unfavorable product and customer mix, in particular, lower revenue from higher margin mobile computing and networking and higher automotive sales at lower gross margin. Gross margin in 2019 also included the unfavorable effects of specific automotive related warranty and inventory provisions beyond routine levels.

Fiscal Year 2018 compared to 2017

Revenue increased by $32.0 million, or 8.3%, in 2018 compared to 2017, mainly driven by strong demand from automotive, networking and distribution customers, partially offset by weaker demand from transportation, sales and payment, and mobile computing customers.

Gross margin for Embedded Broadband was 29.8% in 2018 compared to 32.8% in 2017. The decrease was mainly driven by unfavorable product and customer mix, including the effects of higher automotive volumes at lower gross margin.

FOURTH QUARTER OVERVIEW

Consolidated Results of Operations:

(in thousands of U.S. dollars, except where otherwise stated)	Three months ended December 31, 2019		2018	
	$	% of Revenue	$	% of Revenue
Revenue				
IoT Solutions	90,937	*52.2 %*	95,728	*47.5 %*
Embedded Broadband	83,364	*47.8 %*	105,667	*52.5 %*
	174,301	*100.0 %*	201,395	*100.0 %*
Cost of goods sold				
IoT Solutions	57,272	*32.9 %*	59,077	*29.3 %*
Embedded Broadband	65,661	*37.7 %*	76,423	*37.9 %*
	122,933	*70.5 %*	135,500	*67.3 %*
Gross margin	51,368	*29.5 %*	65,895	*32.7 %*
Expenses				
Sales and marketing	22,309	*12.8 %*	22,353	*11.1 %*
Research and development	21,015	*12.1 %*	22,230	*11.0 %*
Administration	11,600	*6.7 %*	14,516	*7.2 %*
Restructuring	2,309	*1.3 %*	2,345	*1.2 %*
Acquisition-related and integration	274	*0.2 %*	613	*0.3 %*
Impairment	877	*0.5 %*	—	*— %*
Loss on disposal of iTank business	—	*— %*	2,064	*1.0 %*
Amortization	5,369	*3.1 %*	5,971	*3.0 %*
	63,753	*36.6 %*	70,092	*34.8 %*
Loss from operations	(12,385)	*(7.1)%*	(4,197)	*(2.1)%*
Foreign exchange gain (loss)	1,666		(2,378)	
Other expense	(109)		(19)	
Loss before income taxes	(10,828)		(6,594)	
Income tax expense (recovery)	90		(2,768)	
Net Loss	(10,918)		(3,826)	
Net earnings (loss) per share - Basic and diluted (in dollars)	(0.30)		(0.11)	

GAAP:

- Revenue was $174.3 million in the fourth quarter of 2019, down 13.5% compared to $201.4 million in the fourth quarter of 2018, driven by lower revenues from our Embedded Broadband and IoT Solutions segments.
- In the fourth quarter of 2019, compared to the same period of 2018, Embedded Broadband segment revenue decreased by $22.3 million, or 21.1%, due to weaker sales from mobile computing and networking customers, offset by a modest increase in sales from automotive customers.
- IoT Solutions segment revenue decreased by $4.8 million, or 5.0%, in the fourth quarter quarter of 2019, compared to the same period of 2018 due primarily to lower Integrated IoT solutions module revenue, partially offset by stronger recurring and other services revenue. Within the IoT Solutions segment,

recurring and other services revenue was up 16.3%, in the fourth quarter of 2019 compared to the same period of 2018, excluding iTank, which was sold at the end of 2018.

- Gross margin was 29.5% in the fourth quarter of 2019 compared to 32.7% in the same period of 2018, driven by unfavorable product and customer mix in our Embedded Broadband and IoT Solutions segment and certain inventory and warranty provisions related to defective third party printed circuit boards. These unusual warranty and inventory expenses negatively impacted gross margin by approximately $1.7 million or 100 basis points.
- Loss from operations in the fourth quarter of 2019 was $12.4 million compared to a loss of $4.2 million in the comparable period of 2018 as a result of lower revenue and gross margin, offset by lower operating expenses reflecting various cost reduction initiatives we commenced in the fourth quarter of 2018 and which continued throughout 2019, and the absence of a $2.1 million loss on disposal of our iTank business which was sold at the end of 2018.
- Net loss in the fourth quarter was $10.9 million compared to a loss of $3.8 million in the same period of 2018. The increase in net loss was mainly due to lower revenue and gross margin and higher income tax expense, offset by lower operating expenses and favorable foreign exchange movement.
- Cash and cash equivalents at the end of the fourth quarter of 2019 were $75.5 million, a decrease of $11.4 million compared to $86.9 million at the end of the third quarter of 2019. The decrease in cash was mainly due to working capital requirements, partially offset by sales of receivables under our receivable purchase agreement ("RPA") program and proceeds from sale of an investment.

NON-GAAP[(1)]:

- Gross margin was 29.5% in the fourth quarter of 2019, compared to 32.7% in the fourth quarter of 2018. The decrease was mainly due to unfavorable product and customer mix in our Embedded Broadband and IoT Solutions segment and certain inventory and warranty provisions related to defective third party printed circuit boards. These unusual warranty and inventory expenses negatively impacted gross margin by approximately $1.7 million or 100 basis points.
- Loss from operations was $2.7 million in the fourth quarter of 2019 compared to earnings from operations of $10.2 million in the comparable period in 2018 mainly due to lower revenue and gross margin, offset by lower operating expenses reflecting various cost reduction initiatives we commenced in the fourth quarter of 2018 and which continued through 2019.
- Adjusted EBITDA was $2.3 million in the fourth quarter of 2019 compared to $15.3 million in the same period of 2018. This decrease in Adjusted EBITDA mainly reflects lower earnings from operations in the fourth quarter of 2019. Adjusting for the unusual warranty and inventory expenses incurred during the fourth quarter of 2019, Adjusted EBITDA would have been $4.0 million.
- Net loss was $2.9 million in the fourth quarter of 2019 compared to net earnings of $9.0 million in the same period of 2018 due to loss from operations, offset by lower income tax expense. Adjusting for the unusual warranty and inventory expenses incurred during the fourth quarter of 2019, net loss would have been $1.2 million.

[(1)] Non-GAAP financial measures exclude the impact of stock-based compensation expense and related social taxes, acquisition-related amortization, impairment, acquisition-related costs, integration costs, restructuring costs, certain other nonrecurring costs or recoveries, foreign exchange gains or losses on translation of balance sheet accounts, unrealized foreign exchange gains and losses on forward contracts and certain tax adjustments. Refer to the section titled "Non-GAAP Financial Measures" for additional details and reconciliations to the applicable U.S. GAAP financial measures.

SUMMARY OF QUARTERLY RESULTS OF OPERATIONS

The following table highlights selected consolidated financial information for each of the eight most recent quarters that, in management's opinion, have been prepared on a basis consistent with the audited consolidated financial statements for the year ended December 31, 2019. The selected consolidated financial information presented below reflects all adjustments, consisting primarily of normal recurring adjustments, which are, in the opinion of management, necessary for a fair presentation of results for the interim periods. These results are not necessarily indicative of results for any future period. You should not rely on these results to predict future performance.

(In thousands of U.S. dollars, except where otherwise stated)	2019				2018			
	Q4	**Q3**	**Q2**	**Q1**	**Q4**	**Q3**	**Q2**	**Q1**
Revenue	$ 174,301	$ 174,025	$191,374	$ 173,813	$201,395	$203,426	$201,903	$186,878
Cost of goods sold	122,933	118,982	132,425	119,183	135,500	136,159	132,594	124,778
Gross margin	51,368	55,043	58,949	54,630	65,895	67,267	69,309	62,100
Gross margin %	*29.5%*	*31.6%*	*30.8%*	*31.4%*	*32.7%*	*33.1%*	*34.3%*	*33.2%*
Expenses								
Sales and marketing	22,309	23,523	23,755	22,506	22,353	21,743	22,066	22,425
Research and development	21,015	20,550	22,111	22,797	22,230	22,621	24,391	24,465
Administration	11,600	11,937	12,893	12,397	14,516	14,998	19,804	12,264
Restructuring	2,309	6,274	18,180	1,397	2,345	227	952	3,591
Acquisition-related and integration	274	291	314	95	613	570	1,014	1,765
Impairment	877	—	—	—	—	—	—	—
Loss on disposal of iTank business	—	—	—	—	—	—	—	—
Amortization	5,369	5,027	4,967	5,244	5,971	6,255	6,137	7,466
	63,753	67,602	82,220	64,436	70,092	66,414	74,364	71,976
Earnings (loss) from operations	(12,385)	(12,559)	(23,271)	(9,806)	(4,197)	853	(5,055)	(9,876)
Foreign exchange gain (loss)	1,666	(2,964)	854	(852)	(2,378)	(159)	(4,048)	1,115
Other income (expense)	(109)	(121)	(102)	31	(19)	7	8	55
Earnings (loss) before income taxes	(10,828)	(15,644)	(22,519)	(10,627)	(6,594)	701	(9,095)	(8,706)
Income tax expense (recovery)	90	4,577	5,657	596	(2,768)	1,738	2,289	(343)
Net earnings (loss)	$ (10,918)	$ (20,221)	$ (28,176)	$ (11,223)	$ (3,826)	$ (1,037)	$ (11,384)	$ (8,363)
Earnings (loss) per share - in dollars								
Basic	$ (0.30)	$ (0.56)	$ (0.78)	$ (0.31)	$ (0.11)	$ (0.03)	$ (0.32)	$ (0.23)
Diluted	$ (0.30)	$ (0.56)	$ (0.78)	$ (0.31)	$ (0.11)	$ (0.03)	$ (0.32)	$ (0.23)
Weighted average number of shares (in thousands)								
Basic	36,222	36,179	36,156	36,106	36,057	36,085	36,021	35,912
Diluted	36,222	36,179	36,156	36,106	36,057	36,085	36,021	35,912

Our quarterly results may fluctuate from quarter-to-quarter, driven by variation in sales volume, product mix and the combination of variable and fixed operating expenses, as well as from the impact of acquisitions completed in the quarter. The impact of significant items incurred during the first three interim periods of the year ended December 31, 2019 are discussed in more detail and disclosed in our quarterly reports and management's discussion and analysis. Certain of the factors that affected our quarterly results are listed below.

- In the fourth quarter of 2019, net loss was $10.9 million compared to $20.2 million in the third quarter of 2019 due to lower gross margin, offset by lower restructuring costs, lower income tax expense and favorable foreign exchange.

- In the third quarter of 2019, net loss was $20.2 million compared to $28.2 million in the second quarter of 2019, primarily driven by lower restructuring costs, R&D and income tax expenses, offset by unfavorable foreign exchange losses.

- In the second quarter of 2019, net loss was $28.2 million compared to $11.2 million in the first quarter of 2019, mainly due to higher restructuring costs related to the consolidation of our engineering programs and sites, outsourcing activities and other organizational changes we implemented in late 2018 and higher income tax expenses, partially offset by higher revenue and gross margins.

- In the first quarter of 2019, net loss was $11.2 million compared to $3.8 million in the fourth quarter of 2018, primarily due to lower revenue and gross margins, higher tax expense, partially offset by the absence of loss on disposal of iTank business, lower administration and restructuring expenses, and lower foreign exchange losses.

- In the fourth quarter of 2018, net loss was $3.8 million compared to $1.0 million in the third quarter of 2018, primarily due to higher restructuring costs and a loss on disposal of our remote tank monitoring business, partially offset by income tax recoveries.

- In the third quarter of 2018, net loss was $1.0 million compared to $11.4 million in the second quarter of 2018. In the second quarter of 2018, we recorded separation costs related to our former CEO's retirement, higher foreign exchange losses, income tax expenses, restructuring charges, and acquisition-related and integration costs.

- In the second quarter of 2018, net loss was $11.4 million compared to $8.4 million in the first quarter of 2018, driven by one-time separation costs related to our former CEO's retirement, unfavorable foreign exchange losses and higher income tax expenses, offset by higher gross margin and lower restructuring charges.

- In the first quarter of 2018, net loss was $8.4 million compared to $3.5 million in the fourth quarter of 2017, mainly driven by costs added as a result of the Numerex acquisition and higher restructuring charges, offset by lower acquisition costs and lower income tax expenses.

LIQUIDITY AND CAPITAL RESOURCES

Selected Financial Information:

(in thousands of U.S. dollars)	2019	2018	2017 As adjusted
Cash flows provided (used) before changes in non-cash working capital:	$ (12,503)	$ 34,231	$ 41,292
Changes in non-cash working capital			
Accounts receivable	37,965	(5,526)	(12,665)
Inventories	(3,712)	1,508	(6,806)
Prepaids and other	(8,611)	(3,525)	(5,334)
Accounts payable and accrued liabilities	(12,069)	21,944	(17,750)
Deferred revenue and credits	5,792	(1,402)	335
	19,365	12,999	(42,220)
Cash flows provided by (used in):			
Operating activities	**$ 6,862**	**$ 47,230**	**$ (928)**
Investing activities	**$ (16,372)**	**$ (16,006)**	**$ (37,641)**
Proceeds from sale of investment	3,303	—	—
Proceeds from sale of iTank business	500	5,000	—
Capital expenditures and increase in intangible assets	(20,273)	(21,099)	(15,806)
Acquisitions, net of cash acquired	—	—	(21,870)
Financing activities	**$ (1,662)**	**$ (5,927)**	**$ (271)**
Issue of common shares, net of issuance costs	488	2,636	5,708
Repurchase of common shares for cancellation	—	(3,120)	(2,779)
Purchase of treasury shares for RSU distribution	(674)	(2,808)	—
Taxes paid related to net settlement of equity awards	(941)	(1,878)	(1,367)
Payment for contingent consideration	—	(130)	(1,397)
Free Cash Flow [(1)]	**$ (13,411)**	**$ 26,131**	**$ (16,734)**

[(1)] *See section titled "Non-GAAP Financial Measures" for additional details and a reconciliation to the applicable U.S. GAAP financial measure.*

Operating Activities

Cash provided by operating activities decreased by $40.4 million in 2019 compared to 2018, mainly due to lower profitability and higher working capital requirements for accounts payable, inventory and prepaids, partly offset by sale of receivables under our RPA. In 2019, we sold and de-recognized approximately $86.9 millions in trade accounts receivable, and collected and remitted to Canadian Imperial Bank of Commerce ("CIBC") approximately $68.7 million under our RPA.

Investing Activities

Cash used in investing activities increased by $0.4 million in 2019 compared to 2018. In 2019, we received $3.3 million proceeds from the sale of a small share investment and $0.5 million escrow payment from the sale of our iTank business in 2018. In 2018, we received cash consideration of $5.0 million from the sale of our iTank business. Capital expenditures of $20.3 million and $21.1 million in 2019 and 2018, respectively, were consistent. In 2019, capital expenditures were primarily for production, tooling and R&D equipment while cash used for intangible assets was primarily for capitalized software costs.

Financing Activities

Net cash used for financing activities decreased by $4.3 million in 2019 compared to 2018, mainly due to the absence of share purchases under the NCIB, lower purchase of treasury shares for Restricted Share Unit ("RSU") distribution and lower taxes paid related to net settlement of equity awards, partly offset by lower proceeds received from stock option exercises.

Free Cash Flow

Our free cash flow decreased by $39.4 million in 2019 compared to 2018, mainly as a result of lower profitability and higher working capital requirements, in particular related to restructuring, partially offset by sale of receivables. See "Non-GAAP Financial Measures".

Cash Requirements

Our near-term cash requirements are primarily related to funding our operations, including restructuring expenditures, inventory and other working capital items, capital expenditures and other obligations summarized in the table below. Cash may also be used to finance acquisitions of businesses in line with our strategy and share repurchases. We continue to believe our cash and cash equivalents balance of $75.5 million at December 31, 2019, undrawn availability under our revolving credit facility, receivable purchase facility, and cash generated from operations will be sufficient to fund our expected working capital, capital expenditure, restructuring and acquisition requirements for at least the next twelve months based on current business plans. However, we cannot be certain that our actual cash requirements will not be greater than we currently expect. In addition, our ability to achieve our business and cash generation plans is based on a number of assumptions which involve significant judgment and estimates of future performance, borrowing capacity and credit availability which cannot at all times be assured. See "Cautionary Note Regarding Forward-Looking Statements".

The following table presents the aggregate amount of future cash outflows for contractual obligations as of December 31, 2019.

Payments due by period (In thousands of U.S. dollars)	**Total**	**2020**	**2021**	**2022**	**2023**	**2024**	**Thereafter**
Operating lease obligations	$ 34,665	$ 6,069	$ 6,340	$ 4,985	$ 3,066	$ 2,191	$ 12,014
Finance lease obligations	598	331	248	8	8	3	—
Purchase obligations - Contract Manufacturers (1)	128,146	128,146	—	—	—	—	—
Purchase obligations - Mobile Network Operators (2)	7,110	5,314	1,334	462	—	—	—
Purchase obligations - Cloud Computing Services (3)	3,192	1,321	1,321	550	—	—	—
Other long-term liabilities	413	16	12	385			
Total(4)	**$ 174,124**	**$ 141,197**	**$ 9,255**	**$ 6,390**	**$ 3,074**	**$ 2,194**	**$ 12,014**

(1) Purchase obligations represent obligations with certain contract manufacturers and suppliers to buy a minimum amount of designated products between January 2020 and June 2020. In certain of these arrangements, we may be required to acquire and pay for such products up to the prescribed minimum or forecasted purchases.

(2) Purchase obligations represent obligations with certain mobile network operators to purchase a minimum amount of wireless data and wireless data services between January 2020 and October 2022.

(3) Purchase obligation represents obligation with a supplier to purchase a minimum amount of cloud computing services between January 2020 and May 2022.

(4) Also see Acquisition of M2M Group under Annual Overview section.

Normal Course Issuer Bid

On August 1, 2018, we received approval from the Toronto Stock Exchange ("TSX") of our Notice of Intention to make a NCIB. Pursuant to the NCIB, we were permitted to purchase for cancellation up to 3,580,668 of our common shares, or approximately 9.9% of common shares outstanding as of the date of the announcement, representing 10% of the public float. The NCIB commenced on August 8, 2018 and terminated on August 7, 2019. In 2019, we did not repurchase any common shares. In 2018, we repurchased and canceled 161,500 common shares at an average price of $19.32 per share. The excess purchase price over and above the average carrying value in the amount of $1,187 was charged to retained earnings in 2018.

Capital Resources

The source of funds for our future capital expenditures and commitments includes cash, accounts receivable, cash from operations and borrowings under our committed credit facilities.

	2019				2018			
(In thousands of U.S. dollars)	**Dec 31**	**Sept 30**	**June 30**	**Mar 31**	**Dec 31**	**Sept 30**	**June 30**	**Mar 31**
Cash and cash equivalents	$ 75,454	$ 86,900	$ 84,769	$ 74,143	$ 89,076	$ 67,460	$ 73,411	$ 70,588
Unused credit facilities	30,000	30,000	30,000	30,000	30,000	30,000	10,000	10,000
Total	**$105,454**	**$116,900**	**$114,769**	**$104,143**	**$119,076**	**$ 97,460**	**$ 83,411**	**$ 80,588**

We also have access to funds through our uncommitted accounts receivables purchase agreement as discussed below.

At December 31, 2019, we have committed capital expenditures of $5.8 million (Dec 31, 2018 - $4.9 million). Our capital expenditures during the first quarter of 2020 are expected to be primarily for R&D and production equipment and software licenses. We are also committed to the purchase price of $21.0 million relating to the acquisition of M2M Group, comprised of $19.6 million cash consideration and approximately $1.4 million for the retirement of certain obligations, subject to normal working capital adjustments.

Credit Facilities

We have a committed $30 million senior secured revolving credit facility (the "Revolving Facility") with CIBC as sole lender and as Administrative Agent. The Revolving Facility is secured by a pledge against substantially all of our assets and includes an accordion feature, which permits the Company to increase the aggregate revolving loan commitments thereunder on an uncommitted basis subject to certain conditions. The Revolving Facility matures on July 31, 2021 and will be used for general corporate purposes, including, but not limited to, capital expenditures, working capital requirements and/or certain acquisitions permitted under the Revolving Facility. As at December 31, 2019, there were no borrowings under the Revolving Facility.

Letters of Credit

We have access to a standby letter of credit facility of $1.5 million from Toronto Dominion Bank. The letter of credit facility is used for the issuance of letters of credit and guarantees and is guaranteed by Export Development Canada. As of December 31, 2019, there were two letters of credit issued against the revolving standby letter of credit facility for a total value of $0.1 million.

Accounts Receivable Purchase Agreement

On June 26, 2019, we entered into an uncommitted Receivables Purchase Agreement (the “RPA”) with CIBC to improve our liquidity during high working capital periods. Under the RPA, up to $75.0 million of Receivables may be sold and remain outstanding at any time. Eligible trade receivables are sold at 100% face value less discount with a 10% limited recourse to us arising from certain repurchase events. The RPA is on an uncommitted basis with no expiry date and carries a discount rate of CDOR (for purchased receivables in Canadian dollars) and LIBOR (for purchased receivables in U.S. dollars) plus an applicable margin. After the sale, we do not retain any interest in the Receivables, but continue to service and collect, in an administrative capacity, the outstanding receivables on behalf of CIBC.

We account for the sold Receivables as a sale in accordance with Financial Accounting Standards Board ("FASB") ASC 860, *Transfers and Servicing*. Net proceeds from the sale reflect the face value of the Receivables less discount fees charged by CIBC and one time legal costs and are classified under operating activities in the consolidated statements of cash flows.

Pursuant to the RPA, the Company sold and de-recognized \$36.1 million and \$86.9 million Receivables during the three and twelve months ended December 31, 2019. As at December 31, 2019, \$18.2 million remained outstanding to be collected from customers and remitted to CIBC. Discount fees of \$0.4 million are included in *Other income (expense)* and legal costs of \$0.1 million are included in *Administration* expense in the consolidated statements of operations. As at December 31, 2019, we collected \$3.4 million from Receivables that we previously sold and that have not been remitted to CIBC due to timing of settlement dates. We recorded the amount in *Restricted cash* in the consolidated balance sheets with a corresponding increase in accrued liabilities.

NON-GAAP FINANCIAL MEASURES

Our consolidated financial statements are prepared in accordance with U.S. GAAP on a basis consistent for all periods presented. In addition to results reported in accordance with U.S. GAAP, we use non-GAAP financial measures as supplemental indicators of our operating performance. The term "non-GAAP financial measure" is used to refer to a numerical measure of a company's historical or future financial performance, financial position or cash flows that: (i) excludes amounts, or is subject to adjustments that have the effect of excluding amounts, that are included in the most directly comparable measure calculated and presented in accordance with U.S. GAAP in a company's statement of earnings, balance sheet or statement of cash flows; or (ii) includes amounts, or is subject to adjustments that have the effect of including amounts, that are excluded from the most directly comparable measure so calculated and presented.

Our non-GAAP financial measures include non-GAAP gross margin, non-GAAP earnings (loss) from operations, non-GAAP net earnings (loss), non-GAAP basic and diluted net earnings (loss) per share, adjusted EBITDA (earnings before interest, taxes, depreciation and amortization), and free cash flow.

Non-GAAP gross margin excludes the impact of stock-based compensation expense and related social taxes and certain other non-recurring costs or recoveries.

Non-GAAP earnings (loss) from operations includes allocation of realized gains or losses on forward contracts and excludes the impact of stock-based compensation expense and related social taxes, acquisition-related amortization, acquisition-related and integration costs, restructuring costs, impairment and certain other non-recurring costs or recoveries.

Non-GAAP income tax expense includes certain tax adjustments and taxes on acquisition-related amortization, acquisition-related and integration costs, restructuring costs, other non-recurring costs and foreign exchange.

In addition to the above, non-GAAP net earnings (loss) and non-GAAP net earnings (loss) per share exclude the impact of foreign exchange gains or losses on translation of certain balance sheet accounts, foreign exchange gains or losses on forward contracts and certain tax adjustments.

We use the above-noted non-GAAP financial measures for planning purposes and to allow us to assess the performance of our business before including the impacts of the items noted above as they affect the comparability of our financial results. These non-GAAP measures are reviewed regularly by management and the Board of Directors as part of the ongoing internal assessment of our operating performance. We also use non-GAAP earnings from operations as one component in determining short-term incentive compensation for management employees.

Adjusted EBITDA is defined as net earnings (loss) plus stock-based compensation expense and related social taxes, acquisition-related and integration costs, restructuring cost, impairment, certain other non-recurring costs or recoveries, amortization, foreign exchange gains or losses on translation of certain balance sheet accounts, unrealized foreign exchange gains or losses on forward contracts, interest and income tax expense. Adjusted EBITDA is a metric used by investors and analysts for valuation purposes and is an important indicator of our operating performance and our ability to generate liquidity through operating cash flow that will fund future working capital needs and fund future capital expenditures.

Free cash flow is defined as cash flow from operating activities less capital expenditures and increases in intangibles. We believe that disclosure of free cash flow provides a good measure of our ability to internally generate cash that can be used for investment in the business and is an important indicator of our financial strength and performance. We also believe that certain investors and analysts use free cash flow to assess our business.

We disclose these non-GAAP financial measures as we believe they provide useful information to investors and analysts to assist them in their evaluation of our operating results and to assist in comparisons from one period to another. Readers are cautioned that non-GAAP financial measures do not have any standardized meaning prescribed by U.S. GAAP and therefore may not be comparable to similar measures presented by other companies.

We strongly encourage investors to review our financial information in its entirety and not to rely on a single financial measure. We therefore believe that despite these limitations, it is appropriate to supplement the U.S. GAAP measures with certain non-GAAP measures defined in this section of our MD&A.

The following table provides a reconciliation of the non-GAAP financial measures to U.S. GAAP results for years ended December 31:

(In thousands of U.S. dollars, except where otherwise stated)	2019	2018	2017 As adjusted
Gross margin - GAAP	**$ 219,990**	$ 264,571	$ 234,239
Stock-based compensation and related social taxes	**167**	479	461
Realized gains (losses) on hedge contracts	**(4)**	(30)	23
Other nonrecurring costs	**—**	5	—
Gross margin - Non-GAAP	**$ 220,153**	$ 265,025	$ 234,723
Earnings (loss) from operations - GAAP	**$ (58,021)**	$ (18,275)	$ 100
Stock-based compensation and related social taxes	**13,194**	13,006	10,374
Acquisition-related and integration	**974**	3,962	8,195
Restructuring	**28,160**	7,115	1,076
Other nonrecurring costs	**2,903**	11,485	318
Impairment	**877**	—	3,668
Realized gains (losses) on hedge contracts	**(187)**	(562)	419
Acquisition-related amortization	**14,514**	18,575	15,486
Earnings from operations - Non-GAAP	**$ 2,414**	$ 35,306	$ 39,636
Net earnings (loss)- GAAP	**$ (70,538)**	$ (24,610)	$ 4,518
Stock-based compensation and related social taxes, restructuring, impairment, acquisition-related, integration and other nonrecurring costs (recoveries)	**46,108**	35,568	23,631
Amortization	**33,177**	39,150	30,503
Interest and other, net	**301**	(51)	(67)
Foreign exchange losses (gains)	**1,109**	4,908	(7,131)
Income tax expense	**10,920**	916	3,199
Adjusted EBITDA	**$ 21,077**	$ 55,881	$ 54,653
Amortization (exclude acquisition-related amortization)	**(18,663)**	(20,575)	(15,017)
Interest and other, net	**(301)**	51	67
Income tax expense - Non-GAAP	**(2,418)**	(2,930)	(5,184)
Net earnings - Non-GAAP	**$ (305)**	$ 32,427	$ 34,519
Diluted earnings (loss) per share			
GAAP - (in dollars)	**$ (1.95)**	$ (0.68)	$ 0.14
Non-GAAP - (in dollars)	**$ (0.01)**	$ 0.90	$ 1.05

The following table provides a quarterly reconciliation of the non-GAAP financial measures to our most directly comparable U.S. GAAP results:

	2019				2018			
(In thousands of U.S. dollars, except where otherwise stated)	**Q4**	**Q3**	**Q2**	**Q1**	**Q4**	**Q3**	**Q2**	**Q1**
Gross margin - GAAP	$ 51,368	$ 55,043	$ 58,949	$ 54,630	$ 65,895	$ 67,267	$ 69,309	$ 62,100
Stock-based compensation and related social taxes	20	44	44	59	58	57	57	307
Realized gains (losses) on hedge contracts	1	—	(2)	(3)	(13)	(11)	—	(6)
Other nonrecurring costs	—	—	—	—	5	—	—	—
Gross margin - Non-GAAP	$ 51,389	$ 55,087	$ 58,991	$ 54,686	$ 65,945	$ 67,313	$ 69,366	$ 62,401
Earnings (loss) from operations - GAAP	$(12,385)	$(12,559)	$(23,271)	$ (9,806)	$ (4,197)	$ 853	$ (5,055)	$ (9,876)
Stock-based compensation and related social taxes	1,802	3,876	4,102	3,414	2,743	3,473	3,950	2,840
Acquisition-related and integration	274	291	314	95	613	570	1,014	1,765
Restructuring	2,309	6,274	18,180	1,397	2,345	227	952	3,591
Impairment	877	—	—	—	—	—	—	—
Realized gains (losses) on hedge contracts	81	24	(183)	(109)	(296)	(201)	(14)	(51)
Other nonrecurring costs	795	279	662	1,167	4,761	1,583	5,141	—
Acquisition-related amortization	3,593	3,610	3,624	3,687	4,261	4,354	4,426	5,534
Earnings from operations - Non-GAAP	$ (2,654)	$ 1,795	$ 3,428	$ (155)	$ 10,230	$ 10,859	$ 10,414	$ 3,803
Net earnings (loss) - GAAP	$(10,918)	$(20,221)	$(28,176)	$(11,223)	$ (3,826)	$ (1,037)	$(11,384)	$ (8,363)
Stock-based compensation and related social taxes, restructuring, impairment, acquisition-related, integration and other nonrecurring costs (recoveries)	6,057	10,720	23,258	6,073	10,462	5,853	11,057	8,196
Amortization	8,573	8,115	8,118	8,371	9,308	9,483	9,651	10,708
Interest and other, net	109	121	102	(31)	19	(7)	(8)	(55)
Foreign exchange loss (gain)	(1,585)	2,988	(1,037)	743	2,082	(42)	4,034	(1,166)
Income tax expense (recovery)	90	4,577	5,657	596	(2,768)	1,738	2,289	(343)
Adjusted EBITDA	$ 2,326	$ 6,300	$ 7,922	$ 4,529	$ 15,277	$ 15,988	$ 15,639	$ 8,977
Amortization (exclude acquisition-related amortization)	(4,980)	(4,505)	(4,494)	(4,684)	(5,047)	(5,129)	(5,225)	(5,174)
Interest and other, net	(109)	(121)	(102)	31	(19)	7	8	55
Income tax expense - Non-GAAP	(176)	(653)	(859)	(730)	(1,245)	(352)	(769)	(564)
Net earnings - Non-GAAP	$ (2,939)	$ 1,021	$ 2,467	$ (854)	$ 8,966	$ 10,514	$ 9,653	$ 3,294
Diluted earnings (loss) per share								
GAAP - (in dollars)	$ (0.30)	$ (0.56)	$ (0.78)	$ (0.31)	$ (0.11)	$ (0.03)	$ (0.32)	$ (0.23)
Non-GAAP - (in dollars)	$ (0.08)	$ 0.03	$ 0.07	$ (0.02)	$ 0.25	$ 0.29	$ 0.27	$ 0.09

The following table provides a reconciliation of segmented gross margin:

(In thousands of U.S. dollars)	2019	2018	2017 As adjusted
IoT Solutions			
Gross margin - GAAP	**$ 140,158**	$ 139,602	$ 107,242
Stock-based compensation and related social taxes	**88**	226	202
Realized gains (losses) on hedge contracts	**(2)**	(14)	10
Other nonrecurring costs (recoveries)	**(22)**	4	—
Gross margin - Non-GAAP	**$ 140,222**	$ 139,818	$ 107,454
Embedded Broadband			
Gross margin - GAAP	**$ 79,832**	$ 124,969	$ 126,997
Stock-based compensation and related social taxes	**79**	253	259
Realized gains (losses) on hedge contracts	**(2)**	(16)	13
Other nonrecurring recoveries	**22**	1	—
Gross margin - Non-GAAP	**$ 79,931**	$ 125,207	$ 127,269
Total			
Gross margin - GAAP	**$ 219,990**	$ 264,571	$ 234,239
Stock-based compensation and related social taxes	**167**	479	461
Realized gains (losses) on hedge contracts	**(4)**	(30)	23
Other nonrecurring costs (recoveries)	**—**	5	—
Gross margin - Non-GAAP	**$ 220,153**	$ 265,025	$ 234,723

The following table provides a reconciliation of free cash flow:

(In thousands of U.S. dollars)	2019	2018	2017
Cash flows from operating activities	**$ 6,862**	$ 47,230	$ (928)
Capital expenditures and increase in intangible assets	**(20,273)**	(21,099)	(15,806)
Free Cash Flow	**$ (13,411)**	$ 26,131	$ (16,734)

OFF-BALANCE SHEET ARRANGEMENTS

We have the RPA in place that allows us to sell, with limited recourse, qualifying receivables. Details are outlined in the "Liquidity and Capital Resources - Accounts Receivable Purchase Agreement" section.

TRANSACTIONS BETWEEN RELATED PARTIES

We did not undertake any transactions with related parties during the years ended December 31, 2019 and 2018.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

We prepare our consolidated financial statements in accordance with U.S. GAAP and we make certain estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses and the related disclosure of contingent liabilities. Note 2, *Summary of significant accounting policies*, in the December 31, 2019 consolidated financial statements includes a summary of the significant accounting policies used in the preparation of our consolidated financial statements. While all of the significant accounting policies are important to the annual consolidated financial statements, some of these policies may be viewed as involving a high degree of judgment.

On an ongoing basis, we evaluate our estimates and judgments, including those related to business combinations, revenue recognition, adequacy of allowance for doubtful accounts, adequacy of inventory reserve, valuation of goodwill and intangible assets, income taxes, useful lives of long-lived assets, adequacy of warranty reserve, royalty obligations, contingencies, stock-based compensation, and fair value measurement. We base our estimates on historical experience, anticipated results and trends and on various other assumptions that we believe are reasonable under the circumstances. By their nature, estimates are subject to an inherent degree of uncertainty. Actual results could differ materially from our estimates.

The following critical accounting policies require management's most difficult, subjective and complex judgments, and are subject to measurement uncertainty.

Business combinations

We account for our business combinations using the acquisition method. Under this method, estimates we make to determine the fair values of acquired assets and liabilities assumed include judgments in our determinations of acquired intangible assets and assessment of the fair value of existing property and equipment. Assumed liabilities can include litigation and other contingency reserves existing at the time of the acquisition. Goodwill is recognized as of the acquisition date as the excess of the fair value of consideration transferred over the estimated fair values of net identifiable assets acquired and liabilities assumed at their acquisition date. Acquisition related expenses are separately recognized from business combination and are expensed as incurred.

When establishing fair values, we make significant estimates and assumptions, especially with respect to intangible assets. Intangible assets acquired and recorded by us may include patents, intellectual property, customer relationships, brand, backlog and in-process research and development. Estimates include but are not limited to the forecasting of future cash flows and discount rates. From time to time, we may engage third-party firms to assist us in determining the fair value of assets and liabilities assumed. Our estimates of fair values are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable. As a result, actual results may differ from estimates impacting our earnings.

Revenue recognition

Product revenue includes sales from embedded cellular modules, short range and GNSS wireless modules, intelligent routers and gateways, asset tracking and vertical market smart devices, antennas and accessories, and Smart SIMs. Recurring and other services revenue includes sales from cloud services, cellular connectivity services, managed connectivity and application services, software licenses, technical support services, extended warranty services, solution design and consulting services.

We recognize revenues when we satisfy performance obligations by transferring the control of promised products or services to customers. Product revenue is recognized at a point in time when a good is shipped or delivered to the customer. Recurring and other services revenue is recognized over time as the service is rendered or at a point in time upon completion of a service. Our customer contracts can include various combinations of products and services, which are generally capable of being distinct and accounted for as separate performance obligations. Revenue is recognized net of allowances for returns and any taxes collected from customers.

Our products are generally highly dependent on, and interrelated with, the underlying firmware and cannot function without the firmware. In these cases, the hardware and the firmware are accounted for as a single performance obligation and revenue is recognized at the point in time when control is transferred to resellers and distributors, OEMs, or directly to end customers.

Certain customers may receive cash-based incentives or credits, which are accounted for as variable consideration. We estimate the amount of incentives or credits to be provided to customers and reduce revenue recognized. The variable consideration is included in the transaction price to the extent that a significant reversal in the amount of cumulative revenue recognized is not expected to occur when the uncertainty associated with the variable consideration is subsequently resolved.

The expected costs associated with assurance-type warranty are recognized as expense when products are sold. Warranty service that is in addition to the assurance that the product complies with agreed upon specifications is a separate performance obligation; its revenue is recognized ratably over the service period.

Cloud and connectivity services are provided on either a subscription or consumption basis. Revenue related to cloud and connectivity services provided on a subscription basis is recognized ratably over the contract period. Revenue related to cloud and connectivity services provided on a consumption basis is recognized based on the customer utilization of such resources. Revenues from SIM activation and initial application setup are deferred and recognized over the estimated customer life on a straight-line basis.

Licenses for on-premise software provide the customer with a right to use the software as it exists when made available to the customer. Revenue from distinct on-premise licenses are recognized upfront at the point in time when the software is made available to the customer. Revenue from software maintenance, unspecified upgrades and technical support contracts are recognized over the period such items are delivered or services are provided. Technical support contracts extending beyond the current period are deferred and revenue is recognized over the applicable earning period.

Revenue from solution design and consulting services are recognized as services are being provided.

Contract acquisition and fulfillment costs

We recognize an asset for the incremental costs of obtaining or fulfilling a contract with a customer if we expect the benefit of those costs to be longer than one year. We have determined that certain sales incentive bonuses and initial setup costs of managed IoT services meet the requirements to be capitalized. We applied a practical expedient to expense costs as incurred for costs to obtain a contract with a customer when the amortization period would have been one year or less.

The incremental costs of obtaining or fulfilling a contract with a customer are deferred and amortized over the estimated life of the customer relationship. We classify these deferred contract costs as current or non-current based on the timing of when we expect to recognize the expense. The current and non-current portions of deferred contract costs are included in *Prepaids and other* current assets and *Other assets* respectively in our consolidated balance sheets.

Significant judgment

We determine the transaction price of a customer contract by multiplying the unit price of a good or service with the committed order volume or service period.

Certain customers may receive cash-based incentives or credits, which are accounted for as variable consideration. We estimate the expected amount to be provided to customers and exclude it from the transaction price. Sales credits are included in *Accounts payable and accrued liabilities* in our consolidated balance sheets.
Our customer contracts can include various combinations of products and services. When a customer contract includes multiple performance obligations, we allocate the transaction price to each performance obligation on a

relative standalone selling price basis. We generally determine standalone selling prices based on the price charged to customers or a combination of expected cost, plus a margin and residual methods.

Product revenue is recognized at a point in time when a good is shipped or delivered to the customer as it represents the transfer of control of the promised good to a customer. Cloud, connectivity, and managed service revenues are recognized over time as the customer simultaneously receives and consumes the benefits provided by our performance as we perform. Other service revenue is recognized at a point in time upon completion of a service.

Contract Balances

Receivables - We recognize a right to consideration as a receivable when only the passage of time is required before payment of that consideration is due.

Contract Assets - We recognize a right to consideration in exchange for goods or service that we have transferred to a customer as contract assets. Contract assets are comprised mainly of accrued revenue related to monthly IoT service subscriptions, which may include connectivity, cloud applications, and managed services. Contract assets are included in *Accounts receivable* in our consolidated balance sheet.

Deferred Revenue - We recognize an obligation to transfer goods or services to a customer for which we have received consideration from the customer as deferred revenue. Deferred revenue consists of advance payments and billings in excess of revenue recognized, which includes support, extended warranty, cloud application services, and activation fees.

Payment terms and conditions vary by contract type, although terms generally include a requirement of payment within 30 to 60 days.

Allowance for doubtful accounts

We maintain an allowance for doubtful accounts for estimated losses that may result from our customers' inability to pay. We consider the following factors when determining whether collection is reasonably assured: customer credit-worthiness, past transaction history with the customer, insured amounts, if any, current economic industry trends and changes in customer payment terms. If we have no previous experience with the customer, we typically obtain reports from credit organizations to ensure that the customer has a history of paying its creditors. We may also request financial information, including financial statements, to ensure that the customer has the means of making payment. If these factors indicate collection is not reasonably assured, revenue is deferred until collection becomes reasonably assured, which is generally upon receipt of cash. If the financial condition of any of our customers deteriorates, we may increase our allowance.

As at December 31, 2019, accounts receivable comprised 20.6% of total assets. Included in this balance was a provision of $3.2 million for doubtful accounts, or 2.4% of accounts receivable compared to $3.0 million for doubtful accounts, or 1.7% of accounts receivable as at December 31, 2018. We believe our allowance for doubtful accounts as at December 31, 2019 is adequate to provide for probable losses existing in accounts receivable.

Inventory

We value our inventory at the lower of cost, determined on a first-in-first-out basis, and estimated net realizable value. We assess the need for an inventory write-down and/or an accrual for estimated losses on inventory purchase commitments based on our assessment of estimated market value using assumptions about future demand and market conditions. Our reserve requirements generally increase as our projected demand requirements decrease, due to market conditions, technological and product life cycle changes and longer than previously expected usage periods. If market conditions are worse than our projections, we may further write-down the value of our inventory or increase the accrual for estimated losses on inventory purchase commitments.

Goodwill and intangible assets

Goodwill and intangible assets are assessed for impairment on an annual basis and between annual tests whenever circumstances indicate that the carrying value of the goodwill and intangible assets might be impaired. We performed our annual test on October 1, 2019. Circumstances may include an adverse change in business climate, legal factors, operating performance indicators, competition or sale or disposition of a significant portion of a reporting unit. On at least a quarterly basis, we assess whether such circumstances exist. An evaluation of recoverability of goodwill requires judgment, including the identification of reporting units, assigning assets and liabilities to reporting units, assigning goodwill to reporting units, and determining the estimated fair value of each reporting unit. Significant judgments that are required on our part to estimate the fair value of reporting units include estimating future cash flows, determining appropriate discount rates, consideration of appropriate control premium, market conditions, and other assumptions. Changes in these estimates and assumptions could materially affect the determination of fair value for each reporting unit and may result in impairment charges in future periods.

At December 31, 2019, our goodwill balance was $207.6 million. We determined that there was no impairment as the fair values of each of our reporting units exceeded their respective carrying values as at October 1, 2019. Our analysis took into consideration an income valuation approach using the expected discounted cash flows for each reporting unit. The principal factors used in the discounted cash flow analysis were the projected results of operations, the discount rate based on our estimated weighted average cost of capital, and terminal value assumptions for each reporting unit. The discounted cash flow model used was based on our business plan. For years subsequent to those contained in our business plan, we analyzed third party forecasts and other macro-economic indicators that impact our reporting units to provide a reasonable estimate of revenue growth in future periods. Our gross margins and operating expense estimates reflect anticipated changes in our business mix as we transform to incorporate more recurring services in our business mix. We also developed assumptions for the amount of working capital and capital expenditures needed to support each reporting unit.

In addition to the discounted cash flow valuation approach noted above, we reconciled the implied enterprise value from the discounted cash flow analysis to our market capitalization, which was approximately $375 million at October 1, 2019. We then prepared an alternative valuation analysis based on transaction and trading revenue multiples. The analysis confirmed our conclusion that the fair value exceeded the carrying value of $341.7 million at October 1, 2019 and $381.3 million at December 31, 2019.

Income taxes

We recognize and measure each tax position related to income tax positions taken or expected to be taken in a tax return. We have reviewed our tax positions to determine which should be recognized and measured according to the more likely than not threshold requirement. The tax benefits recognized in the financial statements are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate resolution. If the realization of a tax position is not considered more likely than not, we provide for a valuation allowance. The ultimate realization of our deferred tax assets is dependent upon the generation of future taxable income during the periods in which temporary differences become deductible. We consider projected future taxable income from operations, tax planning strategies and transactions in making our assessment. If our assessment of our ability to realize our deferred tax assets changes, we may make an adjustment to our deferred tax assets that would be charged to income (loss).

We do not provide for taxes on foreign earnings as it is our intention to indefinitely reinvest undistributed earnings of our foreign subsidiaries. It is not practical to estimate the income tax liability that might be incurred if there is a change in management's intention in the event that a remittance of such earnings occurs in the future.

The ultimate amount of future income taxes and income tax provision could be materially different from those recorded, as it is influenced by our future operating results and our tax interpretations.

Amortization

Amortization of property and equipment and intangible assets incorporates estimates of useful lives and residual values. These estimates may change as more experience is obtained or as general market conditions change impacting the operation of property and equipment and intangible assets.

Warranty costs

We accrue product warranty costs in accrued liabilities to provide for the repair or replacement of defective products. Our accrual is based on an assessment of historical experience, product quality and management's estimates. If there is a change in these factors, we adjust our accrual accordingly.

Royalty obligations

Under certain license agreements we are committed to royalty payments based on the sales of products using certain technologies. We recognize royalty obligations as determinable in accordance with agreement terms.

Where agreements are not in place, we recognize our current best estimate of the royalty obligation in cost of goods sold, accrued liabilities and long-term liabilities. We base our estimate on the smallest saleable unit ("SSU") principle (i.e., the principle that any royalty obligations should be no more than a portion of the profits for a component within the product that implements the patented technology) as the appropriate methodology for determining FRAND standard essential patent ("SEP") royalties. Using this principle, the royalty accrual on our products is based on the value of the patented technology in the chipset, representing the SSU that implements the technology.

Contingencies

We are from time to time involved in litigation, certain other claims and arbitration matters arising in the ordinary course of our business, including IP matters. We accrue for a liability when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Significant judgment is required in both the determination of probability and the determination as to whether an amount of a loss is reasonably estimable. These accruals are reviewed at least quarterly and adjusted to reflect the impacts of negotiations, settlements, rulings, advice of legal counsel and technical experts and other information and events pertaining to the particular matter. To the extent there is a reasonable possibility (within the meaning of ASC 450, *Contingencies*) that the losses could exceed the amounts already accrued, management believes that the amount of any such additional loss would not be material to our results of operations or financial condition.

In some instances, we are unable to reasonably estimate any potential loss or range of loss. The nature and progression of litigation can make it difficult to predict the impact a particular lawsuit will have on the Company. There are many reasons why we cannot make these assessments, including, among others, one or more of the following: in the early stage of a proceeding related to IP matters, the claimant is not required to specifically identify the patent that has allegedly been infringed; damages sought that are unspecified, unsupportable, unexplained or uncertain; discovery not having been started or being incomplete; the complexity of the facts that are in dispute (e.g., once a patent is identified, the analysis of the patent and a comparison to our activities is a labour-intensive and highly technical process); the difficulty of assessing novel claims; the parties not having engaged in any meaningful settlement discussions; the possibility that other parties may share in any ultimate liability; and the often slow pace of patent litigation.

We are required to apply judgment with respect to any potential loss or range of loss in connection with litigation. While we believe we have meritorious defenses to the claims asserted against us in our currently outstanding litigation, and intend to defend ourselves vigorously in all cases, in light of the inherent uncertainties in litigation there can be no assurance that the ultimate resolution of these matters will not significantly exceed the reserves currently accrued by us for those cases for which an estimate can be made. Losses in connection with any litigation for which we are not presently able to reasonable estimate any potential loss or range of loss could be material to our results of operations and financial condition.

Stock-based compensation

We recognize stock-based compensation expense for all stock-based compensation awards based on the fair value at grant date. We recognize stock-based compensation expense on a straight-line basis over the requisite service period of the award and account for forfeitures as they occur.

Determining the appropriate fair value model and calculating the fair value of share-based payment awards requires subjective assumptions. The assumptions used in calculating the fair value of share-based payment awards represent management's best estimates, but these estimates involve inherent uncertainties and the application of management's judgment. As a result, if factors change and we use different assumptions, our stock-based compensation expense could be materially different in the future.

Fair value measurement

We measure our short-term investments at fair value, defined as the price that would be received from selling an asset or that would be paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining fair value measurements, we consider the principal or most advantageous market in which it would transact and consider assumptions that market participants would use when pricing the asset or liability, such as inherent risk, transfer restrictions and risk of non-performance.

An established fair value hierarchy requires the Company to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. A financial instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is both available and significant to the fair value measurement. Three levels of inputs may be used to measure fair value as detailed below.

- *Level 1* - Quoted prices in active markets for identical assets or liabilities.

- *Level 2* - Observable inputs other than quoted prices in active markets for identical assets and liabilities, such as quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

- *Level 3* - Inputs that are generally unobservable and are supported by little or no market activity and that are significant to the fair value determination of the assets or liabilities.

The determination of fair value requires judgments, assumptions and estimates and may change over time.

OUTSTANDING SHARE DATA

As of March 9, 2020, we had 36,335,547 common shares issued and outstanding, 1,453,096 stock options exercisable into common shares at a weighted average exercise price of $16.56 and 749,380 restricted treasury share units (166,204 of which include performance-based vesting at a multiple not to exceed 200%) outstanding that could result in the issuance of up to 915,584 common shares.

IMPACT OF ACCOUNTING PRONOUNCEMENTS AFFECTING CURRENT PERIOD

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* and subsequent amendments to the initial guidance: ASU 2017-13, ASU 2018-10, ASU 2018-11, ASU 2018-20 and ASU 2019-01 (collectively, Topic 842). This update is to improve transparency and comparability among organizations by requiring lessees to recognize right-of-use assets and lease liabilities on the balance sheet and requiring additional disclosure about leasing arrangements. The standard is effective for fiscal years beginning after December 15, 2018. We adopted the standard effective January 1, 2019, applying the optional transition method permitted under ASU 2018-11, which relieves entities from restating comparative financial statements, allowing entities to apply and adopt the new lease standard as at the effective date, rather than as of the first date of the earliest period presented. We elected the package of practical expedients provided under the guidance, which applies to expired or existing leases and allows us not to reassess whether a contract contains a lease, the lease classification, and any initial direct costs incurred. We also elected the practical expedient to expense short term leases (12 months or less) on a straight-line basis over the lease term, and to not separate the lease and non-lease components for all of our leases. Refer to Note 12 Leases of our interim financial statements.

Upon adoption of Topic 842 effective January 1, 2019, we recognized operating lease liabilities of $31.5 million and corresponding right-of-use assets of $27.0 million. The $4.5 million difference between operating lease liabilities and right-of-use assets recognized is due to deferred rent and exit cost accruals recorded under prior lease accounting standards. Topic 842 requires such balances to be reclassified against right-of-use assets at transition. In future periods such balances will not be presented separately. Our accounting for finance leases remains substantially unchanged.

IMPACT OF ACCOUNTING PRONOUNCEMENTS AFFECTING FUTURE PERIODS

In June 2016, the FASB issued ASU 2016-13, Financial Instruments - *Credit Losses (Topic 326)*. This update will replace the incurred loss impairment methodology for credit losses on financial instruments with a methodology that requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The standard is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. We will adopt the new standard in the first quarter of 2020. We are currently assessing the impact of the new standard on on our financial statements.

In January 2017, FASB issued ASU 2017-04, *Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*. This new guidance simplifies the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. Under the new guidance, entities will perform goodwill impairment tests by comparing fair value of a reporting unit with its carrying amount and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. The standard is effective after December 15, 2019. We will adopt this standard in the first quarter of 2020. After the adoption of this standard, which will be applied prospectively, we will follow a one-step model for goodwill impairment. We do not anticipate this pronouncement to have a significant impact on our consolidated financial statements.

DISCLOSURE CONTROLS AND PROCEDURES

Our management is responsible for establishing and maintaining adequate disclosure controls and procedures for the Company. Our disclosure controls and procedures are designed to ensure that information required to be disclosed in our reports filed with securities regulatory authorities is recorded, processed, summarized and reported within time periods specified in applicable securities regulations, and is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

We conducted an evaluation of the effectiveness of our disclosure controls and procedures, which was carried out under the supervision of, and with the participation of, our management, including our Chief Executive Officer and our Chief Financial Officer, as of December 31, 2019. Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of December 31, 2019 to ensure that information required to be disclosed by us in the reports we file or submit under applicable securities laws and regulations is recorded, processed, summarized, and reported within the time periods specified thereby.

We do not expect that our disclosure controls and procedures will prevent all errors and all fraud. Control procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control procedures are met. Because of the inherent limitations in all control procedures, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within our company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. We considered these limitations during the development of our disclosure controls and procedures and will periodically re-evaluate them to ensure they provide reasonable assurance that such controls and procedures are effective.

INTERNAL CONTROL OVER FINANCIAL REPORTING

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the U.S. Securities Exchange Act of 1934 and has designed such internal control over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP.

Our internal control over financial reporting includes those policies and procedures that: (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements on a timely basis. Also, projections of any evaluation of effectiveness of internal control over financial reporting to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of our Chief Executive Officer and our Chief Financial Officer, management conducted an evaluation of the effectiveness of our internal control over financial reporting, as of December 31, 2019, based on the framework set forth in *Internal Control-Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on its evaluation under this framework, management concluded that our internal control over financial reporting was effective as of that date.

Ernst & Young LLP ("EY"), an independent registered public accounting firm, who audited and reported on our consolidated financial statements as at and for the year ended December 31, 2019, has issued an attestation report on our internal control over financial reporting as of December 31, 2019. Their attestation report is included with our consolidated financial statements.

There were no changes in our internal control over financial reporting during the year ended December 31, 2019 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. During 2019, we initiated outsourcing of a select group of general and administrative transaction-based activities to a global outsourcing partner. Transition activities commenced in the third quarter of 2019 and we expect the activities to be fully transitioned by mid-2020. Management has concluded that this outsourcing has not materially affected the Company's internal controls in 2019. As the transition proceeds over the coming months, management will continually assess its impact on the Company's internal controls over financial reporting. The design of any system of controls and procedures is based in part upon certain assumptions about the likelihood of certain events. There can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions, regardless of how remote.

LEGAL PROCEEDINGS

In November 2019, Stormborn Technologies LLC filed a patent infringement lawsuit in the United States District Court for the District of Delaware, which lawsuit makes certain allegations concerning our FX and GL series devices. The lawsuit is in the initial pleadings stage.

In June 2019, Inventergy LBS, LLC filed a patent infringement lawsuit in the United States District Court of the Northern District of Georgia, which lawsuit makes certain allegations concerning our Uplink GPS Asset Tracking devices. The lawsuit has been dismissed with prejudice.

In January 2017, Koninklijke KPN N.V. filed a patent infringement lawsuit in the United States District Court for the District of Delaware asserting patent infringement by us and our U.S. subsidiary. The lawsuit makes certain allegations concerning the alleged use of data transmission error checking technology in our wireless products. In March 2018, the Court granted our motion for judgment on the pleadings that the plaintiff's patent is invalid. The plaintiff appealed this invalidity ruling to the Federal Circuit, and in November 2019, the Federal Circuit reversed the District Court's invalidity ruling. In District Court, we are continuing to pursue our counterclaims alleging that the plaintiff has breached its commitments to standard setting organizations. A summary judgement hearing has occurred, and a decision of the court is pending. Following the reversal of the invalidity ruling, the District Court has scheduled the matter for trial, coordinating the case with several other pending cases involving the plaintiff and the patent-in-suit and setting the first trial with an unspecified defendant for January 2021. In April 2019, the United States Patent and Trial Appeal Board rendered its final decision in our petition for *Inter Partes* Review of the patent-in-suit, and the instituted claims were not proved to be unpatentable.

In August 2014, M2M Solutions LLC filed a patent infringement lawsuit against us in District Court for the District of Delaware asserting patent infringement by us and our US subsidiary. The lawsuit makes certain allegations concerning our wireless products with respect to US Patent No. 8,648,717. In March 2017, the United States Patent and Trial Appeal Board issued its decisions in the instituted *Inter Partes* Review proceedings filed by us and other defendants, invalidating all independent claims and several dependent claims in the single patent-in-suit. In April 2017, M2M Solutions assigned the patent-in-suit to Blackbird Tech LLC ("Blackbird"), and they became a plaintiff in the lawsuit in June of that year. In September 2018, the court denied a motion to dismiss the lawsuit. Blackbird was granted leave to identify additional asserted claims and accused products with respect to the patent-in-suit. In November 2019, the Judge issued a claim construction order finding two of the remaining five claims in the patent-in-suit to be indefinite and therefore invalid. The lawsuit is currently nearing the end of the discovery stage. Trial in our case has been scheduled for January 2021.

Intellectual Property Indemnification Claims

We have been notified by certain of our customers in the following matter that we may have an obligation to indemnify them in respect of the products we supply to them:

In June 2019, Sisvel International S.A. and 3G Licensing S.A. (together, "Sisvel"), filed patent infringement lawsuits in the United States District Court for the District of Delaware against one or more of our customers alleging patent infringement with respect to a portfolio of 12 patents purportedly owned by Sisvel and obtained from Nokia Corporation (5 patents) and Blackberry, Ltd. (7 patents), that Sisvel alleges relate to technology for cellular communications networks including, but not limited to 2G, 3G and 4G/LTE. The allegations have been made in relation to certain of our customer's products, which may include products which utilize modules sold to them by us. The lawsuits are in the initial pleadings stage. Several defendants have filed motions to dismiss the lawsuits for failure to state a claim for which relief can be granted, which motions have been granted in February 2020 with leave given to the plaintiff to amend its pleadings.

Although there can be no assurance that an unfavorable outcome would not have a material adverse effect on our operating results, liquidity or financial position, we believe the claims made in the foregoing legal proceedings are without merit and intend to defend ourselves and our products vigorously in all cases.

We are engaged in certain other claims, legal actions and arbitration matters, all in the ordinary course of business, and believe that the ultimate outcome of these claims, legal actions and arbitration matters will not have a material adverse effect on our operating results, liquidity or financial position.

FINANCIAL RISK MANAGEMENT

Financial instruments consist primarily of cash and cash equivalents, accounts receivable, derivatives such as foreign currency forward and option contracts, accounts payable and accrued liabilities.

We have exposure to the following business risks:

We maintain substantially all of our cash and cash equivalents with major financial institutions or invest in government instruments. Our deposits with banks may exceed the amount of insurance provided on such deposits.

We outsource manufacturing of our products to third parties and, accordingly, we are dependent upon the development and deployment by third parties of their manufacturing abilities. The inability of any supplier or manufacturer to fulfill our supply requirements could impact future results. We have supply commitments to our contract manufacturers based on our estimates of customer and market demand. Where actual results vary from our estimates, whether due to execution on our part or market conditions, we are at risk.

Financial instruments that potentially subject us to concentrations of credit risk are primarily accounts receivable. We perform on-going credit evaluations of our customer's financial condition and require letters of credit or other guarantees whenever deemed appropriate.

Although a significant portion of our revenues are in U.S. dollars, we incur operating costs that are denominated in other currencies. Fluctuations in the exchange rates between these currencies could have a material impact on our business, financial condition and results of operations.

To manage our foreign currency risks, we enter into foreign currency forward contracts and options contracts to reduce our exposure to future foreign exchange fluctuations. Foreign currency forward and options contracts are recorded in *Accounts receivable* or *Account payable and accrued liabilities*. As of December 31, 2019, we had foreign currency forward contracts totaling $8.4 million Canadian dollars with an average forward rate of 1.347 maturing between January to June 2020. As at December 31, 2019, we did not have foreign currency options contracts outstanding.

We are subject to risks typical of an international business including, but not limited to, differing economic conditions, changes in political climate, differing tax structures other regulations and restrictions and foreign exchange rate volatility. Accordingly, our future results could be materially affected by changes in these or other factors.

RISKS AND UNCERTAINTIES

Our business is subject to significant risks and uncertainties and past performance is no guarantee of future performance. The risks and uncertainties described below are those which we currently believe to be material, and do not represent all of the risks that we face. Additional risks and uncertainties, not presently known to us, may become material in the future or those risks that we currently believe to be immaterial may become material in the future. If any of the following risks actually occur, alone or in combination, our business, financial condition and results of operations, as well as the market price of our common shares, could be materially adversely affected.

Competition from new or established IoT, cloud services and wireless services companies or from those with greater resources may prevent us from increasing or maintaining our market share and could result in price reductions and/or loss of business with resulting reduced revenues and gross margins.

The market for IoT products and services is highly competitive and rapidly evolving. We have experienced and expect to continue to experience the impact of intense competition on our business, including:

- competition from more established and larger companies with strong brands and greater financial, technical and marketing resources or companies with different business models;
- business combinations or strategic alliances by our competitors which could weaken our competitive position;
- introduction of new products or services by us that put us in direct competition with major new competitors;
- existing or future competitors who may be able to respond more quickly to technological developments and changes and introduce new products or services before we do; and
- competitors who may independently develop and patent technologies and products that are superior to ours or achieve greater acceptance due to factors such as more favorable pricing, more desired or better-quality features or more efficient sales channels.

If we are unable to compete effectively with our competitors' pricing strategies, technological advances and other initiatives, we may lose customer orders and market share and we may need to reduce the price of our products and services, resulting in reduced revenue and reduced gross margins. In addition, new market entrants or alliances between customers and suppliers could emerge to disrupt the markets in which we operate through disintermediation of our modules business or other means. There can be no assurance that we will be able to compete successfully and withstand competitive pressures.

The loss of any of our significant customers could adversely affect our revenue and profitability, and therefore shareholder value.

We sell our products and services to OEMs, enterprises, government agencies, distributors, resellers and network operators, and we are occasionally party to sales agreements with customers comprising a significant portion of our revenue. Accordingly, our business and future success depends on our ability to maintain and build on existing relationships and develop new relationships with OEMs, enterprises, government agencies, distributors, resellers and network operators. If certain of our significant customers, for any reason, discontinue their relationship with us, reduce or postpone current or expected purchase orders for products, reduce or postpone initiation or usage of our services or suffer from business loss, our revenues and profitability could decline materially.

In addition, our current customers purchase our products under purchase orders. Our customers have no contractual obligation to continue to purchase our products following our fulfillment of current purchase orders and if they do not continue to make purchases, our revenue and our profitability could decline materially.

Natural catastrophes or public health epidemics could result in production disruption and impact our capacity to continue critical operations.

Our business operations are subject to interruption by natural disasters and catastrophic events beyond our control, including, but not limited to, earthquakes, hurricanes, typhoons, tropical storms, floods, tsunamis, fires, droughts, tornadoes, public health issues and pandemics, severe changes in climate, war, terrorism, and geo-political unrest and uncertainties. In particular, the current outbreak of the novel coronavirus (COVID-19) that was first reported in Wuhan, China, on December 31, 2019, is impacting production by our contract manufacturers in China. The outbreak of coronavirus may also impact customer demand, the availability of key components sourced from China, logistics flows and the availability of other resources to support critical operations in the Asia Pacific region. If we are unable to mitigate the impacts of the novel coronavirus outbreak on our operations, we may be unable to fulfill our product delivery obligations to customers, our costs may increase, and our revenue and margins could decrease.

Our financial results are subject to fluctuations that could have a material adverse effect on our business and that could affect the market price of our common shares.

Our revenue, gross margin, operating earnings and net earnings may vary from quarter-to-quarter and could be significantly impacted by a number of factors, including but not limited to the following:

- price and product competition which may result in lower selling prices for some of our products and services or lost market share;
- price and demand pressure on our products and services from our customers as they experience pressure in their businesses;
- demand fluctuation based on the success of our customers in selling their products and solutions which incorporate our wireless products, services and software;
- development and timing of the introduction of our new products including the timing of sales orders, OEM and distributor customer sell through and design win cycles in our embedded wireless module business;
- transition periods associated with the migration to new technologies;
- potential commoditization and saturation in certain markets;
- our ability to accurately forecast demand in order to properly align the purchase of components and the appropriate level of manufacturing capability;
- product mix of our sales (our products have different gross margins - for example the embedded wireless module product line has lower gross margins than the higher margin rugged mobile product line);
- possible delays or shortages in component supplies;
- possible delays in the manufacturing or shipment of current or new products and the introduction of new services;

- possible product or service quality or factory yield issues that may increase our cost of sales;
- concentration in our customer base;
- seasonality in demand;
- amount of inventory held by our channel partners;
- possible fluctuations in certain foreign currencies relative to the U.S. dollar that may affect foreign denominated revenue, cost of sales and operating expenses;
- impairment of our goodwill or intangible assets which may result in a significant charge to earnings in the period in which an impairment is determined;
- achievement of milestones related to our professional services contracts; and
- operating expenses that are generally fixed in the short-term and therefore difficult to rapidly adjust to different levels of business.

Any of the factors listed above, or others, could cause significant variations in our revenues, gross margin and earnings in any given quarter. Therefore, our quarterly results are not necessarily indicative of our overall business, results of operations, and financial condition.

Quarterly variations in operating results or any of the other factors listed above, changes in financial estimates by securities analysts, failure to meet any guidance provided by us or any change in guidance provided by us, or other events or factors may result in wide fluctuations in the market price of our common shares. Broad market fluctuations or any failure of our operating results in a particular quarter to meet market expectations may adversely affect the market price of our common shares. Over the past several years, following volatility in the market price of a company's securities, class action litigation has often been commenced against the affected company. Any litigation of this type brought against us could result in substantial costs which could materially and adversely affect our business, financial position, results of operation or cash flows.

Our business transformation initiatives may result in disruptions to our business or may not achieve the anticipated benefits.

The Company is currently undertaking steps to transform the business in order to provide better alignment with our Device-to-Cloud strategy and drive greater automation and efficiency. Key initiatives include implementing a new go-to-market operating model, introduction of integrated online customer experience, consolidation of engineering sites, outsourcing of a select group of general and administration activities, optimization of terms with our third party manufacturers and re-organizing the product team to combine responsibilities for both devices and services. These changes will involve departure of skilled personnel, employees changing roles, adding new talent, realignment of teams, on-boarding of new partners, additional costs and working capital investments. Successfully executing these changes will be a significant factor in enabling future revenue growth. The anticipated benefits of these transformations may not be obtained if circumstances prevent us from taking advantage of the strategic and business opportunities that we expect they may afford us. As the transformation proceeds, there will be impact on costs and liquidity. Further, there could be a higher rate of organizational and business process change and our operations may not be able to recalibrate business processes in a timely and efficient manner thereby impacting the effectiveness of certain business processes, our ability to design, develop and commercially launch new products and services in a timely manner, and the delivery of our products and services to our customers. Our employees may not fully understand the plans to change the business and therefore staff morale and engagement may deteriorate as we implement the changes to our organization.

We may have difficulty responding to changing technology, industry standards and customer requirements, and therefore be unable to develop new products or services in a timely manner which meet the needs of our customers.

The wireless communications industry is subject to rapid technological change, including evolving industry standards, frequent new product inventions, constant improvements in performance characteristics and short product life cycles. Our business and future success will depend, in part, on our ability to accurately predict and anticipate evolving wireless technology standards and develop products and services that keep pace with the continuing changes in technology, evolving industry standards and changing customer and end-user preferences and requirements. Our products embody complex technology that may not meet those standards, preferences and requirements. Our ability to design, develop and commercially launch new products and services depends on a number of factors including, but not limited to, the following:

- our ability to design and manufacture products or implement solutions and services at an acceptable cost and quality;
- our ability to attract and retain skilled technical employees;
- the availability of critical components from third parties;
- our ability to successfully complete the development of products in a timely manner; and
- the ability of third parties to complete and deliver on outsourced product development engagements.

A failure by us, or our suppliers, in any of these areas or a failure of new products or services to obtain commercial acceptance, could mean we generate less revenue than we anticipate and we may be unable to recover our research and development expenses.

We develop products and services to meet our customers' requirements. OEM customers award design wins for the integration of wide area embedded wireless modules on a platform by platform basis. Current design wins do not guarantee future design wins. If we are unable or choose not to meet our customers' needs, we may not win their future business and our revenue and profitability may decrease.

In addition, wireless communications service providers require that wireless data systems deployed on their networks comply with their own standards, which may differ from the standards of other providers. We may be unable to successfully address these developments on a timely basis or at all. Our failure to respond quickly and cost-effectively to new standards through the development of new products or enhancements to existing products could cause us to be unable to recover significant research and development expenses and reduce our revenues.

Failures of our products or services due to design flaws and errors, component quality issues, manufacturing defects, network service interruptions, cyber-security vulnerabilities or other quality issues that may result in product liability claims and product recalls could lead to unanticipated costs or otherwise harm our business.

Our products are comprised of hardware and software that is technologically complex, and we are reliant on third parties to provide important components for our products. It is possible that our products and IoT services may contain undetected errors, defects or cyber-security vulnerabilities. As a result, our products or IoT services may be rejected by our customers or may not operate as intended, our services may be unavailable to our customers leading to loss of business, loss of revenue, additional development and customer service costs, unanticipated warranty claims, payment of monetary damages under contractual provisions and damage to our reputation. Certain components in our products provided by a third-party supplier may have been affected by a Global Positioning System ("GPS") week number rollover event which occurred on November 3, 2019. If our customers have not deployed the supplier-provided software update or an alternate remedy prior to the GSP week number rollover event, or such update or remedy is not effective to address the rollover, then the customer's application may not function correctly to the extent it is reliant on the GPS time, date or location data generated from such component.

In addition, our IoT services, including information systems and telecommunications infrastructure, could be disrupted by technological failures or cyber-attacks which could result in the inability of our customers to receive our services for an indeterminate period of time. Third parties seeking unauthorized access to our products may attempt to take advantage of the fact that we do not have a direct relationship with, and therefore may not know the identity of certain end users of our products, and these end users may not upgrade their software, apply security patches or otherwise monitor steps we take to address any cyber-security vulnerabilities. Any disruption to our services, such as failure of our network operations centers to function as required, or extended periods of reduced levels of service could cause us to lose customers or revenue, result in delays or cancellations of future implementations of our products and services, result in failure to attract customers, require customer service or repair work that would involve substantial costs, result in loss of customer data, result in litigation, payment of monetary damages under contractual provisions and distract management from operating our business.

Continued difficult or uncertain global economic conditions could adversely affect our operating results and financial condition.

A significant portion of our business is in the United States, Europe and the Asia-Pacific region and we are particularly exposed to the downturns and current uncertainties that impact the wireless communications industry in those economies. Economic uncertainty may cause an increased level of commercial and consumer delinquencies, lack of consumer confidence resulting in delayed purchases or reduced volumes by our customers, credit tightening by lenders, increased market volatility, fluctuations in foreign exchange rates and widespread reduction of business activity generally. To the extent that we experience further economic uncertainty, or deterioration in one of our large markets in the United States, Europe or the Asia-Pacific region, the resulting economic pressure on our customers may cause them to end their relationship with us, reduce or postpone current or expected orders for our products or services, or suffer from business failure, resulting in a material adverse impact to our revenues, profitability, cash flow and bad debt expense.

It is difficult to estimate or project the level of economic activity, including economic growth, in the markets we serve. As our budgeting and forecasting is based on the demand for our products and services, these economic uncertainties may result in difficulties in estimating future revenue and expenses.

We may be unable to attract or retain key personnel which may harm our ability to compete effectively.

Our success depends in large part on the skills and experience of our executive officers and other key employees. Competition for highly skilled management, technical, research and development and other key employees is intense in the wireless communications industry. We may not be able to retain our current executive officers or key employees and may not be able to hire and transition in a timely manner experienced and highly qualified additional executive officers and key employees as needed to achieve our business objectives. The loss of key employees or deterioration in overall employee morale and engagement as a result of organizational change could have an adverse impact on our growth, operations and profitability.

We do not have fixed-term employment agreements with our key personnel. As well, from time to time we may undertake transitions in our executive leadership. The loss of executive officers and key employees could disrupt our operations and our ability to compete effectively could be adversely affected.

Cyber-attacks or other breaches of information technology security could have an adverse impact on our business.

We rely on certain internal processes, infrastructure and information technology systems, including infrastructure and systems operated by third parties to efficiently operate our business in a secure manner. The inability to continue to enhance or prevent a failure of these internal processes, infrastructure or information technology systems could negatively impact our ability to operate our business. Our IoT services depend on very high levels of network reliability and availability in order to provide our customers with the ability to continuously monitor and receive data from their devices.

Cyber-attacks or other breaches of network or IT systems security may cause disruptions to our operations including the ability to provide connectivity, device management and other cloud-based services to our customers. Our industry is prone to cyber-attacks by third parties seeking unauthorized access to our data or our customers' data, or by third parties seeking to exploit our technology and devices to conduct denial of service attacks. The prevalence and sophistication of these types of threats are increasing and our frequently evolving security measures may not be sufficient to prevent the damage that such threats can inflict on our assets and information. The theft, unauthorized use or publication of our intellectual property and/or confidential business information could harm our competitive position, reduce the value of our investment in research and development and other strategic initiatives and/or otherwise adversely affect our business. Our security measures may also be breached due to employee error, malfeasance, system errors or vulnerabilities, including vulnerabilities of our vendors, suppliers, their products or otherwise. To the extent that any security breach results in inappropriate disclosure of our customers' confidential information or disruption of service to our customers, we may incur liability, be subject to legal action and suffer damage to our reputation. Our insurance may not be adequate to fully reimburse us for these costs and losses.

The transmission, use and disclosure of user data and personal information could give rise to liabilities or additional costs as a result of laws, governmental regulations and mobile network operator and other customer requirements or differing views of personal privacy rights.

Our products and services are used to transmit a large volume of data and potentially including personal information. This information is increasingly subject to legislation and regulations in numerous jurisdictions around the world that is intended to protect the privacy and security of personal information, as well as the collection, storage, transmission, use and disclosure of such information.

The interpretation of privacy and data protection laws in a number of jurisdictions is unclear and in a state of flux. There is a risk that these laws may be interpreted and applied in conflicting ways from country to country. Complying with these varying international requirements could cause us to incur additional costs and change our business practices. In addition, because our products and services are sold and used worldwide, certain foreign jurisdictions may claim that we are required to comply with their laws, even where we have no local entity, employees, or infrastructure.

We could be adversely affected if legislation or regulations are expanded to require changes in our products, services or business practices, if governmental authorities in the jurisdictions in which we do business interpret or implement their legislation or regulations in ways that negatively affect our business or if end users allege that their personal information was misappropriated because of a defect or vulnerability in our products or services. If we are required to allocate significant resources to modify our products, services or our existing security procedures for the personal information that our products and services transmit, our business, results of operations and financial condition may be adversely affected. The European Union General Data Protection Regulation ("GDPR"), which is designed to harmonize data privacy laws across Europe, became effective on May 25, 2018. We have made and continue to make improvements to our systems and processes to ensure that we are compliant with the GDPR. In addition, in the United States, the California Consumer Privacy Act ("CCPA") recently became effective on January 1, 2020. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing and receive detailed information about how their personal information is used by requiring covered companies to provide new disclosures to California consumers (as that term is broadly defined) and provide such consumers new ways to opt-out of certain sales of personal information. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. Like the GDPR and other evolving privacy and data protection laws worldwide, the CCPA may result in increased costs and may impact our ability to sell our products and services. A determination that we have violated any of these privacy or data protection laws could result in significant damage awards, fines and other penalties that could, individually or in the aggregate, materially harm our business and reputation.

Acquisitions and divestitures of businesses or technologies may result in disruptions to our business or may not achieve the anticipated benefits.

The growth of our company through the successful acquisition and integration of complementary businesses is an important component of our business strategy. We continue to evaluate opportunities to acquire or invest in businesses, products and technologies that expand, complement or otherwise relate to our business. For example, on January 7, 2020, we acquired M2M Group and expanded our IoT solutions business in the Asia-Pacific region. Any acquisitions, investments or business combinations by us may be accompanied by risks commonly encountered including, but not limited to, the following:

- exposure to unknown liabilities or risks of acquired companies, including unknown litigation related to acts or omissions of an acquired company and/or its directors and officers prior to the acquisition, deficiencies in disclosure controls and procedures of the acquired company and deficiencies in internal controls over financial reporting of the acquired company;
- higher than anticipated acquisition and integration costs and expenses;
- the difficulty and expense of integrating the operations and personnel of the acquired companies;
- use of cash to support the operations of an acquired business;
- increased foreign exchange translation risk depending on the currency denomination of the revenue and expenses of the acquired business;
- disruption of, and demands on, our ongoing business as a result of integration activities including diversion of management's time and attention from the ongoing business;
- failure to maximize our financial and strategic position by the successful incorporation of acquired technology;
- the inability to implement uniform standards, disclosure controls and procedures, internal controls over financial reporting and other procedures and policies in a timely manner;
- the potential loss of key employees and customers;
- decrease in our share price if the market perceives that an acquisition does not fit our strategy, the price paid is excessive in light of other similar transactions or that the terms of the acquisition are not favorable to our earnings growth;
- failure to anticipate or adequately address regulatory requirements that may need to be satisfied as part of a business acquisition or disposition;
- litigation and settlement costs if shareholders bring lawsuits triggered by acquisition or divestiture activities;
- decrease in our share price, if, as a result of our acquisition strategy or growth, we decide to raise additional capital through an offering of securities; and
- dilution to our shareholders if the purchase price is paid in common shares or securities convertible into common shares.

In addition, geographic distances and cultural differences may make integration of businesses more difficult. We may not be successful in overcoming these risks or any other problems encountered in connection with any acquisitions. If realized, these risks could reduce shareholder value.

As business circumstances dictate, we may also decide to divest assets, technologies or businesses. In a divestiture, we may not be successful in identifying or managing the risks commonly encountered, including: higher than anticipated costs; disruption of, and demands on, our ongoing business; diversion of management's time and attention; claims or litigation from the counterparties; adverse effects on existing business relationships with suppliers and customers and employee issues. These risks or any other problems encountered in connection with a divestiture of assets, technologies or businesses, if realized, could reduce shareholder value.

In addition, we may be unsuccessful at bringing to conclusion proposed transactions. Negotiations and closing activities, including regulatory review, of transactions are complex functions subject to numerous unforeseen events that may impede the speed at which a transaction is closed or even prevent a transaction from closing. Failure to conclude transactions in an efficient manner may prevent us from advancing other opportunities or introduce unanticipated transition costs.

We may be found to infringe on the intellectual property rights of others.

The industry has many participants that own, or claim to own, proprietary intellectual property. We license technology, intellectual property and software from third parties for use in our products and may be required to license additional technology, intellectual property and software in the future. In some cases, these licenses provide us with certain pass-through rights for the use of other third-party intellectual property, which pass-through rights may be unilaterally adjusted, limited or removed under the terms of such licenses. Some licensors have instituted policies limiting the products they will cover under their licenses to end products only, which limits our ability to obtain new licenses from such licensors, where required, for our wireless embedded module products. There is no assurance that we will be able to maintain our third-party licenses or obtain new licenses when required and this inability could materially adversely affect our business and operating results and the quality and functionality of our products.

In the past we have received, and in the future, we are likely to continue to receive, assertions or claims from third parties alleging that our products violate or infringe their intellectual property rights. We may be subject to these claims directly or through indemnities against these claims which we have provided to certain customers and other third parties. Our component suppliers and technology licensors do not typically indemnify us against these claims and therefore we do not have recourse against them in the event a claim is asserted against us or a customer we have indemnified. This potential liability, if realized, could materially adversely affect our operating results and financial condition.

Activity in the wireless communications area by third parties, particularly those with tenuous claims, is prevalent. In the past, patent claims have been brought against us by third parties whose primary (or sole) business purpose is to acquire patents and other intellectual property rights, and not to manufacture and sell products and services. These entities aggressively pursue patent litigation, resulting in increased litigation costs for us. Infringement of intellectual property can be difficult to verify and litigation may be necessary to establish if we have infringed the intellectual property rights of others. In many cases, these third parties are companies with substantially greater resources than us, and they may choose to pursue complex litigation to a greater degree than we could. Regardless of whether these infringement claims have merit or not, we may be subject to the following:

- we may be found to be liable for potentially substantial damages, liabilities and litigation costs, including attorneys' fees;
- we may be prohibited from further use of intellectual property because of an injunction and may be required to cease selling our products that are subject to the claim;
- we may have to license third party intellectual property, incurring royalty fees that may or may not be on commercially reasonable terms; in addition, there is no assurance that we will be able to successfully negotiate and obtain such a license from the third party;
- we may have to develop a non-infringing alternative, which could be costly and delay or result in the loss of sales; in addition, there is no assurance that we will be able to develop such a non-infringing alternative;
- management attention and resources may be diverted;
- our relationships with customers may be adversely affected; and
- we may be required to indemnify our customers for certain costs and damages they incur in respect of such a claim.

In addition to potentially being found to be liable for substantial damages in the event of an unfavorable outcome in respect of such a claim and if we are unable to either obtain a license from the third party on commercially reasonable terms or develop a non-infringing alternative, we may have to cease the sale of certain products and restructure our business and, as a result, our operating results and financial condition may be materially adversely affected.

Misappropriation of our intellectual property could place us at a competitive disadvantage.

Our intellectual property is important to our success. We rely on a combination of patent protection, copyrights, trademarks, trade secrets, licenses, non-disclosure agreements and other contractual agreements to protect our intellectual property. Third parties may attempt to copy aspects of our products and technology or obtain information we regard as proprietary without our authorization. If we are unable to protect our intellectual property against unauthorized use by others it could have an adverse effect on our competitive position. Our strategies to deter misappropriation could be inadequate due to the following risks:

- non-recognition of the proprietary nature or inadequate protection of our methodologies in the United States, Canada, France or other foreign countries;
- undetected misappropriation of our intellectual property;
- the substantial legal and other costs of protecting and enforcing our rights in our intellectual property; and
- development of similar technologies by our competitors.

In addition, we could be required to spend significant funds and management resources could be diverted to defend our rights, which could disrupt our operations.

We depend on single source suppliers for some components used in our products and if these suppliers are unable to meet our demand, the delivery of our products to our customers may be interrupted.

From time to time, certain components used in our products have been, and may continue to be, in short supply. Such shortages in allocation of components may result in a delay in filling orders from our customers, which may adversely affect our business. In addition, our products are comprised of components, some of which are procured from single source suppliers, including where we have licensed certain software embedded in a component. Our single source suppliers may experience damage or interruption in their operations due to unforeseen events, be impacted by natural catastrophes or public health epidemics illnesses, including coronavirus, become insolvent or bankrupt, or experience claims of infringement, all of which could delay or stop their shipment of components to us, which may adversely affect our business, operating results and financial condition. If there is a shortage of any such components and we cannot obtain an appropriate substitute from an alternate supplier of components, we may not be able to deliver sufficient quantities of our products to our customers. If such shortages occur, we may lose business or customers and our operating results and financial condition may be materially adversely affected.

We depend on a limited number of third parties to manufacture our products. If they do not manufacture our products properly or cannot meet our needs in a timely manner, we may be unable to fulfill our product delivery obligations and our costs may increase, our revenue and margins could decrease.

We outsource the manufacturing of our products to several contract manufacturers and depend on these manufacturers to meet our needs in a timely and satisfactory manner at a reasonable cost. Third party manufacturers, or other third parties to which such third-party manufacturers in turn outsource our manufacturing requirements, may not be able to satisfy our manufacturing requirements on a timely basis, including by failing to meet scheduled production and delivery deadlines or to meet our product quality requirements or the product quality requirements of our customers. Insufficient supply or an interruption or stoppage of supply from such third-party manufacturers or our inability to obtain additional or substitute manufacturers when and if needed, and on a cost-effective basis, could have a material adverse effect on our business, results of operations and financial condition.

Our reliance on third party manufacturers subjects us to a number of risks, including but not limited to the following:

- potential business interruption due to unexpected events such as natural disasters, public health epidemic illnesses, such as coronavirus, labor unrest, cyber-attacks, technological issues or geopolitical events;
- the absence of guaranteed or adequate manufacturing capacity;
- potential violations of laws and regulations by our manufacturers that may subject us to additional costs for duties, monetary penalties, seizure and loss of our products or loss of our import privileges, and damage to our reputation;
- reduced control over delivery schedules, production levels, manufacturing yields, costs and product quality;
- the inability of our contract manufacturers to secure adequate volumes of components in a timely manner at a reasonable cost; and
- unexpected increases in manufacturing costs.

If we are unable to successfully manage any of these risks or to locate alternative or additional manufacturers or suppliers in a timely and cost-effective manner, we may not be able to deliver products in a timely manner. In addition, our results of operations could be harmed by increased costs, reduced revenues and reduced margins.

Under our manufacturing agreements, in many cases we are required to place binding purchase orders with our manufacturers well in advance of our receipt of binding purchase orders from our customers. In these situations, we consider our customers' good faith, non-binding forecasts of demand for our products. As a result, if the number of actual products ordered by our customers is materially different from the number of products we have instructed our manufacturer to build (and to purchase the required components to complete such build instruction), then, if too many components have been purchased by our manufacturer, we may be required to purchase such excess component inventory, or, if an insufficient number of components have been purchased by our manufacturer, we may not be in a position to meet all of our customers' requirements. If we are unable to successfully manage our inventory levels and respond to our customers' purchase orders based on their forecasted quantities, our business, operating results and financial condition could be adversely affected.

We have been subject to certain class action lawsuits and may in the future be subject to class action or derivative action lawsuits, which if decided against us, could require us to pay substantial judgments, settlements or other penalties.

In addition to being subject to litigation in the ordinary course of business, we may be subject to class actions, derivative actions and other securities litigation and investigations. We expect that this type of litigation will be time consuming, expensive and will distract us from the conduct of our daily business. It is possible that we will be required to pay substantial judgments, settlements or other penalties and incur expenses that could have a material adverse effect on our operating results, liquidity or financial position. Expenses incurred in connection with these lawsuits, which include substantial fees of lawyers and other professional advisors and our obligations to indemnify officers and directors who may be parties to such actions, could materially adversely affect our reputation, operating results, liquidity or financial position. Furthermore, we do not know with certainty if any of this type of litigation and resulting expenses will be fully or even partially covered by our insurance. In addition, these lawsuits may cause our insurance premiums to increase in future periods.

We depend on mobile network operators to promote and offer acceptable wireless data services.

Our products and our wireless connectivity services can only be used over wireless data networks operated by third parties. Our business and future growth depends, in part, on the successful deployment by mobile network operators of next generation wireless data networks and appropriate pricing of wireless data services. We also depend on successful strategic relationships with our mobile network operator partners and our operating results and financial condition could be harmed if they increase the price of their services or experience operational issues with their networks. In certain cases, our mobile network operator partners may also offer services that compete with our IoT services business.

Contractual disputes could have a material adverse effect on our business.

Our business is exposed to the risk of contractual disputes with counterparties and as a result we may be involved in complaints, claims and litigation. We cannot predict the outcome of any complaint, claim or litigation. If a dispute cannot be resolved favorably, it may delay or interrupt our operations and may have a material adverse effect on our operating results, liquidity or financial position.

Government regulations could result in increased costs and inability to sell our products and services.

Our products and services are subject to certain mandatory regulatory approvals in the United States, Canada, the European Union, the Asia-Pacific region and other regions in which we operate. For example, in the United States the Federal Communications Commission regulates many aspects of communications devices. In Canada, similar regulations are administered by the Ministry of Industry, through Industry Canada. European Union directives provide comparable regulatory guidance in Europe. Although we have obtained all the necessary Federal Communications Commission, Industry Canada and other required approvals for the products we currently sell, we may not receive approvals for future products on a timely basis, or at all. In addition, regulatory requirements may change, or we may not be able to receive regulatory approvals from countries in which we may desire to sell products in the future. If we fail to comply with the applicable regulatory requirements, we may be subject to regulatory and civil liability, additional costs (including fines), reputational harm, and in severe cases, we may be prevented from selling our products in certain jurisdictions.

Environmental regulations or changes in the supply, demand or available sources of energy or other natural resources may affect the availability or cost of goods and services, including natural resources, necessary to manufacture our products and run our business.

We may also incur additional expenses or experience difficulties selling our products associated with complying with the SEC rules and reporting requirements related to conflict minerals. In August 2012, the SEC adopted new disclosure requirements implementing Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 for manufacturers of products containing certain minerals that may originate from the Democratic Republic of Congo and adjoining countries. As a result, since 2013 we have been required to conduct certain country of origin and due diligence procedures to meet the SEC reporting requirements. The impact of the regulations may limit the sourcing and availability, or may increase the costs, of some of the metals used in the manufacture of our products. Also, since our supply chain is complex, we may be unable to sufficiently verify the origins for all metals used in our products through our supplier due diligence procedures. As governments change in any of the markets in which we operate, there could be further uncertainties with respect to certain of our regulatory obligations in the near term, including with respect to fiscal and trade-related matters.

We are subject to risks inherent in foreign operations.

Sales outside North America represented approximately 60% of our revenues in 2019, and approximately 62% and 68% of our revenues in fiscal 2018 and 2017, respectively. We maintain offices in a number of foreign jurisdictions. We have limited experience conducting business in some of the jurisdictions outside North America and we may not be aware of all the factors that may affect our business in foreign jurisdictions. We are subject to a number of risks associated with our international business operations that may increase liabilities, costs, lengthen sales cycles and require significant management attention. These risks include:

- compliance with the laws of the United States, Canada and other countries that apply to our international operations, including import and export legislation, lawful access and privacy laws;

- compliance with existing and emerging anti-corruption laws, including the Foreign Corrupt Practices Act of the United States, the *Corruption of Foreign Public Officials Act* of Canada and the UK Bribery Act;
- increased reliance on third parties to establish and maintain foreign operations;
- the complexities and expense of administering a business abroad;
- complications in compliance with, and unexpected changes in, foreign regulatory requirements, including requirements relating to content filtering and requests from law enforcement authorities;
- trading and investment policies;
- consumer protection laws that impose additional obligations on us or restrict our ability to provide limited warranty protection;
- instability in economic or political conditions, including inflation, recession and actual or anticipated military conflicts, social upheaval or political uncertainty;
- foreign currency fluctuations;
- foreign exchange controls and cash repatriation restrictions;
- emerging protectionist trends in certain countries leading to new or higher tariffs and other trade barriers;
- difficulties in collecting accounts receivable;
- potential adverse tax consequences, including changes in tax policies in various jurisdictions that may render our tax planning strategy less effective than planned;
- uncertainties of laws and enforcement relating to the protection of intellectual property or secured technology;
- litigation in foreign court systems;
- cultural and language differences;
- difficulty in managing a geographically dispersed workforce in compliance with local laws and customs that vary from country to country; and
- other factors, depending upon the country involved.

There can be no assurance that the policies and procedures implemented by us to address or mitigate these risks will be successful, that our personnel will comply with them, that we will not experience these factors in the future or that they will not have a material adverse effect on our business, results of operations and financial condition.

Increases in tariffs or other trade restrictions may have an adverse impact on our business.

The United States and other countries have currently levied tariffs and taxes on certain goods manufactured in China and other jurisdictions. General trade tensions between the U.S. and China continue to be high. Certain of our components that we source from suppliers in China and import into the U.S. are included in the announced and implemented tariffs. At this point, we do not expect these tariffs to have a material impact on our business or results of operations. However, our business may be impacted by retaliatory trade measures taken by China or other countries in response to existing or future tariffs. If the U.S. were to impose additional tariffs on components that we or our suppliers source from China, our costs of such components would increase and our gross margins may decrease. We may also incur additional operating costs from our efforts to mitigate the impact of tariffs on our customers and our operations.

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the reference to our Firm under the caption “Experts”, and to the incorporation by reference in the Registration Statement (No. 333-210315) on Form S-8 of Sierra Wireless, Inc. and the use herein of our reports dated March 10, 2020, with respect to the consolidated balance sheets as at December 31, 2019 and 2018, and the related consolidated statements of operations and comprehensive earnings (loss), equity and cash flows for each of the years in the three year period ended December 31, 2019, and the effectiveness of internal control over financial reporting of Sierra Wireless, Inc. as of December 31, 2019, included in this Annual Report on Form 40-F.

Vancouver, Canada	/s/ Ernst & Young LLP
March 10, 2020	Chartered Professional Accountants

EXHIBIT 31.1

CERTIFICATION PURSUANT TO
RULE 13a-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Kent P. Thexton, certify that:

1. I have reviewed this annual report on Form 40-F of Sierra Wireless, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;
4. The issuer'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 issuer 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 issuer, 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 issuer’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 issuer’s internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer’s internal control over financial reporting; and
5. The issuer’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer’s auditors and the audit committee of the issuer’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 issuer’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 issuer’s internal control over financial reporting.

Date: March 10, 2020

/s/ Kent P. Thexton
Kent P. Thexton
Chief Executive Officer

CERTIFICATION PURSUANT TO
RULE 13a-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, David G. McLennan, certify that:

1. I have reviewed this annual report on Form 40-F of Sierra Wireless, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;
4. The issuer'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 issuer 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 issuer, 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 issuer'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 issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer’s internal control over financial reporting; and
5. The issuer's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer'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 issuer'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 issuer's internal control over financial reporting.

Date: March 10, 2020

/s/ David G. McLennan
David G. McLennan
Chief Financial Officer

EXHIBIT 32.1

CERTIFICATE OF THE CHIEF EXECUTIVE OFFICER
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 annual report of Sierra Wireless, Inc. (the "Corporation") on Form 40-F for the fiscal year ending December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Kent P. Thexton, Chief Executive Officer of the Corporation, certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(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 this Report fairly presents, in all material respects, the financial condition and results of operations of the Corporation.

Dated at Richmond, British Columbia, Canada this March 10, 2020.

/s/ Kent P. Thexton
Kent P. Thexton
Chief Executive Officer

This certification accompanies the Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by the Corporation for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

CERTIFICATE OF THE CHIEF FINANCIAL OFFICER
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 annual report of Sierra Wireless, Inc. (the “Corporation”) on Form 40-F for the fiscal year ending December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, David G. McLennan, Chief Financial Officer of the Corporation, certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(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 this Report fairly presents, in all material respects, the financial condition and results of operations of the Corporation.

Dated at Richmond, British Columbia, Canada this March 10, 2020.

/s/ David G. McLennan
David G. McLennan
Chief Financial Officer

This certification accompanies the Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by the Corporation for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.