
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

Form 10-K

(Mark One)

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended June 28, 2019 or
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
Commission File Number 001-33278

AVIAT NETWORKS, INC.
(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

860 N. McCarthy Blvd., Suite 200, Milpitas, California

(Address of principal executive offices)

20-5961564

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

95035

(Zip Code)

Registrant's telephone number, including area code: (408) 941-7100
Securities registered pursuant to Section 12(b) of the Act:

<u>Title of Each Class</u>	<u>Trading Symbol(s)</u>	<u>Name of Each Exchange on Which Registered</u>
Common Stock, par value \$0.01 per share	AVNW	NASDAQ Stock Market LLC

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

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

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

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

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

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

As of December 28, 2018, the aggregate market value of the registrant's common stock held by non-affiliates was approximately \$46.0 million. For purposes of this calculation, the registrant has assumed that its directors, executive officers and holders of 5% or more of the outstanding common stock are affiliates.

As of July 31, 2019, there was 5,364,851 shares of the registrant's common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for its Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days after the end of the registrant's fiscal year ended June 28, 2019, are incorporated by reference into Part III of this Annual Report on Form 10-K.

AVIAT NETWORKS, INC.
ANNUAL REPORT ON FORM 10-K
For the Fiscal Year Ended June 28, 2019
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CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, including “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations,” contains forward-looking statements that involve risks and uncertainties, as well as assumptions that, if they do not materialize or prove correct, could cause our results to differ materially from those expressed or implied by such forward-looking statements. All statements other than statements of historical fact are statements that could be deemed forward-looking statements, including statements of, about, concerning or regarding: our plans, strategies and objectives for future operations, including with respect to growing our business and sustaining profitability; our restructuring efforts; our research and development efforts and new product releases and services; trends in revenue; drivers of our business and the markets in which we operate; future economic conditions; performance or outlook and changes in our industry and the markets we serve; the outcome of contingencies; the value of our contract awards; beliefs or expectations; the sufficiency of our cash and our capital needs and expenditures; our intellectual property protection; our compliance with regulatory requirements and the associated expenses; expectations regarding litigation; our intention not to pay cash dividends; seasonality of our business; the impact of foreign exchange and inflation; taxes; and assumptions underlying any of the foregoing. Forward-looking statements may be identified by the use of forward-looking terminology, such as “anticipates,” “believes,” “expects,” “may,” “should,” “would,” “will,” “intends,” “plans,” “estimates,” “strategy,” “projects,” “targets,” “goals,” “seeing,” “delivering,” “continues,” “forecasts,” “future,” “predict,” “might,” “could,” “potential,” or the negative of these terms, and similar words or expressions.

These forward-looking statements are based on estimates reflecting the current beliefs of the senior management of Aviat Networks. These forward-looking statements involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. Forward-looking statements should therefore be considered in light of various important factors, including those set forth in this Annual Report on Form 10-K. Important factors that could cause actual results to differ materially from estimates or projections contained in the forward-looking statements include, but are not limited to, the following:

- *continued price and margin erosion as a result of increased competition in the microwave transmission industry;*
- *the impact of the volume, timing and customer, product and geographic mix of our product orders;*
- *our ability to meet financial covenant requirements which could impact, among other things, our liquidity;*
- *the timing of our receipt of payment for products or services from our customers;*
- *our ability to meet projected new product development dates or anticipated cost reductions of new products;*
- *our suppliers’ inability to perform and deliver on time as a result of their financial condition, component shortages or other supply chain constraints;*
- *customer acceptance of new products;*
- *the ability of our subcontractors to perform in a timely manner;*
- *continued weakness in the global economy affecting customer spending;*
- *retention of our key personnel;*
- *our ability to manage and maintain key customer relationships;*
- *uncertain economic conditions in the telecommunications sector combined with operator and supplier consolidations;*
- *our failure to protect our intellectual property rights or defend against intellectual property infringement claims by others;*
- *the results of our restructuring efforts;*
- *the ability to preserve and use our net operating loss carryforwards;*
- *the effects of currency and interest rate risks;*
- *the conduct of unethical business practices in developing countries; and*
- *the impact of political turmoil in countries where we have significant business.*

Other factors besides those listed here also could adversely affect us. See “Item 1A. Risk Factors” in this Annual Report on Form 10-K for more information regarding factors that may cause our results to differ materially from those expressed or implied by the forward-looking statements contained in this Annual Report on Form 10-K.

You should not place undue reliance on these forward-looking statements, which reflect our management’s opinions only as of the date of the filing of this Annual Report on Form 10-K. Forward-looking statements are made in reliance upon the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, along with provisions of the Private Securities Litigation Reform Act of 1995, and we undertake no obligation, other than as imposed by law, to update any forward-looking statements to reflect further developments or information obtained

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after the date of filing of this Annual Report on Form 10-K or, in the case of any document incorporated by reference, the date of that document.

PART I

Item 1. Business

Aviat Networks, Inc., together with its subsidiaries, is a global supplier of microwave networking solutions, backed by an extensive suite of professional services and support. Aviat Networks, Inc. may be referred to as “the Company,” “AVNW,” “Aviat Networks,” “we,” “us” and “our” in this Annual Report on Form 10-K.

We were incorporated in Delaware in 2006 to combine the businesses of Harris Corporation’s Microwave Communications Division (“MCD”) and Stratex Networks, Inc. (“Stratex”). On January 28, 2010, we changed our corporate name from Harris Stratex Networks, Inc. to Aviat Networks, Inc.

Our principal executive offices are located at 860 North McCarthy Boulevard, Suite 200, Milpitas, California 95035, and our telephone number is (408) 941-7100. Our common stock is listed on the NASDAQ Global Select Market under the symbol AVNW. As of June 28, 2019, we have 708 employees compared with 704 employees as of June 29, 2018.

Overview and Description of the Business

We design, manufacture and sell a range of wireless networking products, solutions and services to two principal customer types.

1. Communications Service Providers (CSPs): These include mobile and fixed telecommunications network operators, broadband and internet service providers and network operators which generate revenues from the communications services that they provide.
2. Private network operators: These are customers which do not resell communications services but build networks for reasons of economics, autonomy, and or security to support a wide variety of mission critical performance applications. Examples include, federal, state and local government agencies, transportation agencies, energy and utility companies, public safety agencies and broadcast network operators around the world.

We sell products and services directly to our customers, and, to a lesser extent, use agents and resellers.

Our products utilize microwave and millimeter wave technologies to create point to point wireless links for short, medium and long-distance interconnections. Our products incorporate Ethernet switching and IP routing capabilities optimized for a microwave and millimeter wave environment and for hybrid applications of microwave and optical fiber transport, to form complete networking solutions. We provide software tools and applications to enable deployment, monitoring, network management and optimization of our systems as well as to automate network design and procurement. We also source, qualify supply and support third party equipment such as antennas, routers, optical transmission equipment and other equipment necessary to build and deploy a complete telecommunications transmission network. We provide a full suite of professional services for planning, deployment, operations, optimization and maintenance of our customers’ networks.

Our wireless systems deliver urban, suburban, regional and country-wide communications links as the primary alternative to fiber optic connections. In dense urban and suburban areas, short range wireless solutions are faster to deploy and lower cost per mile than new fiber deployments. In developing nations, fiber infrastructure is scarce and wireless systems are used for both long and short distance connections. Wireless systems also have advantages over optical fiber in areas with rugged terrain, and to provide connections over bodies of water such as between islands or to offshore oil and gas production platforms. Though the air wireless transmission is also inherently lower in latency than transmission through optical cables and can be leveraged in time sensitive networking applications.

Revenue from our North America and international regions represented approximately 54% and 46%, respectively, of our revenue in fiscal 2019, 54% and 46%, respectively, of our revenue in fiscal 2018, and 55% and 45%, respectively, of our revenue in fiscal 2017. Information about our revenue attributable to our geographic regions is set forth in “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” and in “Note 9. Segment and Geographic Information” of the accompanying consolidated financial statements in this Annual Report on Form 10-K.

Market Overview

We believe that future demand for microwave and millimeter wave transmission systems will be influenced by a number of factors across several market segments.

Mobile Networks

As mobile networks expand, add subscribers and increase the number of wirelessly connected devices, sensors and machines, they require ongoing investment in backhaul infrastructure. Whether mobile network operators choose to self-build this backhaul infrastructure or lease backhaul services from other network providers, the evolution of the network drives demand for transmission technologies such as microwave and millimeter wave wireless backhaul. Within this overall scope there are multiple individual drivers for investment in backhaul infrastructure.

- *New RAN Technologies.* Mobile Radio Access Network (“RAN”) technologies are continually evolving. With the evolution from 2G to 3G (HSPA), 4G (HSPA+ and LTE), and the rapidly emerging 5G standards, technology is continuously advancing and providing subscribers with higher speed access to the Internet, social media, and video streaming services. The rapid increases in data to be transported through the RAN and across the backhaul infrastructure drives requirements for higher data transport links necessitating upgrades to or replacement of the existing backhaul infrastructure.
- *Subscriber Growth.* Traffic on the backhaul infrastructure increases as the number of unique subscribers grows.
- *Connected Devices.* The number of devices such as smart phones and tablets connected to the mobile network is far greater than the number of unique subscribers and is continuing to grow as consumers adopt multiple mobile device types. There is also rapid growth in the number and type of wireless enabled sensors and machines being connected to the mobile network creating new revenue streams for network operators in healthcare, agriculture, transportation and education. As a result, the data traffic crossing the backhaul infrastructure continues to grow rapidly.
- *IoT.* The Internet of Things (“IoT”) brings the potential of massive deployment of wireless end points for sensing and reporting data and remotely controlling machines and devices. The increase of data volume drives investment in network infrastructure.
- *Network Densification.* RAN frequency spectrum is a limited resource and shared between all of the devices and users within the coverage area of each base station. Meeting the combined demand of increasing subscribers and devices will require the deployment of much higher densities of base stations with smaller and smaller range (small cells) each requiring interconnection and proportionally driving increased demand for wireless backhaul and or fronthaul solutions as the primary alternative to optical fiber connectivity.
- *Geographic Coverage.* Expanding the geographic area covered by a mobile network requires the deployment of additional Cellular Base Station sites. Each additional base station site also needs to be connected to the core of the mobile network through expansion of the backhaul system.
- *License Mandates.* Mobile Operators are licensed telecommunications service providers. Licenses will typically mandate a minimum geographic footprint within a specific period of time and/or a minimum proportion of a national or regional population served. This can pace backhaul infrastructure investment and cause periodic spikes in demand.
- *Evolution to IP.* Network Infrastructure capacity, efficiency and flexibility is greatly enhanced by transitioning from legacy SDH (synchronous digital hierarchy) / SONET (synchronous optical network) / TDM (time division multiplexing) to IP (internet protocol) infrastructure. Our products offer integrated IP transport and routing functionality increasing the value they bring in the backhaul network.
- *Expansion of Offered Services.* Mobile network operators especially in emerging markets now own and operate the most modern communications networks within their respective regions. These network assets can be further leveraged to provide high speed broadband services to fixed locations such as small, medium and large business enterprises, airports, hotels, hospitals, and educational institutions. Microwave and millimeter wave backhaul is ideally suited to providing high speed broadband connections to these end points due to the lack of fiber infrastructure.

Other Vertical Markets

In addition to mobile backhaul, we see demand for microwave technology in other vertical markets, including utility, public safety, financial institutions and broadcast.

- Many utility companies around the world are actively investing in “Smart Grid” solutions and energy demand management, which drive the need for network modernization and increased capacity of networks.

- The investments in network modernization in the public safety market can significantly enhance the capabilities of security agencies. Improving border patrol effectiveness, enabling inter-operable emergency communications services for local or state police, providing access to timely information from centralized databases, or utilizing video and imaging devices at the scene of an incident requires a high bandwidth and reliable network. The mission critical nature of public safety and national security networks can require that these networks are built, operated and maintained independently of other public network infrastructure and microwave is very well suited to this environment because it is a cost-effective alternative to fiber.
- Microwave technology can be used to engineer long distance and more direct connections than optical cable. Microwave signals also travel through the air much faster than light through glass and the combined effect of shorter distance and higher speed reduces latency, which is valued for trading applications in the financial industry. Our products have already been used to create low latency connections between major centers in the United States (“U.S.”), Europe and Asia and we see long-term interest in the creation of further low latency routes in various geographies around the world.
- The enhancement of border security and surveillance networks to counter terrorism and insurgency is aided by the use of wireless technologies including microwave backhaul.

These factors are combining to create a range of opportunities for continued investment in backhaul and transport networks favoring microwave and millimeter wave technologies. As we focus on executing future generations of our technology, our goal is to make wireless technology a viable choice for an ever-broadening range of network types.

Strategy

As we continue executing our technology roadmap, we are engaging more deeply with customers on the evolution of use cases and applications as 5th Generation mobile and broadband networks edge closer to implementation and begin to factor more strongly in the vendor selection process. We are confident in our ability to address future 5G market needs.

We are focused on building a sustainable and profitable business with growth potential. We have invested in our people and processes to create a platform for operational excellence across sales, services, product development and supply chain areas while continuing to make investments in strengthening our product and services portfolio and expanding our reach into targeted market areas.

Our technology strategy has three main elements aligned to deliver a compelling Total Cost of Ownership (“TCO”) value proposition. The first is the integration of network routing functions into our wireless transport solution allowing our customers increased flexibility with a much better total cost solution. Second, we are expanding the data-carrying capacity of our wireless products to address the increasing data demand in networks of all types. Third, in order to address the operational complexity of planning, deploying, owning and operating microwave networks, we are investing in a combination of software applications, tools and services where simplification, process automation and our unique expertise in wireless technology can make a significant difference for our customers and partners.

We continued to develop our professional services portfolio as key to our long-term strategy and differentiation. During the year, we continued to expand the number of customer networks managed from our North America Network Operations Center. We began offering cloud-based network management to our customers and we continue to offer training and accreditation programs for microwave and IP network design, deployment and maintenance.

Our strategy includes partnering with companies with technical expertise in areas outside of our core competencies to meet our customers’ demand for an end-to-end solution. Our partner product strategy enables us to go beyond wireless transmission to address the vendor consolidation trend whereby customers are “buying more from fewer vendors” and in doing so providing expanding market share opportunity. A comprehensive solutions portfolio comprised of our wireless product and intelligent partner products can allow us to compete with vendors that offer turnkey solution portfolios and serve to focus our research and development (“R&D”) efforts on core competency wireless innovations. Having a broader portfolio will enable us to further differentiate our offerings from other independent microwave equipment suppliers.

We expect to continue to serve and expand upon our existing customer base and develop business with new customers. We intend to leverage our customer base, our longstanding presence in many countries, our distribution channels, our comprehensive product line, our superior customer service and our turnkey solution capability to continue to sell existing and new products and services to current and future customers.

Products and Solutions

Our strong product and solutions portfolio is key to building and maintaining our marquee base of customers. We offer a comprehensive product and solutions portfolio that meets the needs of service providers and network operators in every region of the world and that addresses a broad range of applications, frequencies, capacities and network topologies.

- *Broad product and solution portfolio.* We offer a comprehensive suite of wireless transmission systems for microwave and millimeter wave networking applications. These solutions utilize a wide range of transmission frequencies, ranging from 5 GHz to 90 GHz, and can deliver a wide range of transmission capacities, ranging up to 20 Gigabits per second (Gbps). The major product families included in these solutions are CTR 8000, WTM 4000 and AviatCloud. Our CTR 8000 platform merges the functionality of an indoor microwave modem unit and a cell site router into a single integrated solution, simplifying IP/MPLS deployments and creating a better performing network. The newest addition to our product portfolio is the WTM 4000, the highest capacity microwave radio ever produced, and purpose built for SDN. We have now introduced multiple important variants to the WTM 4000 platform; WTM4100 & 4200 providing single and dual frequency microwave links with advanced XPIC and MIMO capabilities; WTM4500 for multi-channel aggregation of microwave channels in long distance applications; WTM4800 is the latest addition to address 5G network requirements and is capable of operating in the 80GHz E Band at up to 20Gbps capacity, with the unique ability to operate in multi-band mode simultaneously using microwave and E Band frequencies for maximum robustness. To address the issues of operational complexity in our customers' networks, AviatCloud is an app-based platform to automate and virtualize networks and their operations.
- *Low total cost of ownership.* Our wireless-based solutions are focused on achieving a low total cost of ownership, including savings on the combined costs of initial acquisition, installation and ongoing operation and maintenance. Our latest generation system designs reduce rack space requirements, require less power, are software-configurable to reduce spare parts requirements, and are simple to install, operate, upgrade and maintain. Our advanced wireless features can also enable operators to save on related costs, including spectrum fees and tower rental fees.
- *Futureproof network.* Our solutions are designed to protect the network operator's investment by incorporating software-configurable capacity upgrades and plug-in modules that provide a smooth migration path to Carrier Ethernet and IP/MPLS (multiprotocol label switching) based networking, without the need for costly equipment substitutions and additions. Our products include key technologies we believe will be needed by operators for their network evolution to support new broadband services.
- *Flexible, easily configurable products.* We use flexible architectures with a high level of software configurable features. This design approach produces high-performance products with reusable components while at the same time allowing for a manufacturing strategy with a high degree of flexibility, improved cost and reduced time-to-market. The software features of our products offer our customers a greater degree of flexibility in installing, operating and maintaining their networks.
- *Comprehensive network management.* We offer a range of flexible network management solutions, from element management to enterprise-wide network management and service assurance that we can optimize to work with our wireless systems.
- *Complete professional services.* In addition to our product offerings, we provide network planning and design, site surveys and builds, systems integration, installation, maintenance, network monitoring, training, customer service and many other professional services. Our services cover the entire evaluation, purchase, deployment and operational cycle and enable us to be one of the few complete, turnkey solution providers in the industry.

Business Operations

Sales and Service

Our primary route to market is through our own direct sales, service and support organization. This provides us with the best opportunity to leverage our role as a technology specialist and differentiate ourselves from competitors. Our focus on key customers and geographies allows us to consistently achieve high customer satisfaction ratings leading to a high level of customer retention and repeat business. Our highest concentrations of Sales and Service resources are in the United States, Western and Southern Africa, the Philippines, and the European Union. We maintain a presence in a number of other countries, some of which are based in customer locations and include, but not limited to, Canada, Mexico, Kenya, India, Saudi Arabia, Australia, New Zealand, and Singapore.

In addition to our direct channel to market, we also have informal, and in some cases formal, relationships with original equipment manufacturers (“OEMs”) and system integrators especially focused towards large and complex projects in National Security and Government related applications. Our role in these relationships ranges from equipment supply only to being a sub-contractor for a portion of the project scope where we will supply equipment and a variety of design, deployment and maintenance services.

We also use indirect sales channels, including dealers, resellers and sales representatives, in the marketing and sale of some lines of products and equipment on a global basis. These independent representatives may buy for resale or, in some cases, solicit orders from commercial or governmental customers for direct sales by us. Prices to the ultimate customer in many instances may be recommended or established by the independent representative and may be above or below our list prices. These independent representatives generally receive a discount from our list prices and are free to set the final sales prices paid by the customer.

We have introduced a direct online sales option through our online “AviatStore” for our WTM radio platform, initially in North America and targeted at wireless internet service providers delivering broadband services in rural and underserved areas. We provide online design tools for radio link planning and on-line ordering tools, which we fulfill directly from our AviatStore with multiple options of product available for next day shipment. Shipments from AviatStore commenced late in 2018 and increased in our third and fourth fiscal quarters.

We have repair and service centers in India, Nigeria, Ghana, Mexico, the Philippines, the United Kingdom and the United States. We have customer service and support personnel who provide customers with training, installation, technical support, maintenance and other services on systems under contract. We install and maintain customer equipment directly, in some cases, and contract with third-party service providers in other cases, depending on the equipment being installed and customer requirements.

The specific terms and conditions of our product warranties vary depending upon the product sold and country in which we do business. On direct sales, warranty periods generally start on the delivery date and continue for one to three years.

Manufacturing

Our global manufacturing strategy follows an outsourced manufacturing model using contract manufacturing partners in both the United States and Asia. Our strategy is based on balancing cost and supplier performance as well as taking into account qualification for localization requirements of certain market segments, such as the Buy America statute.

In accordance with our global logistics requirements and customer geographic distribution, we are engaged with contract manufacturing partners in Asia and the United States. All manufacturing operations have been certified to International Standards Organization 9001, a recognized international quality standard. We have also been certified to the TL 9000 standard, a telecommunication industry-specific quality system standard.

Backlog

Our backlog was approximately \$160.1 million at June 28, 2019 and \$145.4 million (adjusted for Accounting Standards Codification 606 adoption) at June 29, 2018 consisting primarily of contracts or purchase orders for both product and service deliveries and extended service warranties. Services include management’s initial estimate of the value of a customer’s commitment under a services contract. The calculation used by management involves estimates and judgments to gauge the extent of a customer’s commitment, including the type and duration of the agreement, and the presence of termination charges or wind down costs. Contract extensions and increases in scope are treated as backlog only to the extent of the new incremental value. We regularly review our backlog to ensure that our customers continue to honor their purchase commitments and have the financial means to purchase and deploy our products and services in accordance with the terms of their purchase contracts. Backlog estimates are subject to change and are affected by several factors, including terminations, changes in the scope of contracts, periodic revalidation, adjustments for revenue not materialized and adjustments for currency.

We expect to substantially fill the backlog as of June 28, 2019 during fiscal 2020, but we cannot be assured that this will occur. Product orders in our current backlog are subject to changes in delivery schedules or to cancellation at the option of the purchaser without significant penalty. Accordingly, although useful for scheduling production, backlog as of any particular date may not be a reliable measure of sales for any future period because of the timing of orders, delivery intervals, customer and product mix and the possibility of changes in delivery schedules and additions or cancellations of orders.

Customers

Although we have a large customer base, during any given fiscal year or quarter, a small number of customers may account for a significant portion of our revenue.

During fiscal 2019 Mobile Telephone Networks Group (“MTN Group”) in Africa accounted for 11% of our total revenue compared with 13% in fiscal 2018 and 14% in fiscal 2017. We have entered into separate and distinct contracts with MTN Group as well as separate arrangements with MTN Group subsidiaries. The loss of all or a substantial portion of MTN Group’s business could adversely affect our results of operations, cash flows and financial position.

Competition

The microwave and millimeter wave wireless networking business is a specialized segment of the telecommunications industry that is sensitive to technological advancements and is extremely competitive. Our principal competitors include business units of large mobile and IP network infrastructure manufacturers such as Ericsson, Huawei, NEC Corporation and Nokia Corporation, as well as a number of smaller microwave specialist companies such as Ceragon Networks Ltd. and SIAE Microelectronica S.p.A.

Some of our larger competitors may have greater name recognition, broader product lines (some including non-wireless telecommunications equipment and managed services), a larger installed base of products and longer-standing customer relationships. They may from time to time leverage their extensive overall portfolios into completely outsourced and managed network offerings restricting opportunities for specialist suppliers. In addition, some competitors may offer seller financing, which can be a competitive advantage under certain economic climates.

Some of our larger competitors may also act as systems integrators through which we sometimes distribute and sell products and services to end users.

The smaller independent private and public specialist competitors typically leverage new technologies and low products costs but are generally less capable of offering a complete solution including professional services, especially in the North America and Africa regions which form the majority of our addressed market.

We concentrate on market opportunities that we believe are compatible with our resources, overall technological capabilities and objectives. Principal competitive factors are cost-effectiveness, product quality and reliability, technological capabilities, service, ability to meet delivery schedules and the effectiveness of dealers in international areas. We believe that the combination of our network and systems engineering support and service, global reach, technological innovation, agility and close collaborative relationships with our customers are the key competitive strengths for us. However, customers may still make decisions based primarily on factors such as price, financing terms and/or past or existing relationships, where it may be difficult for us to compete effectively or profitably.

Research and Development

We believe that our ability to enhance our current products, develop and introduce new products on a timely basis, maintain technological competitiveness and meet customer requirements is essential to our success. Accordingly, we allocate, and intend to continue to allocate, a significant portion of our resources to research and development efforts in key technology areas and innovation to differentiate our overall portfolio from our competition. The majority of such research and development resources will be focused on technologies in microwave and millimeter wave RF, digital signal processing, networking protocols and software applications.

Our research and development expenditures totaled \$21.1 million, or 8.7% of revenue, in fiscal 2019, \$19.8 million, or 8.1% of revenue, in fiscal 2018, and \$18.7 million, or 7.7% of revenue, in fiscal 2017.

Research and development are primarily directed to the development of new products and to building technological capability. We are an industry innovator and intend to continue to focus significant resources on product development in an effort to maintain our competitiveness and support our entry into new markets.

Our product development teams totaled 153 employees as of June 28, 2019, and were located in the United States, New Zealand, Slovenia and Canada.

Raw Materials and Supplies

Because of the range of our products and services, as well as the wide geographic dispersion of our facilities, we use numerous sources of raw materials needed for our operations and for our products, such as electronic components, printed

circuit boards, metals and plastics. We are dependent upon suppliers and subcontractors for a large number of components and subsystems and upon the ability of our suppliers and subcontractors to adhere to customers' or regulatory materials' restrictions and to meet performance and quality specifications and delivery schedules.

Our strategy for procuring raw material and supplies includes dual sourcing on strategic assemblies and components. In general, we believe this reduces our risk with regard to the potential financial difficulties in our supply base. In some instances, we are dependent upon one or a few sources, either because of the specialized nature of a particular item or because of local content preference requirements pursuant to which we operate on a given project. Examples of sole or limited source categories include metal fabrications and castings, for which we own the tooling and therefore limit our supplier relationships, ASIC's and MMICs (types of integrated circuit used in manufacturing microwave radios), which we procure at volume discount from a single source. Our supply chain plan includes mitigation plans for alternative manufacturing sources and identified alternate suppliers.

Although we have been affected by performance issues of some of our suppliers and subcontractors, we have not been materially adversely affected by the inability to obtain raw materials or products. In general, any performance issues causing short-term material shortages are within the normal frequency and impact range experienced by high-tech manufacturing companies and are due primarily to the highly technical nature of many of our purchased components.

Patents and Other Intellectual Property

We consider our patents and other intellectual property rights, in the aggregate, to constitute an important asset. We own a portfolio of patents, trade secrets, know-how, confidential information, trademarks, copyrights and other intellectual property. We also license intellectual property to and from third parties. As of June 28, 2019, we held 270 U.S. patents and 220 international patents and had 23 U.S. patent applications pending and 32 international patent applications pending. We do not consider our business to be materially dependent upon any single patent, license or other intellectual property right, or any group of related patents, licenses or other intellectual property rights. From time to time, we might engage in litigation to enforce our patents and other intellectual property or defend against claims of alleged infringement. Any of our patents, trade secrets, trademarks, copyrights and other proprietary rights could be challenged, invalidated or circumvented, or may not provide competitive advantages. Numerous trademarks used on or in connection with our products are also considered to be valuable assets.

In addition, to protect confidential information, including our trade secrets, we require our employees and contractors to sign confidentiality and invention assignment agreements. We also enter into non-disclosure agreements with our suppliers and appropriate customers to limit access to and disclosure of our proprietary information.

Although our ability to compete may be affected by our ability to protect our intellectual property, we believe that, because of the rapid pace of technological change in the wireless telecommunications industry, our innovative skills, technical expertise and ability to introduce new products on a timely basis will be more important in maintaining our competitive position than protection of our intellectual property. Trade secret, trademark, copyright and patent protections are important but must be supported by other factors such as the expanding knowledge, ability and experience of our personnel, new product introductions and product enhancements. Although we continue to implement protective measures and intend to vigorously defend our intellectual property rights, there can be no assurance that these measures will be successful.

Environmental and Other Regulations

Our facilities and operations, in common with those of our industry in general, are subject to numerous domestic and international laws and regulations designed to protect the environment, particularly with regard to wastes and emissions. We believe that we have complied with these requirements and that such compliance has not had a material adverse effect on our results of operations, financial condition or cash flows. Based upon currently available information, we do not expect expenditures to protect the environment and to comply with current environmental laws and regulations over the next several years to have a material impact on our competitive or financial position but can give no assurance that such expenditures will not exceed current expectations. From time to time, we receive notices from the U.S. Environmental Protection Agency or equivalent state or international environmental agencies that we are a potentially responsible party under the Comprehensive Environmental Response, Compensation and Liability Act, which is commonly known as the Superfund Act, and equivalent laws. Such notices may assert potential liability for cleanup costs at various sites, which include sites owned by us, sites we previously owned and treatment or disposal sites not owned by us, allegedly containing hazardous substances attributable to us from past operations. We are not presently aware of any such liability that could be material to our business, financial condition or operating results, but due to the nature of our business and environmental risks, we cannot provide assurance that any such material liability will not arise in the future.

Electronic products are subject to environmental regulation in a number of jurisdictions. Equipment produced by us is subject to domestic and international requirements requiring end-of-life management and/or restricting materials in products delivered to customers. We believe that we have complied with such rules and regulations, where applicable, with respect to our existing products sold into such jurisdictions.

Radio communications are also subject to governmental regulation. Equipment produced by us is subject to domestic and international requirements to avoid interference among users of radio frequencies and to permit interconnection of telecommunications equipment. We believe that we have complied with such rules and regulations with respect to our existing products, and we intend to comply with such rules and regulations with respect to our future products. Reallocation of the frequency spectrum also could impact our business, financial condition and results of operations.

We have a comprehensive policy and procedures in effect concerning conflict minerals compliance.

Employees

As of June 28, 2019, we employed 708 people compared with 704 people as of the end of fiscal 2018, and 710 as of the end of fiscal 2017. As of June 28, 2019, 268 of our employees are located in the U.S. We also utilized 30 and 32 independent contractors as of June 28, 2019 and June 29, 2018, respectively. None of our employees in the U.S. are represented by a labor union. In certain international subsidiaries, our employees are represented by workers' councils or statutory labor unions. In general, we believe that our employee relations are good.

Executive Officers of the Registrant

The name, age, position held with us, and principal occupation and employment during at least the past 5 years for each of our executive officers as of August 27, 2019, are as follows:

<u>Name and Age</u>	<u>Position Currently Held and Past Business Experience</u>
Michael A. Pangia, 58	Mr. Pangia has been our President and Chief Executive Officer and a member of our board of directors (the "Board") since July 18, 2011. From March 2009 to July 2011, he served as our Chief Sales Officer responsible for company-wide operations of the global sales and services organization. Prior to joining Aviat Networks, from 2008 to 2009, Mr. Pangia served as Senior Vice President, global sales operations and strategy at Nortel, where he was responsible for all operational aspects of the global sales function. From 2006 to 2008, he was President of Nortel's Asia region where his key responsibilities included sales and overall business management for all countries where Nortel did business in the region.
Stan Gallagher, 56	Mr. Gallagher joined Aviat Networks in June 2018 as our Senior Vice President, Chief Operating Officer and Principal Financial Officer. Mr. Gallagher is responsible for the operations, finance and IT organizations. Before joining Aviat, Mr. Gallagher was a Director and Operational Excellence/Supply Chain Management Lead at Synergetics Installations Worldwide, Inc. since 2012, and a Senior Consultant with LeadFirst Leadership Development Consultants since 2010. From 2007 to 2010, Mr. Gallagher held a number of leadership positions with various subsidiaries of General Electric.
Shaun McFall, 59	Mr. McFall was appointed Senior Vice President, Corporate Development in July 2018. Mr. McFall was Chief Strategy Officer from 2015 to July 2018. He was our Chief Marketing Officer since July 2008. Previously, from 2000 to 2008, he served as Vice President, Marketing for Aviat Networks and Stratex Networks. He has been with us since 1989.
Eric Chang, 46	Mr. Chang joined Aviat Networks in February 2016 as our Vice President, Corporate Controller and Principal Accounting Officer responsible for worldwide accounting, reporting, compliance and taxation. Prior to joining Aviat Networks, from 2013 to 2016, Mr. Chang was the Senior Director, Corporate Controller at Micrel, Incorporated. From 2007 to 2013, he served as Senior Director, Assistant Controller and Business Unit Controller at Atmel Corporation. From 2003 to 2007, he was at Ernst & Young LLP, most recent as Senior Audit Manager.

There is no family relationship between any of our executive officers or directors, and there are no arrangements or understandings between any of our executive officers or directors and any other person pursuant to which any of them was appointed or elected as an officer or director, other than arrangements or understandings with our directors.

Web site Access to Aviat Networks' Reports; Available Information

We maintain an Internet Web site at <http://www.aviatnetworks.com>. Our annual reports on Form 10-K, proxy statements, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to such reports, filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") are available free of charge on our Web site as soon as reasonably practicable after these reports are electronically filed with, or furnished to, the Securities and Exchange Commission ("SEC"). Our website and the information posted thereon are not incorporated into this Annual Report on Form 10-K or any current or other periodic report that we file or furnish to the SEC.

We will also provide the reports in electronic or paper form, free of charge upon request. All reports we file with or furnish to the SEC are also available free of charge via EDGAR through the SEC's website at <http://www.sec.gov>.

Additional information relating to our business and operations is set forth in "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Annual Report on Form 10-K.

Item 1A. Risk Factors

In addition to the risks described elsewhere in this Annual Report on Form 10-K and in certain of our other filings with the SEC, the following risks and uncertainties, among others, could cause our actual results to differ materially from those contemplated by us or by any forward-looking statement contained herein. Prospective and existing investors are strongly urged to carefully consider the various cautionary statements and risks set forth in this Annual Report on Form 10-K and our other public filings.

We have many business risks including those related to our financial performance, investments in our common stock, operating our business and legal matters. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties may also impair our business operations. If any of these risks occur, our financial condition and results of operations could be materially and adversely affected.

Our sales cycle may be lengthy, and the timing of sales, along with additional services such as warehousing, inventory management, installation and implementation of our products within our customers' networks, may extend over more than one period, which can make our operating results difficult to predict.

We anticipate difficulty in accurately predicting the timing of the sale of products and amounts of revenue generated from sales of our products, primarily in developing countries. The establishment of a business relationship with a potential customer is a lengthy process, generally taking several months and sometimes longer. Following the establishment of the relationship, the negotiation of purchase terms can be time-consuming, and a potential customer may require an extended evaluation and testing period. We expect that our product sales cycle, which results in our products being designed into our customers' networks, could take 12 to 24 months. A number of factors can contribute to the length of the sales cycle, including technical evaluations of our products, the design process required to integrate our products into our customers' networks and warehousing and/or inventory management services that may be requested by certain large customers. In anticipation of product orders, we may incur substantial costs before the sales cycle is complete and before we receive any customer payments. Specifically, should a customer require warehousing and/or inventory management services, such services may impact our operating results in any period due to the costs associated with providing such services and the fact that the timing of the revenue recognition may be delayed. As a result, in the event that a sale is not completed or is canceled or delayed, we may have incurred substantial expenses, making it more difficult for us to become profitable or otherwise negatively impacting our financial results. Furthermore, because of our lengthy sales cycle, our recognition of revenue from our selling efforts may be substantially delayed, our ability to forecast our future revenue may be more limited and our revenue may fluctuate significantly from quarter to quarter.

Once a purchase agreement has been executed, the timing and amount of revenue, if applicable, may remain difficult to predict. The completion of services such as warehousing and inventory management, installation and testing of the customer's networks and the completion of all other suppliers' network elements are subject to the customer's timing and efforts and other factors outside our control, each of which may prevent us from making predictions of revenue with any certainty and could cause us to experience substantial period-to-period fluctuations in our operating results.

Due to the volume of our international sales, we may be susceptible to a number of political, economic and geographic risks that could harm our business.

We are highly dependent on sales to customers outside the U.S. In each of fiscal 2019, 2018 and 2017, our sales to international customers accounted for 47% of total revenue. Significant portions of our international sales are in less developed countries. Our international sales are likely to continue to account for a large percentage of our products and services revenue for the foreseeable future. As a result, the occurrence of any international, political, economic or geographic event could result in a significant decline in revenue. In addition, compliance with complex foreign and U.S. laws and regulations that apply to our international operations increases our cost of doing business in international jurisdictions. These numerous and sometimes conflicting laws and regulations include internal control and disclosure rules, data privacy and filtering requirements, anti-corruption laws, such as the Foreign Corrupt Practices Act, and other local laws prohibiting corrupt payments to governmental officials, and anti-competition regulations, among others. Violations of these laws and regulations could result in fines and penalties, criminal sanctions against us, our officers, or our employees, prohibitions on the conduct of our business and on our ability to offer our products and services in one or more countries, and could also materially affect our brand, our international expansion efforts, our ability to attract and retain employees, our business, and our operating results. Although we have implemented policies and procedures designed to ensure compliance with these laws and regulations, there can be no assurance that our employees, contractors, or agents will not violate our policies.

Some of the risks and challenges of doing business internationally include:

- unexpected changes in regulatory requirements;
- fluctuations in international currency exchange rates including its impact on unhedgeable currencies and our forecast variations for hedgeable currencies;
- imposition of tariffs and other barriers and restrictions;
- management and operation of an enterprise spread over various countries;
- the burden of complying with a variety of laws and regulations in various countries;
- application of the income tax laws and regulations of multiple jurisdictions, including relatively low-rate and relatively high-rate jurisdictions, to our sales and other transactions, which results in additional complexity and uncertainty;
- the conduct of unethical business practices in developing countries;
- general economic and geopolitical conditions, including inflation and trade relationships;
- war and acts of terrorism;
- kidnapping and high crime rate;
- natural disasters;
- availability of U.S. dollars especially in countries with economies highly dependent on resource exports, particularly oil; and
- changes in export regulations.

While these factors and the impacts of these factors are difficult to predict, any one or more of them could adversely affect our business, financial condition and results of operations in the future.

We may undertake further restructuring activities, which may adversely impact our operations, and we may not realize all of the anticipated benefits of these activities or any potential future restructurings. Any restructuring activities may harm our business.

We continue to evaluate our business to determine the potential need to realign our resources as we continue to transform our business in order to achieve desired cost savings in an increasingly competitive market. In prior years, we have undertaken a series of steps to restructure our operations involving, among other things and depending on the year, reductions of our workforce, the relocation of our corporate headquarters and the reduction and outsourcing of manufacturing activities. We incurred restructuring charges of \$0.7 million, \$1.3 million and \$0.6 million in fiscal 2019, 2018 and 2017, respectively.

We have based our restructuring efforts on assumptions and plans regarding the appropriate cost structure of our business based on our product mix and projected sales, among other factors. Some of our assumptions include the elimination of jobs and the outsourcing of certain functions to reduce our operating expenses. These assumptions may not be accurate and we may not be able to operate in accordance with our plans. Should this occur we may determine that we must incur additional restructuring charges in the future. Moreover, we cannot assure you that we will realize all of the anticipated benefits of our restructuring actions or that we will not further reduce or otherwise adjust our workforce or exit, or dispose

of, certain businesses and product lines. Any decision to further limit investment, exit, or disposal of businesses or product lines may result in the recording of additional restructuring charges. Consequently, the costs actually incurred in connection with the restructuring efforts may be higher than originally planned and may not lead to the anticipated cost savings and/or improved results. For example, if we consolidate additional facilities in the future, we may incur additional restructuring and related expenses, which could have a material adverse effect on our business, financial condition or results of operations.

We must increase our revenues and/or reduce costs if we hope to maintain profitability.

As measured under U.S. generally accepted accounting principles (“U.S. GAAP”), we recorded net income attributable to our stockholders of \$9.7 million in fiscal 2019, compared to net income attributable to our stockholders of \$1.8 million in fiscal 2018 and net losses attributable to our stockholders of \$0.8 million in fiscal 2017. We generated cash from operations in fiscal 2019, 2018 and 2017.

Throughout fiscal 2019, we experienced strong price competition for new business in all regions while major customer consolidations from prior years also put pressure on revenue and gross margin. In addition, we saw pricing pressures in all markets, particularly in international markets. Customer consolidation may have an increasing negative impact on our revenue if Aviat is not selected as a vendor for the products and/or services we provide. In order to counter pricing pressures, we invested heavily in product improvements to reduce unit costs and enhance product features, decreased overall company expenses, and worked with our vendors to attain more favorable pricing. If we are unable to reduce product unit costs associated with enhanced product features, including payments to contract manufacturers and other suppliers, or achieve the projected cost reductions, we may not achieve profitability.

We cannot be certain that these actions or others that we may take will allow us to maintain operating profitability or net income as determined under U.S. GAAP in the future.

Our quarterly results may be volatile, which can adversely affect the trading price of our common stock.

Our quarterly operating results may vary significantly for a variety of reasons, many of which are outside our control. These factors could harm our business and include, among others:

- seasonality in the purchasing habits of our customers;
- the volume and timing of product orders and the timing of completion of our product deliveries and installations;
- our ability and the ability of our key suppliers to respond to changes on demand as needed;
- margin variability based on geographic and product mix;
- our suppliers’ inability to perform and deliver on time as a result of their financial condition, component shortages or other supply chain constraints;
- retention of key personnel;
- the length of our sales cycle;
- litigation costs and expenses;
- continued timely rollout of new product functionality and features;
- increased competition resulting in downward pressure on the price of our products and services;
- unexpected delays in the schedule for shipments of existing products and new generations of the existing platforms;
- maintaining appropriate inventory levels and purchase commitments;
- failure to realize expected cost improvement throughout our supply chain;
- order cancellations or postponements in product deliveries resulting in delayed revenue recognition;
- restructuring and streamlining of our operations;
- war and acts of terrorism;
- natural disasters;
- the ability of our customers to obtain financing to enable their purchase of our products;
- fluctuations in international currency exchange rates;
- regulatory developments including denial of export and import licenses;
- general economic conditions worldwide that affect demand and financing for microwave and millimeter wave telecommunications networks; and
- the timing and size of future restructuring plans and write-offs.

Our quarterly results are expected to be difficult to predict and delays in product delivery or closing a sale can cause revenue, margins and net income or loss to fluctuate significantly from anticipated levels. A substantial portion of our contracts are completed in the latter part of a quarter and a significant percentage of these are large orders. Because a significant portion of our cost structure is largely fixed in the short term, revenue shortfalls tend to have a disproportionately negative impact on our profitability and can increase our inventory. The number of large new transactions also increases the risk of fluctuations in our quarterly results because a delay in even a small number of these transactions could cause our quarterly revenues and profitability to fall significantly short of our predictions. In addition, we may increase spending in response to competitive actions or in pursuit of new market opportunities. Accordingly, we cannot provide assurances that we will be able to achieve profitability in the future or that if profitability is attained, that we will be able to sustain profitability, particularly on a quarter-to-quarter basis.

We cannot guarantee that our stock repurchase program will be fully implemented or that it will enhance long-term stockholder value.

In May 2018, our Board of Directors approved a stock repurchase program for the repurchase of up to \$7.5 million. The repurchase program may be suspended or discontinued at any time and we are not obligated to repurchase a specified number of shares. Our repurchase program even if fully implemented, may not enhance long-term stockholder value. During fiscal 2019, we repurchased \$2.3 million of our common stock in the open market. As of June 28, 2019, \$5.2 million remained available under our stock repurchase program.

Our success will depend on new products introduced to the marketplace in a timely manner, successfully completing product transitioning and achieving customer acceptance.

The market for our products and services is characterized by rapid technological change, evolving industry standards and frequent new product introductions. Our future success will depend, in part, on continuous, timely development and introduction of new products and enhancements that address evolving market requirements and are attractive to customers. If we fail to develop or introduce, on a timely basis, new products or product enhancements or features that achieve market acceptance, our business may suffer. Additionally, we work closely with a variety of third-party partners to develop new product features and new platforms. Should our partners face delays in the development process, then the timing of the rollout of our new products may be significantly impacted which may negatively impact our revenue and gross margin. Another factor impacting our future success is the growth in the customer demand of our new products. Rapidly changing technology, frequent new product introductions and enhancements, short product life cycles and changes in customer requirements characterize the markets for our products. We believe that successful new product introductions provide a significant competitive advantage because of the significant resources committed by customers in adopting new products and their reluctance to change products after these resources have been expended. We have spent, and expect to continue to spend, significant resources on internal research and development to support our effort to develop and introduce new products and enhancements.

As we transition to new product platforms, we face significant risk that the development of our new products may not be accepted by our current customers or by new customers. To the extent that we fail to introduce new and innovative products that are adopted by customers, we could fail to obtain an adequate return on these investments and could lose market share to our competitors, which could be difficult or impossible to regain. Similarly, we may face decreased revenue, gross margins and profitability due to a rapid decline in sales of current products as customers hold spending to focus purchases on new product platforms. We could incur significant costs in completing the transition, including costs of inventory write-downs of the current product as customers transition to new product platforms. In addition, products or technologies developed by others may render our products non-competitive or obsolete and result in significant reduction in orders from our customers and the loss of existing and prospective customers.

Changes in accounting standards issued by the Financial Accounting Standards Board (“FASB”) could adversely affect our financial condition and results of operations, and could require a significant expenditure of time, attention and resources, especially by senior management.

Our accounting and financial reporting policies conform to U.S. GAAP, which are periodically revised and/or expanded. The application of accounting principles is also subject to varying interpretations over time. Accordingly, we are required to adopt new or revised accounting standards or comply with revised interpretations that are issued from time to time by various parties, including accounting standard setters and those who interpret the standards, such as the FASB and the SEC and our independent registered public accounting firm. New financial accounting standards which may be adopted by FASB could result in significant changes to our accounting and/or financial reporting practices that could adversely affect our financial condition and results of operations.

Our average sales prices may decline in the future.

We are experiencing, and are likely to continue to experience, declining sales prices. This price pressure is likely to result in downward pricing pressure on our products and services. As a result, we are likely to experience declining average sales prices for our products. Our future profitability will depend upon our ability to improve manufacturing efficiencies, to reduce the costs of materials used in our products and to continue to introduce new lower-cost products and product enhancements and if we are unable to do so, we may not be able to respond to pricing pressures. If we are unable to respond to increased price competition, our business, financial condition and results of operations will be harmed. Because customers frequently negotiate supply arrangements far in advance of delivery dates, we may be required to commit to price reductions for our products before we are aware of how, or if, cost reductions can be obtained. As a result, current or future price reduction commitments and any inability on our part to respond to increased price competition could harm our business, financial condition and results of operations.

Credit and commercial risks and exposures could increase if the financial condition of our customers declines.

A substantial portion of our sales are to customers in the telecommunications industry. These customers may require their suppliers to provide extended payment terms, direct loans or other forms of financial support as a condition to obtaining commercial contracts. In addition, if local currencies cannot be hedged, we have an inherent exposure in our ability to convert monies at favorable rates from or to U.S. dollars. More generally, we expect to routinely enter into long-term contracts involving significant amounts to be paid by our customers over time. Pursuant to these contracts, we may deliver products and services representing an important portion of the contract price before receiving any significant payment from the customer. As a result of the financing that may be provided to customers and our commercial risk exposure under long-term contracts, our business could be adversely affected if the financial condition of our customers erodes. Over the past few years, certain of our customers have filed with the courts seeking protection under the bankruptcy or reorganization laws of the applicable jurisdiction or have experienced financial difficulties. The financial healthiness may be exacerbated in many emerging markets, where our customers are being affected not only by recession, but by deteriorating local currencies and a lack of credit. Upon the financial failure of a customer, we may experience losses on credit extended to such customer, losses relating to our commercial risk exposure and the loss of the customer's ongoing business. If customers fail to meet their obligations to us, we may experience reduced cash flows and losses in excess of reserves, which could materially adversely impact our results of operations and financial position.

We may not be able to obtain capital when desired on favorable terms, if at all, or without dilution to our stockholders.

We believe that our existing cash and cash equivalents, the available line of credit under our credit facility and future cash collections from customers will be sufficient to provide for our anticipated requirements for working capital and capital expenditures for the next 12 months and the foreseeable future. However, it is possible that we may not generate sufficient cash flow from operations or otherwise have the capital resources to meet our longer-term capital needs. If this occurs, we may need to sell assets, reduce capital expenditures, or obtain additional equity or debt financing. We have no assurance that additional financing will be available on terms favorable to us, or at all. If adequate funds are not available or are not available on acceptable terms if and when needed, our business, financial condition and results of operations could be harmed.

If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our stockholders could be significantly diluted, and these newly-issued securities may have rights, preferences or privileges senior to those of existing stockholders.

Our restructuring actions could harm our relationships with our employees and impact our ability to recruit new employees.

Employees, whether or not directly affected by any restructuring actions that we undertake, may seek employment with our business partners, customers or competitors. We cannot assure that the confidential nature of our proprietary information will not be compromised by any such employees who terminate their employment with us. Further, we believe that our future success will depend in large part upon our ability to attract, motivate and retain highly skilled personnel. We may have difficulty attracting and retaining such personnel as a result of a perceived risk of future workforce reductions, and we may terminate the employment of employees as part of a restructuring and later determine that such employees were important to the success of the ongoing business.

Our business could be adversely affected if we are unable to attract and retain key personnel.

Our success and ability to invest and grow depend largely on our ability to attract and retain highly skilled technical, professional, managerial, sales and marketing personnel. Historically, competition for these key personnel has been intense. The loss of services of any of our key personnel, the inability to retain and attract qualified personnel in the future, delays

in hiring required personnel, particularly engineering and sales personnel, or the loss of key personnel to competitors could make it difficult for us to meet key objectives, such as timely and effective product introductions and financial goals.

We face strong competition for maintaining and improving our position in the market, which can adversely affect our revenue growth and operating results.

The wireless access, interconnection and backhaul business is a specialized segment of the wireless telecommunications industry and is extremely competitive. Competition in this segment is intense, and we expect it to increase. Some of our competitors have more extensive engineering, manufacturing and marketing capabilities and significantly greater financial, technical and personnel resources than we have. In addition, some of our competitors have greater name recognition, broader product lines, a larger installed base of products and longer-standing customer relationships. Our competitors include established companies, such as Ericsson, Huawei, NEC and Nokia, as well as a number of other public and private companies, such as Ceragon and SIAE. Some of our competitors are OEMs or systems integrators through whom we market and sell our products, which means our business success may depend on these competitors to some extent. One or more of our largest customers could internally develop the capability to manufacture products similar to those manufactured or outsourced by us and, as a result, the demand for our products and services may decrease.

In addition, we compete for acquisition and expansion opportunities with many entities that have substantially greater resources than we have. Our competitors may enter into business combinations in order to accelerate product development or to compete more aggressively and we may lack the resources to meet such enhanced competition.

Our ability to compete successfully will depend on a number of factors, including price, quality, availability, customer service and support, breadth of product lines, product performance and features, rapid time-to-market delivery capabilities, reliability, timing of new product introductions by us, our customers and competitors, the ability of our customers to obtain financing and the stability of regional sociopolitical and geopolitical circumstances, and the ability of large competitors to obtain business by providing more seller financing especially for large transactions. We can give no assurances that we will have the financial resources, technical expertise, or marketing, sales, distribution, customer service and support capabilities to compete successfully, or that regional sociopolitical and geographic circumstances will be favorable for our successful operation.

If we fail to accurately forecast our manufacturing requirements or customer demand, we could incur additional costs, which would adversely affect our business and results of operations.

If we fail to accurately predict our manufacturing requirements or forecast customer demand, we may incur additional costs of manufacturing and our gross margins and financial results could be adversely affected. If we overestimate our requirements, our contract manufacturers may experience an oversupply of components and assess us charges for excess or obsolete components that could adversely affect our gross margins. If we underestimate our requirements, our contract manufacturers may have inadequate inventory or components, which could interrupt manufacturing and result in higher manufacturing costs, shipment delays, damage to customer relationships and/or our payment of penalties to our customers. Our contract manufacturers also have other customers and may not have sufficient capacity to meet all of their customers' needs, including ours, during periods of excess demand.

The effects of global financial and economic conditions in certain markets has had, and may continue to have, significant effects on our customers and suppliers, and has in the past, and may in the future have, a material adverse effect on our business, operating results, financial condition and stock price.

The effects of global financial and economic conditions in certain markets include, among other things, significant reductions in available capital and liquidity from banks and other providers of credit, substantial reductions and/or fluctuations in equity and currency values worldwide.

Economic conditions in certain markets have adversely affected and may continue to adversely affect our customers' access to capital and/or willingness to spend capital on our products, and/or their levels of cash liquidity and/or their ability and/or willingness to pay for products that they will order or have already ordered from us, or result in their ceasing operations. Further, we have experienced an increasing number of our customers, principally in emerging markets, requesting longer payment terms, lease or vendor financing arrangements, longer terms for the letters of credit securing purchases of our products and services, which could potentially negatively impact our orders, revenue conversion cycle, and cash flows.

In seeking to reduce their expenses, we have also seen significant pressure from our customers to lower prices for our products as they try to improve their operating performance and procure additional capital equipment within their reduced budget levels. To the extent that we lower prices on our products and services, our orders, revenues, and gross margins may be negatively impacted. Additionally, certain emerging markets are particularly sensitive to pricing as a key differentiator.

Where price is a primary decision driver, we may not be able to effectively compete, or we may choose not to compete due to unacceptable margins.

In addition, economic conditions in certain markets could materially adversely affect our suppliers' access to capital and liquidity with which to maintain their inventories, production levels, and/or product quality, could cause them to raise prices or lower production levels, or result in their ceasing operations. Further, with respect to our credit facility discussed under "Liquidity, Capital Resources and Financial Strategies" in Item 7 of this Annual Report on Form 10-K, if continued uncertain economic conditions adversely affect Silicon Valley Bank, our ability to access the funds available under our credit facility could be materially adversely affected.

The potential effects of these economic factors are difficult to forecast and mitigate. As a consequence, our operating results for a particular period are difficult to predict and prior results are not necessarily indicative of results to be expected in future periods. Any of the foregoing effects could have a material adverse effect on our business, results of operations, and financial condition and could adversely affect our stock price.

If we fail to effectively manage our contract manufacturer relationships, we could incur additional costs or be unable to timely fulfill our customer commitments, which would adversely affect our business and results of operations and, in the event of an inability to fulfill commitments, would harm our customer relationships.

We outsource all of our manufacturing and a substantial portion of our repair service operations to independent contract manufacturers and other third parties. Our contract manufacturers typically manufacture our products based on rolling forecasts of our product needs that we provide to them on a regular basis. The contract manufacturers are responsible for procuring components necessary to build our products based on our rolling forecasts, building and assembling the products, testing the products in accordance with our specifications and then shipping the products to us. We configure the products to our customer requirements, conduct final testing and then ship the products to our customers. Although we currently partner with multiple major contract manufacturers, there can be no assurance that we will not encounter problems as we are dependent on contract manufacturers to provide these manufacturing services or that we will be able to replace a contract manufacturer that is not able to meet our demand.

In addition, if we fail to effectively manage our relationships with our contract manufacturers or other service providers, or if one or more of them should not fully comply with their contractual obligations or should experience delays, disruptions, component procurement problems or quality control problems, then our ability to ship products to our customers or otherwise fulfill our contractual obligations to our customers could be delayed or impaired which would adversely affect our business, financial results and customer relationships.

We depend on sole or limited sources for some key components and failure to receive timely delivery of any of these components could result in deferred or lost sales.

In some instances, we are dependent upon one or a few sources, either because of the specialized nature of a particular item or because of local content preference requirements pursuant to which we operate on a given project. Examples of sole or limited sourcing categories include metal fabrications and castings, for which we own the tooling and therefore limit our supplier relationships, and MMICs (a type of integrated circuit used in manufacturing microwave radios), which we procure at a volume discount from a single source. Our supply chain plan includes mitigation plans for alternative manufacturing sources and identified alternate suppliers. However, if these alternatives cannot address our requirements when our existing sources of these components fail to deliver them on time, we could suffer delayed shipments, canceled orders and lost or deferred revenues, as well as material damage to our customer relationships. Should this occur, our operating results, cash flows and financial condition could be materially adversely affected.

As a result of changes in tax laws, treaties, rulings, regulations or agreements, or their interpretation, of any country in which we operate, the loss of a major tax dispute or a successful challenge to our operating structure, intercompany pricing policies or the taxable presence of our key subsidiaries in certain countries, or other factors, our effective tax rate could be highly volatile and could adversely affect our operating results.

We operate in multiple jurisdictions and our profits are taxed pursuant to the tax laws of these jurisdictions. Our future effective tax rate may be adversely affected by a number of factors, many of which are outside of our control, including:

- the jurisdictions in which profits are determined to be earned and taxed;
- adjustments to estimated taxes upon finalization of various tax returns;
- increases in expenses not deductible for tax purposes, including write-offs of acquired in-process research and development and impairment of goodwill in connection with acquisitions;
- ability to utilize net operating loss;

- changes in available tax credits;
- changes in share-based compensation expense;
- changes in the valuation of our deferred tax assets and liabilities;
- changes in domestic or international tax laws or the interpretation of such tax laws including the impact of the Tax Cuts and Jobs Act of 2017;
- the resolution of issues arising from tax audits with various tax authorities;
- the tax effects of purchase accounting for acquisitions and restructuring charges that may cause fluctuations between reporting periods; and
- taxes that may be incurred upon a repatriation of cash from foreign operations.

Any significant increase in our future effective tax rates could impact our results of operations for future periods adversely.

Our ability to use net operating loss carryforwards to offset future taxable income for U.S. federal income tax purposes and other tax benefits may be limited.

Section 382 of the Internal Revenue Code of 1986, as amended (the “Code”) imposes an annual limitation on the amount of taxable income that may be offset if a corporation experiences an “ownership change” as defined in Section 382 of the Code. An ownership change occurs when a company’s “five-percent shareholders” (as defined in Section 382 of the Code) collectively increase their ownership in the company by more than 50 percentage points (by value) over a rolling three-year period. Additionally, various states have similar limitations on the use of state net operating losses (“NOL”) following an ownership change.

If we experience an ownership change, our ability to use our NOLs, any loss or deducting attributable to a “net unrealized built-in loss” and other tax attributes (collectively, the “Tax Benefits”) could be substantially limited, and the timing of the usage of the Tax Benefits could be substantially delayed, which could significantly impair the value of the Tax Benefits. There is no assurance that we will be able to fully utilize the Tax Benefits and we could be required to record an additional valuation allowance related to the amount of the Tax Benefits that may not be realized, which could adversely impact our result of operations.

We believe that these Tax Benefits are a valuable asset for us. On September 6, 2016, the Board approved a Tax Benefit Preservation Plan (the “Plan”) in an effort to protect our Tax Benefits during the effective period of the Plan. Further, on September 6, 2016, the Board adopted certain amendments to our Amended and Restated Certificate of Incorporation, as amended (the “Charter Amendments”), which are intended to preserve the Tax Benefits by restricting certain transfers of our common stock. The Plan and the Charter Amendments were approved by our stockholders at our 2016 annual meeting of stockholders on November 16, 2016. Although the Plan and the Charter Amendments are intended to reduce the likelihood of an “ownership change” that could adversely affect us, there is no assurance that the restrictions on transferability in the Plan and the Charter Amendments will prevent all transfers that could result in such an “ownership change.” There also can be no assurance that the transfer restrictions in the Charter Amendments will be enforceable against all of our stockholders absent a court determination confirming such enforceability. The transfer restrictions may be subject to challenge on legal or equitable grounds.

The Plan and the Charter Amendments could make it more difficult for a third party to acquire, or could discourage a third party from acquiring, us or a large block of our common stock. A third party that acquires 4.9% or more of our common stock could suffer substantial dilution of its ownership interest under the terms of the Plan through the issuance of common stock or common stock equivalents to all stockholders other than the acquiring person. The acquisition may also be void under the Charter Amendments.

The foregoing provisions may adversely affect the marketability of our common stock by discouraging potential investors from acquiring our stock. In addition, these provisions could delay or frustrate the removal of incumbent directors and could make more difficult a merger, tender offer or proxy contest involving us, or impede an attempt to acquire a significant or controlling interest in us, even if such events might be beneficial to us and our stockholders.

Our customers may not pay for products and services in a timely manner, or at all, which would decrease our cash flows and adversely affect our working capital.

Our business requires extensive credit risk management that may not be adequate to protect against customer nonpayment. A risk of non-payment by customers is a significant focus of our business. We expect a significant amount of future revenue to come from international customers in developing countries. We do not generally expect to obtain collateral

for sales, although we require letters of credit or credit insurance as appropriate for international customers. For information regarding the percentage of revenue attributable to certain key customers, see the risks discussed in the following risk factor. Our historical accounts receivable balances have been concentrated in a small number of significant customers. Unexpected adverse events impacting the financial condition of our customers, bank failures or other unfavorable regulatory, economic or political events in the countries in which we do business may impact collections and adversely impact our business, require increased bad debt expense or receivable write-offs and adversely impact our cash flows, financial condition and operating results, which could also result in a breach of our bank covenants.

Because a significant amount of our revenue may come from a limited number of customers, the termination of any of these customer relationships may adversely affect our business.

Sales of our products and services historically have been concentrated in a small number of customers. Principal customers for our products and services include domestic and international wireless/mobile service providers, OEMs, as well as private network users such as public safety agencies; government institutions; and utility, pipeline, railroad and other industrial enterprises that operate broadband wireless networks. During fiscal 2019, 2018 and 2017, we had one customer in Africa, MTN Group that accounted for 11%, 13% and 14%, respectively, of our total revenue. Although we have a large customer base, during any given quarter a small number of customers may account for a significant portion of our revenue.

It is possible that a significant portion of our future product sales also could become even more concentrated in a limited number of customers. In addition, product sales to major customers have varied widely from period to period. The loss of any existing customer, a significant reduction in the level of sales to any existing customer, or our inability to gain additional customers could result in declines in our revenue or an inability to grow revenue. In addition, further consolidation of our potential customer base could result in purchasing decision delays as consolidating customers integrate their operations and could generally reduce our opportunities to win new customers to the extent that the number of potential customers decreases. Furthermore, as our customers become larger, they may have more leverage to negotiate better pricing which could adversely affect our revenues and gross margins.

Consolidation within the telecommunications industry could result in a decrease in our revenue.

The telecommunications industry has experienced significant consolidation among its participants, and we expect this trend to continue. Some operators in this industry have experienced financial difficulty and have filed, or may file, for bankruptcy protection. Other operators may merge and one or more of our competitors may supply products to the customers of the combined company following those mergers. This consolidation could result in purchasing decision delays and decreased opportunities for us to supply products to companies following any consolidation. This consolidation may also result in lost opportunities for cost reduction and economies of scale.

We continually evaluate strategic transaction opportunities which could involve merger, restructuring, divestiture, sale and/or acquisition activities that could disrupt our operations and harm our operating results.

Our growth depends upon market growth, our ability to enhance our existing products and our ability to introduce new products on a timely basis. We intend to continue to address the need to develop new products and enhance existing products through acquisitions, or “tuck-ins,” product lines, technologies, and personnel. Strategic transactions involve numerous risks, including the following:

- difficulties in integrating the operations, systems, technologies, products, and personnel of the combined companies, particularly companies with large and widespread operations and/or complex products;
- diversion of management’s attention from normal daily operations of the business and the challenges of managing larger and more widespread operations resulting from business combinations, sales, divestitures and /or restructurings;
- potential difficulties in completing projects associated with in-process research and development intangibles;
- difficulties in entering markets in which we have no or limited direct prior experience and where competitors in each market have stronger market positions;
- initial dependence on unfamiliar supply chains or relatively small supply partners;
- insufficient revenue to offset increased expenses associated with acquisitions; and
- the potential loss of key employees, customers, resellers, vendors and other business partners of our company or the companies with which we engage in strategic transactions following and continuing after announcement of an anticipated strategic transaction.

Strategic transactions may also cause us to:

- issue common stock that would dilute our current stockholders or cause a change in control of the combined company;
- use a substantial portion of our cash resources, or incur debt;
- significantly increase our interest expense, leverage and debt service requirements if we incur additional debt to pay for an acquisition;
- assume material liabilities;
- record goodwill and non-amortizable intangible assets that are subject to impairment testing on a regular basis and potential periodic impairment charges;
- incur amortization expenses related to certain intangible assets;
- incur tax expenses related to the effect of acquisitions on our intercompany R&D cost sharing arrangement and legal structure;
- incur large and immediate write-offs and restructuring and other related expenses; and
- become subject to intellectual property or other litigation.

Mergers, restructurings, sales and acquisitions of high-technology companies are inherently risky and subject to many factors outside of our control. No assurance can be given that any future strategic transactions will be successful and will not materially adversely affect our business, operating results or financial condition. Failure to manage and successfully complete a strategic transaction could materially harm our business and operating results. Even when an acquired or acquiring company has already developed and marketed products, there can be no assurance that product enhancements will be made in a timely fashion or that pre-acquisition due diligence will have identified all possible issues that might arise with respect to such products.

If we are unable to adequately protect our intellectual property rights, we may be deprived of legal recourse against those who misappropriate our intellectual property.

Our ability to compete will depend, in part, on our ability to obtain and enforce intellectual property protection for our technology in the U.S. and internationally. We rely upon a combination of trade secrets, trademarks, copyrights, patents and contractual rights to protect our intellectual property. In addition, we enter into confidentiality and invention assignment agreements with our employees and enter into non-disclosure agreements with our suppliers and appropriate customers so as to limit access to and disclosure of our proprietary information. We cannot give assurances that any steps taken by us will be adequate to deter misappropriation or impede independent third-party development of similar technologies. In the event that such intellectual property arrangements are insufficient, our business, financial condition and results of operations could be harmed. We cannot provide assurances that the protection provided to our intellectual property by the laws and courts of particular nations will be substantially similar to the protection and remedies available under U.S. law. Furthermore, we cannot provide assurances that third parties will not assert infringement claims against us based on intellectual property rights and laws in other nations that are different from those established in the U.S.

If we fail to develop and maintain distribution and licensing relationships, our revenue may decrease.

Although a majority of our sales are made through our direct sales force, we also market our products through indirect sales channels such as independent agents, resellers, OEMs and systems integrators. These relationships enhance our ability to pursue major contract awards and, in some cases, are intended to provide our customers with easier access to financing and a greater variety of equipment and service capabilities, which an integrated system provider should be able to offer. We may not be able to maintain our current relationships or develop new ones. If additional relationships are developed, they may not be successful. Furthermore, as we consider increasing licensing revenue based on upgraded technology, we may not be successful in transitioning customers to the planned software upgrades. Our inability to establish or maintain these distribution and licensing relationships could restrict our ability to market our products and thereby result in significant reductions in revenue. If these revenue reductions occur, our business, financial condition and results of operations would be harmed.

If sufficient radio frequency spectrum is not allocated for use by our products, or we fail to obtain regulatory approval for our products, our ability to market our products may be restricted.

We may be affected by the allocation and auction of the radio frequency spectrum by governmental authorities both in the U.S. and internationally. The unavailability of sufficient radio frequency spectrum may inhibit the future growth of wireless communications networks. In addition, to operate in a jurisdiction, we must obtain regulatory approval for our products and each jurisdiction in which we market our products has its own regulations governing radio communications. If we are unable to obtain sufficient allocation of radio frequency spectrum by the appropriate governmental authority or

obtain the proper regulatory approval for our products, our business, financial condition and results of operations may be harmed.

Our business is subject to changing regulation of corporate governance, public disclosure and anti-bribery measures which have resulted in increased costs and may continue to result in additional costs in the future and/or potential liabilities.

We are subject to rules and regulations of federal and state regulatory authorities, The NASDAQ Stock Market LLC (“NASDAQ”) and financial market entities charged with the protection of investors and the oversight of companies whose securities are publicly traded, and foreign and domestic legislative bodies. During the past few years, these entities, including the Public Company Accounting Oversight Board, the SEC, NASDAQ and several foreign governments, have issued requirements, laws and regulations and continue to develop additional requirements, laws and regulations, most notably the Sarbanes-Oxley Act of 2002 (“SOX”), and recent laws and regulations regarding bribery and unfair competition. Our efforts to comply with these requirements and regulations have resulted in, and are likely to continue to result in, increased general and administrative expenses and a diversion of substantial management time and attention from revenue-generating activities to compliance activities.

Moreover, because these laws, regulations and standards are subject to varying interpretations, their application in practice may evolve over time as new guidance becomes available. This evolution may result in continuing uncertainty regarding compliance matters and additional costs potentially necessitated by ongoing revisions to our disclosure and governance practices. Finally, if we are unable to ensure compliance with such requirements, laws, or regulations, we may be subject to costly prosecution and liability, and resulting reputational harm, from such noncompliance.

There are inherent limitations on the effectiveness of our controls.

We do not expect that our disclosure controls or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well-designed and operated, can provide only reasonable, not absolute, assurance that the control system’s objectives will be met. The design of a control system must reflect the fact that resource constraints exist, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, 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 errors or mistakes. Controls can also be circumvented by individual acts of some persons, by collusion of two or more people, or by management’s override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of the effectiveness of controls to future periods are subject to risks. Over time, controls may become inadequate due to changes in conditions or deterioration in the degree of compliance with policies or procedures. If our controls become inadequate, we could fail to meet our financial reporting obligations, our reputation may be adversely affected, our business and operating results could be harmed, and the market price of our stock could decline.

Our products are used in critical communications networks which may subject us to significant liability claims.

Because our products are used in critical communications networks, we may be subject to significant liability claims if our products do not work properly. We warrant to our current customers that our products will operate in accordance with our product specifications. If our products fail to conform to these specifications, our customers could require us to remedy the failure or could assert claims for damages. The provisions in our agreements with customers that are intended to limit our exposure to liability claims may not preclude all potential claims. In addition, any insurance policies we have may not adequately limit our exposure with respect to such claims. Liability claims could require us to spend significant time and money in litigation or to pay significant damages. Any such claims, whether or not successful, would be costly and time-consuming to defend, and could divert management’s attention and seriously damage our reputation and our business.

We may be subject to litigation regarding our intellectual property. This litigation could be costly to defend and resolve and could prevent us from using or selling the challenged technology.

The wireless telecommunications industry is characterized by vigorous protection and pursuit of intellectual property rights, which has resulted in often protracted and expensive litigation. Any litigation regarding patents or other intellectual property could be costly and time-consuming and could divert our management and key personnel from our business operations. The complexity of the technology involved and the uncertainty of intellectual property litigation increase these risks. Such litigation or claims could result in substantial costs and diversion of resources. In the event of an adverse result in any such litigation, we could be required to pay substantial damages, cease the use and transfer of allegedly infringing

technology or the sale of allegedly infringing products and expend significant resources to develop non-infringing technology or obtain licenses for the infringing technology. We can give no assurances that we would be successful in developing such non-infringing technology or that any license for the infringing technology would be available to us on commercially reasonable terms, if at all. This could have a materially adverse effect on our business, results of operation, financial condition, competitive position and prospects.

System security risks, data protection breaches, and cyber attacks could compromise our proprietary information, disrupt our internal operations and harm public perception of our security products, which could cause our business and reputation to suffer and adversely affect our stock price.

In the ordinary course of business, we store sensitive data, including intellectual property, our proprietary business information and proprietary information of our customers, suppliers and business partners, on our networks. The secure maintenance of this information is critical to our operations and business strategy. Increasingly, companies, including ours, are subject to a wide variety of attacks on their networks on an ongoing basis. Despite our security measures, our information technology and infrastructure may be vulnerable to penetration or attacks by computer programmers and hackers, or breached due to employee error, malfeasance or other disruptions. Any such breach could compromise our networks, creating system disruptions or slowdowns and exploiting security vulnerabilities of our products, and the information stored on our networks could be accessed, publicly disclosed, lost or stolen, which could subject us to liability to our customers, suppliers, business partners and others, and cause us reputational and financial harm. In addition, sophisticated hardware and operating system software and applications that we produce or procure from third parties may contain defects in design or manufacture, including “bugs” and other problems that could unexpectedly interfere with the operation of our networks.

If an actual or perceived breach of network security occurs in our network or in the network of a customer of our security products, regardless of whether the breach is attributable to our products, the market perception of the effectiveness of our products could be harmed. Because the techniques used by computer programmers and hackers, many of whom are highly sophisticated and well-funded, to access or sabotage networks change frequently and generally are not recognized until after they are used, we may be unable to anticipate or immediately detect these techniques. This could impede our sales, manufacturing, distribution or other critical functions. In addition, the economic costs to us to eliminate or alleviate cyber or other security problems, bugs, viruses, worms, malicious software systems and security vulnerabilities could be significant and may be difficult to anticipate or measure because the damage may differ based on the identity and motive of the programmer or hacker, which are often difficult to identify.

Anti-takeover provisions of Delaware law, the Plan, and provisions in our Amended and Restated Certificate of Incorporation, as amended, and Amended and Restated Bylaws could make a third-party acquisition of us difficult.

Because we are a Delaware corporation, the anti-takeover provisions of Delaware law could make it more difficult for a third party to acquire control of us, even if the change in control would be supported by our stockholders. We are subject to the provisions of Section 203 of the General Corporation Law of Delaware, which prohibits us from engaging in certain business combinations, unless the business combination is approved in a prescribed manner. In addition, our Amended and Restated Certificate of Incorporation, as amended, and Amended and Restated Bylaws also contain certain provisions that may make a third-party acquisition of us difficult, including the ability of the Board to issue preferred stock and the requirement that nominations for directors and other proposals by stockholders must be made in advance of the meeting at which directors are elected or the proposals are voted upon.

In addition, the Plan and the Charter Amendments could make an acquisition of us more difficult, and certain acquisitions may also be void under the Charter Amendments. The risks associated with the Plan and the Charter Amendments are described in more detail above under the heading “Our ability to use net operating loss carryforwards to offset future taxable income for U.S. federal income tax purposes and other tax benefits may be limited.”

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

As of June 28, 2019, we leased approximately 158,000 square feet of facilities worldwide, with approximately 39% in the United States, mostly in California, and Texas. Our corporate headquarters is located in Milpitas, California, and consists of approximately 19,000 square feet office space. We also lease approximately 41,000 square feet of office, assembly facilities and warehouse in multiple locations in Texas. Internationally, we lease approximately 96,000 square feet of facilities throughout Europe, Canada, South America, Africa and Asia regions, including offices in Singapore, Slovenia, Philippine

Islands, India, Mexico, Brazil, Canada, South Africa, Ghana, Ivory Coast, Kenya, Nigeria, Algeria, France, Netherlands, Poland, Russia, Australia, Dubai, Saudi Arabia, Lebanon, China, and Thailand. In addition, we own approximately 108,000 square feet of facilities in Wellington, New Zealand and Lanarkshire, Scotland.

We maintain our facilities in good operating condition and believe that they are suitable and adequate for our current and projected needs. We continuously review our anticipated requirements for facilities and may, from time to time, acquire additional facilities, expand existing facilities, or dispose of existing facilities or parts thereof, as we deem necessary.

For more information about our lease obligations, see “Note 11. Commitments and Contingencies” of the notes to consolidated financial statements, which are included in Item 8 in this Annual Report on Form 10-K.

Item 3. *Legal Proceedings*

We are subject from time to time to disputes with customers concerning our products and services. In May 2016, we received notification of a claim for \$1.0 million in damages from a customer in Austria alleging that certain of our products were defective. We are continuing to investigate this claim, and at this time an estimate of the reasonably possible loss or range of loss cannot be made.

From time to time, we may be involved in various other legal claims and litigation that arise in the normal course of our operations. We are aggressively defending all current litigation matters. Although there can be no assurances and the outcome of these matters is currently not determinable, we currently believe that none of these claims or proceedings are likely to have a material adverse effect on our financial position. We expect to defend each of these disputes vigorously. There are many uncertainties associated with any litigation and these actions or other third-party claims against us may cause us to incur costly litigation and/or substantial settlement charges. As a result, our business, financial condition, results of operations, and cash flows could be adversely affected. The actual liability in any such matters may be materially different from our estimates, if any.

We record accruals for our outstanding legal proceedings, investigations or claims when it is probable that a liability will be incurred and the amount of loss can be reasonably estimated. We evaluate, at least on a quarterly basis, developments in legal proceedings, investigations or claims that could affect the amount of any accrual, as well as any developments that would result in a loss contingency to become both probable and reasonably estimable. We have not recorded any accrual for loss contingencies associated with such legal claims or litigation discussed above.

Item 4. *Mine Safety Disclosures*

Not applicable.

PART II**Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities****Market Information on Common Stock**

Our common stock, with a par value of \$0.01 per share, is listed and primarily traded on the NASDAQ Global Select Market, under the ticker symbol AVNW (prior to January 28, 2010 our ticker symbol was HSTX). There was no established trading market for shares of our common stock prior to January 29, 2007.

According to the records of our transfer agent, as of July 31, 2019, there were 2,325 holders of record of our common stock.

Dividend Policy

We have not paid cash dividends on our common stock and do not intend to pay cash dividends in the foreseeable future. We intend to retain any earnings for use in our business. In addition, the covenants of our credit facility may restrict us from paying dividends or making other distributions to our stockholders under certain circumstances.

Sales of Unregistered Securities

During fiscal 2019, we did not issue or sell any unregistered securities.

Issuer Repurchases of Equity Securities

Following is a summary of stock repurchases for the fourth quarter of fiscal 2019:

Period	Total Number of Shares Repurchased	Weighted Average Price Paid per Share	Total Number of Shares Repurchased as Part of Publicly Announced Program	Approximate Dollar Value of Shares that May Yet be Repurchased Under the Program ⁽¹⁾ (in thousands)
March 30, 2019 through April 26, 2019	—	\$ —	—	\$ 5,623
April 27, 2019 through May 24, 2019	6,243	\$ 12.77	6,243	\$ 5,544
May 25, 2019 through June 28, 2019	27,480	\$ 13.16	27,480	\$ 5,183
Total	33,723	\$ 13.09	33,723	

⁽¹⁾ Stock Repurchase Programs

In May 2018, our board of directors approved a repurchase program, which does not have an expiration date, for the repurchase of up to \$7.5 million of our common stock. During the fourth quarter of fiscal 2019, we repurchased \$0.4 million of our common stock in the open market. As of June 28, 2019, \$5.2 million remained available under our stock repurchase program.

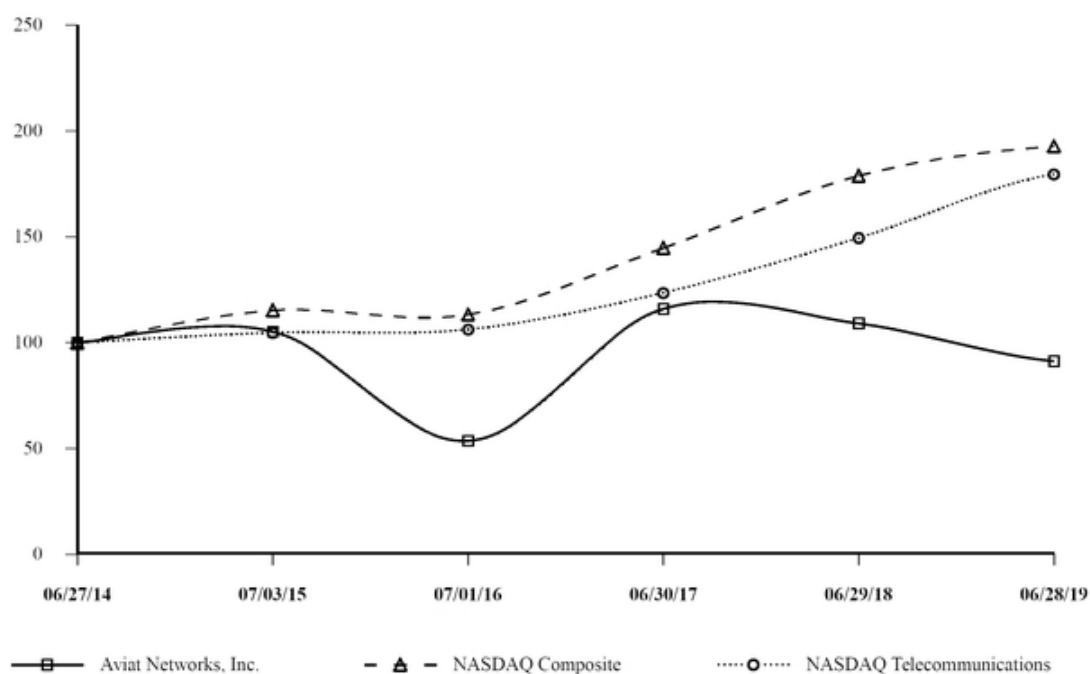
Performance Graph

The following graph and accompanying data compare the cumulative total return on our common stock with the cumulative total return of the Total Return Index for The NASDAQ Composite Market (U.S. Companies) and the NASDAQ Telecommunications Index for the five-year period ended June 28, 2019. The stock price performance shown on the graph below is not necessarily indicative of future price performance. Note that this graph and accompanying data is "furnished," not "filed," with the SEC.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Aviat Networks, Inc., the NASDAQ Composite Index

and the NASDAQ Telecommunications Index



	6/27/2014	7/3/2015	7/1/2016	6/30/2017	6/29/2018	6/28/2019
Aviat Networks, Inc.	\$ 100.00	\$ 105.20	\$ 53.63	\$ 115.92	\$ 109.06	\$ 91.27
NASDAQ Composite	\$ 100.00	\$ 115.25	\$ 113.26	\$ 144.70	\$ 178.85	\$ 192.77
NASDAQ Telecommunications	\$ 100.00	\$ 104.71	\$ 106.23	\$ 123.53	\$ 149.44	\$ 179.54

* Assumes (i) \$100 invested on June 27, 2014 in Aviat Networks, Inc. common stock, the Total Return Index for The NASDAQ Composite Market (U.S. companies) and the NASDAQ Telecommunications Index; and (ii) immediate reinvestment of all dividends.

Item 6. Selected Financial Data

The following table summarizes our selected historical financial information for each of the last five fiscal years that has been derived from our consolidated financial statements. All of the per-share data have been retroactively adjusted for the 1-for-12 reverse stock split discussed in footnote 3 below. Data presented for fiscal years 2019, 2018 and 2017 are included elsewhere in this Annual Report on Form 10-K. This table should be read in conjunction with our other financial information, including “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the consolidated financial statements and notes, included elsewhere in this Annual Report on Form 10-K.

(In thousands, except per share amounts)	Fiscal Year Ended				
	June 28, 2019	June 29, 2018	June 30, 2017	July 1, 2016	July 3, 2015
Revenue from product sales and services	\$ 243,858	\$ 242,506	\$ 241,874	\$ 268,690	\$ 335,878
Cost of product sales and services	164,588	162,003	166,402	206,973	255,188
Income (loss) from continuing operations ^{(1) (2)}	9,738	2,302	(621)	(30,178)	(24,648)
Net income (loss) ^{(1) (2)}	9,738	2,302	(621)	(29,637)	(24,554)
Net income attributable to noncontrolling interests, net of tax	—	457	202	270	71
Net income (loss) attributable to Aviat Networks ^{(1) (2)}	9,738	1,845	(823)	(29,907)	(24,625)
Basic and diluted income (loss) per common share ⁽³⁾ :					
Income (loss) from continuing operations - basic	\$ 1.81	\$ 0.35	\$ (0.16)	\$ (5.81)	\$ (4.77)
Net income (loss) - basic	\$ 1.81	\$ 0.35	\$ (0.16)	\$ (5.71)	\$ (4.75)
Net income (loss) - diluted	\$ 1.73	\$ 0.33	\$ (0.16)	\$ (5.71)	\$ (4.75)

- (1) Include share-based compensation expense of \$1.7 million, \$2.4 million, \$2.1 million, \$1.8 million and \$2.2 million for fiscal 2019, 2018, 2017, 2016, and 2015, respectively.
- (2) Include restructuring charges of \$0.7 million, \$1.3 million, \$0.6 million, \$2.5 million, and \$4.9 million for fiscal 2019, 2018, 2017, 2016, and 2015, respectively.
- (3) On June 14, 2016, we effected a reverse stock split of all of the outstanding shares of our common stock at a ratio of 1-for-12 (“Reverse Stock Split”). The authorized number of shares of 300 million and par value per share of our common stock of \$0.01 per share remained unchanged after the Reverse Stock Split.

(In thousands)	As of				
	June 28, 2019	June 29, 2018	June 30, 2017	July 1, 2016	July 3, 2015
Total assets	\$ 169,193	\$ 156,061	\$ 152,576	\$ 166,111	\$ 224,715
Long-term liabilities	15,466	12,077	12,218	12,707	18,198

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations**Overview of Business; Operating Environment and Key Factors Impacting Fiscal 2018 and 2019 Results**

The following Management’s Discussion and Analysis (“MD&A”) is intended to help the reader understand our results of operations and financial condition. MD&A is provided as a supplement to, and should be read in conjunction with, our consolidated financial statements and the accompanying notes. In the discussion below, our fiscal year ending July 3, 2020 is referred to as “fiscal 2020” or “2020”; our fiscal year ended June 28, 2019 is referred to as “fiscal 2019” or “2019”; our fiscal year ended June 29, 2018 is referred to as “fiscal 2018” or “2018”; and our fiscal year ended June 30, 2017 is referred to as “fiscal 2017” or “2017.”

Overview

We anticipate our overall revenue in fiscal 2020 to be higher in North America, offset by lower revenue from our international regions. This expectation is based on actual order volumes in fiscal 2019 and our observation of customer spending patterns going into fiscal 2020. We have a healthy backlog entering fiscal 2020 for North America private network projects and we anticipate continuing our strong momentum across these verticals. We have made inroads into the U.S. rural broadband and wireless internet service provider areas and there is evidence now of investment to support 5G deployments with our U.S. service provider customers. Internationally, we are taking a more conservative view of our revenue opportunity based on a variety of factors that have led to an overall capital spending decline and increased competitive intensity, especially from vendors based in China. While there is an attractive pipeline of international revenue opportunity, it has less clarity on timing and we are consequently lessening our international expectations with respect to fiscal 2020.

Operations Review

The market for mobile backhaul continued to be our primary addressable market segment globally in fiscal 2019. In North America, we supported long-term evolution (LTE) deployments of our mobile operator customers, public safety network deployments for state and local governments, and private network implementations for utilities and other customers. In international markets, our business continued to rely on a combination of customers increasing their capacity to handle subscriber growth, the ongoing build-out of some large 3G deployments, and LTE deployments. Our position continues to be to support our customers for 5G and LTE readiness and ensure that our technology roadmap is well aligned with evolving market requirements. We continue to find that our strength in turnkey and after-sale support services is a differentiating factor that wins business for us and enables us to expand our business with existing customers in all markets. However, as disclosed above and in the “Risk Factors” section in Item 1A of this Annual Report on Form 10-K, a number of factors could prevent us from achieving our objectives, including ongoing pricing pressures attributable to competition and macroeconomic conditions in the geographic markets that we service.

Revenue

We manage our sales activities primarily on a geographic basis in North America and three international geographic regions: (1) Africa and the Middle East, (2) Europe and Russia and (3) Latin America and Asia Pacific. Revenue by region for fiscal 2019, 2018 and 2017 and the related changes are shown in the table below:

(In thousands, except percentages)	Fiscal Year			\$ Change		% Change	
	2019	2018	2017	2019/2018	2018/2017	2019/2018	2018/2017
North America	\$ 132,884	\$ 131,078	\$ 132,078	\$ 1,806	\$ (1,000)	1.4 %	(0.8)%
Africa and the Middle East	48,305	58,459	60,150	(10,154)	(1,691)	(17.4)%	(2.8)%
Europe and Russia	16,933	18,205	14,128	(1,272)	4,077	(7.0)%	28.9 %
Latin America and Asia Pacific	45,736	34,764	35,518	10,972	(754)	31.6 %	(2.1)%
Total Revenue	\$ 243,858	\$ 242,506	\$ 241,874	\$ 1,352	\$ 632	0.6 %	0.3 %

During fiscal 2019, we recognized revenue based on Accounting Standard Codification (“ASC”) 606 but revenue for fiscal 2018 was recognized based on ASC 605. Therefore, the periods are not directly comparable. For additional information regarding the impact of ASC 606 on our revenue, please refer to “Note 3, Revenue Recognition” of the Notes to Consolidated Financial Statements in this Annual Report on Form 10-K.

Our revenue from North America increased by \$1.8 million, or 1.4%, in fiscal 2019 compared with fiscal 2018. The increase in North America revenue during fiscal 2019 was due to stronger order flow from private network customers,

overcoming a small decrease in orders from mobile operators. Revenue from North America decreased \$1.0 million, or 0.8%, in fiscal 2018 compared with fiscal 2017. While our overall North America revenue was nearly flat, the decrease during fiscal 2018 was due to our private networks customers.

Our revenue from Africa and the Middle East decreased by \$10.2 million, or 17.4%, in fiscal 2019 compared with fiscal 2018. The decrease in revenue was primarily due to decreased sales to our large mobile operator customers in the region and completion of a large Middle East project in fiscal 2018 that was not repeated in fiscal 2019. Revenue from Africa and the Middle East decreased \$1.7 million, or 2.8%, in fiscal 2018 compared with fiscal 2017. While we saw substantial revenue from a long running Middle East project during fiscal 2018, our sales to major African customers declined.

Revenue from Europe and Russia decreased by \$1.3 million, or 7.0%, in fiscal 2019 compared with fiscal 2018. The decrease was due to lower sales to mobile and private network customers in the region. Revenue in Europe and Russia increased \$4.1 million, or 28.9%, in fiscal 2018 compared with fiscal 2017. The increase during fiscal 2018 was due to the addition of a mobile network operator customer in the region which boosted our revenues compared to the prior year.

Revenue from Latin America and Asia Pacific increased by \$11.0 million, or 31.6%, in fiscal 2019 compared with fiscal 2018. The increase was primarily due to higher sales volume from certain mobile operator customers in Asia Pacific. Revenue from Latin America and Asia-Pacific decreased \$0.8 million, or 2.1%, in fiscal 2018 compared with fiscal 2017. Increased sales in the Asia Pacific region during fiscal 2018 were offset by decreased sales in Latin America.

(In thousands, except percentages)	Fiscal Year			\$ Change		% Change	
	2019	2018	2017	2019/2018	2018/2017	2019/2018	2018/2017
Product sales	\$ 156,724	\$ 151,685	\$ 153,517	\$ 5,039	\$ (1,832)	3.3 %	(1.2)%
Services	87,134	90,821	88,357	(3,687)	2,464	(4.1)%	2.8 %
Total Revenue	\$ 243,858	\$ 242,506	\$ 241,874	\$ 1,352	\$ 632	0.6 %	0.3 %

Our revenue from product sales increased by \$5.0 million, or 3.3%, in fiscal 2019 compared with fiscal 2018. Product volume increased primarily with mobile operators in Asia Pacific and a small increase in North America offsetting volume reductions in the other regions compared with fiscal 2018. Our services revenue decreased by \$3.7 million, or 4.1%, in fiscal 2019 compared with fiscal 2018. Decreased sales in Africa and the Middle East were offset in part by increased sales in other regions.

Our revenue from product sales decreased \$1.8 million, or 1.2%, in fiscal 2018 compared with fiscal 2017. Product sales were weaker in all markets during fiscal 2018, with the exceptions of the Middle East, Europe and Asia Pacific. We experienced a gain in Europe mainly due to the addition of a new mobile operator customer during fiscal 2018. The increase was offset by decreases in Africa, North America and Latin America as compared to fiscal 2017. Our services revenue increased \$2.5 million, or 2.8%, in fiscal 2018 compared with fiscal 2017 due to increased sales in the Middle East, Europe and North America.

Gross Margin

(In thousands, except percentages)	Fiscal Year			\$ Change		% Change	
	2019	2018	2017	2019/2018	2018/2017	2019/2018	2018/2017
Revenue	\$ 243,858	\$ 242,506	\$ 241,874	\$ 1,352	\$ 632	0.6 %	0.3 %
Cost of revenue	164,588	162,003	166,402	2,585	(4,399)	1.6 %	(2.6)%
Gross margin	\$ 79,270	\$ 80,503	\$ 75,472	\$ (1,233)	\$ 5,031	(1.5)%	6.7 %
% of revenue	32.5%	33.2%	31.2%				
Product margin %	33.9%	34.0%	31.5%				
Service margin %	29.9%	31.9%	30.7%				

Gross margin for fiscal 2019 decreased by \$1.2 million, or 1.5%, compared with fiscal 2018. Gross margin as a percentage of revenue for fiscal 2019 decreased to 32.5%, compared with 33.2% in fiscal 2018, primarily due to lower margin rates for services. Service margin as a percentage of service revenue declined in fiscal 2019 compared to fiscal 2018, primarily due to decreased margins in North America, the Middle East and Africa.

Gross margin for fiscal 2018 increased \$5.0 million, or 6.7%, compared with fiscal 2017. Gross margin as a percentage of revenue for fiscal 2018 improved to 33.2%, compared with 31.2% in fiscal 2017. Gross margin improvement was primarily due to improved sales margin rates from both product and service businesses due to improvements in service delivery performance and product mix. Product margin as a percentage of product revenue and service margin as a percentage of revenue increased over the same period in fiscal 2017 largely due to improved margins in the Middle East and Africa.

Research and Development Expenses

(In thousands, except percentages)	Fiscal Year			\$ Change		% Change	
	2019	2018	2017	2019/2018	2018/2017	2019/2018	2018/2017
Research and development expenses	\$ 21,111	\$ 19,750	\$ 18,684	\$ 1,361	\$ 1,066	6.9%	5.7%
% of revenue	8.7%	8.1%	7.7%				

Our R&D expenses increased by \$1.4 million, or 6.9%, in fiscal 2019 compared with fiscal 2018. The increase was primarily due to increased development activity on new product lines.

Our R&D expenses increased \$1.1 million, or 5.7%, in fiscal 2018 compared with fiscal 2017. The increase in R&D expenses was primarily due to a \$0.9 million increase in salaries and benefits as a result of foreign exchange, and a \$0.2 million increase in professional services and material spending. We continue to invest in new product features, new functionality and lower cost platforms that we believe will enable our product lines to retain their technology leads in a cost-effective manner.

Selling and Administrative Expenses

(In thousands, except percentages)	Fiscal Year			\$ Change		% Change	
	2019	2018	2017	2019/2018	2018/2017	2019/2018	2018/2017
Selling and administrative expenses	\$ 56,055	\$ 58,157	\$ 57,184	\$ (2,102)	\$ 973	(3.6)%	1.7%
% of revenue	23.0%	24.0%	23.6%				

Our selling and administrative expenses decreased by \$2.1 million, or 3.6%, in fiscal 2019 compared with fiscal 2018. The decrease was primarily due to lower variable compensation.

Our selling and administrative expenses increased \$1.0 million, or 1.7%, in fiscal 2018 compared with fiscal 2017. The increase was primarily due to a \$0.6 million increase in salaries and benefits as a result of foreign exchange and an increase of \$0.8 million in sales commissions. The increase was offset by a \$0.6 million reduction in professional fees primarily associated with accounting, IT, legal, and marketing consulting services.

Restructuring Charges

During the fourth quarter of fiscal 2018, our Board approved a restructuring plan (the "Fiscal 2018-2019 Plan") to consolidate back-office support functions and align resources by geography to lower our expense structure. We completed the restructuring activities under the Fiscal 2018-2019 Plan at the end of fiscal 2019. Payments related to the accrued restructuring liability balance for this plan are expected to be fully paid in fiscal 2020.

Our restructuring charges by plan for fiscal 2019, 2018 and 2017 are summarized in the table below:

(In thousands, except percentages)	Fiscal Year			\$ Change		% Change	
	2019	2018	2017	2019/2018	2018/2017	2019/2018	2018/2017
Fiscal 2018-2019 Plan	\$ 736	\$ 1,532	\$ —	\$ (796)	\$ 1,532	(52.0)%	N/A
Fiscal 2016-2017 Plan	—	(5)	345	5	(350)	N/A	(101.4)%
Other prior years plans	—	(248)	244	248	(492)	N/A	(201.6)%
Total	\$ 736	\$ 1,279	\$ 589	\$ (543)	\$ 690	(42.5)%	117.1 %

Restructuring charges in fiscal 2019 of \$0.7 million relates to employee severance and benefits to complete the Fiscal 2018-2019 Plan. Restructuring charges for fiscal 2018 included \$1.5 million of employee severance and benefits costs primarily related to the Fiscal 2018-2019 Plan and a reduction in the previously estimated accrual of \$0.3 million. Restructuring charges for fiscal 2017 included \$0.4 million of employee severance and benefits costs primarily related to a fiscal 2016-2017 restructuring plan and a \$0.2 million facility charge primarily consisting of headquarters moving costs. Payments related to our accrued restructuring liability balances for the 2018-2019 Plan are expected to be fully paid in fiscal 2020.

Interest Income, Interest Expense and Other Expense

(In thousands, except percentages)	Fiscal Year			\$ Change		% Change	
	2019	2018	2017	2019/2018	2018/2017	2019/2018	2018/2017
Interest income	\$ 267	\$ 198	\$ 261	\$ 69	\$ (63)	35%	(24)%
Interest expense	(102)	(29)	(50)	(73)	21	252%	(42)%
Other income (expense), net	17	(220)	169	237	(389)	N/A	N/A

Interest income reflected interest earned on our cash equivalents which were comprised of money market funds and bank certificates of deposit.

Interest expense was primarily related to interest associated with borrowings under our Silicon Valley Bank (“SVB”) credit facility and discounts on customer letters of credit.

Other expense included \$0.2 million and \$0.3 million in fiscal 2018 and 2017, respectively, related to the foreign exchange loss on a dividend declared by our Nigeria entity (a partnership for U.S. tax purposes) to our Aviat U.S. entity which was caused by a significant devaluation of the Nigerian Naira in June 2016. Other income in fiscal 2017 included a \$0.3 million foreign currency translation gain reclassified from accumulated other comprehensive loss upon liquidation of a dormant foreign legal entity.

Income Taxes

(In thousands, except percentages)	Fiscal Year			\$ Change	
	2019	2018	2017	2019/2018	2018/2017
Income (loss) before income taxes	\$ 1,550	\$ 1,266	\$ (605)	\$ 284	\$ 1,871
(Benefit from) provision for income taxes	(8,188)	(1,036)	16	(7,152)	(1,052)
As % of income (loss) before income taxes	(528.3)%	(81.8)%	(2.6)%		

Our (benefit from) provision for income taxes was \$8.2 million of benefit for fiscal 2019, \$1.0 million of benefit for fiscal 2018 and \$16 thousand of expense for fiscal 2017. Our tax benefit for fiscal 2019 was primarily due to the release of certain U.S. federal and state valuation allowances of \$7.5 million and a refundable foreign withholding tax credit, partially offset by losses in tax jurisdictions in which we cannot recognize tax benefits. During the first quarter of fiscal 2019, we received notification from the Department of Federal Revenue of Brazil that our withholding tax refund request had been approved. We recorded a net discrete income tax benefit of \$1.6 million for the release of valuation allowance previously recorded as a deferred tax asset for the withholding tax credits. This consisted of an income tax benefit of \$1.9 million for the refundable withholding tax credit, less tax expense of \$0.3 million from recognizing an ASC 740-10 reserve previously recorded as a reduction to the withholding tax credits.

During fiscal 2018, we received refund of \$1.3 million from the Inland Revenue Authority of Singapore (“IRAS”) related to a \$13.2 million tax assessment we paid in fiscal year 2014. The tax refund was recorded as a discrete tax benefit during the year the payment was received. During fiscal 2018, we recorded a valuation allowance release of \$3.3 million related to refundable alternative minimum tax credit under the Tax Cuts and Jobs Act (the “2017 Tax Act”). We expect to receive the refund of this tax benefit starting in our fiscal year 2021. The 2017 Tax Act reduced the corporate tax rate from 35% to 21%, effective January 1, 2018. Since we have a fiscal year end during the middle of the calendar year, we are subject to rules relating to transitional tax rates. As a result, our fiscal 2018 federal statutory rate was a blended rate of 28.1%.

Liquidity, Capital Resources and Financial Strategies

As of June 28, 2019, our cash and cash equivalents and short-term investments totaled \$31.9 million. Approximately \$15.0 million, or 47.0%, was held in the United States. The remaining balance of \$16.9 million, or 53.0%, was held by entities outside the United States. Of the amount of cash and cash equivalents held by our foreign subsidiaries at June 28, 2019, \$14.9 million was held in jurisdictions where our undistributed earnings are indefinitely reinvested, and if repatriated, would be subject to foreign withholding taxes.

Operating Activities

Cash provided by operating activities is presented as net income (loss) adjusted for certain non-cash items and changes in assets and liabilities. Net cash provided by operating activities was \$2.9 million for fiscal 2019, \$8.2 million for fiscal 2018 and \$9.4 million for fiscal 2017.

For fiscal 2019 compared to fiscal 2018, cash provided by operating activities declined by \$5.3 million. The net contribution of non-cash items to cash provided by operating activities decreased by \$7.2 million and the net contribution of changes in operating assets and liabilities to cash provided by operating activities decreased by \$5.5 million in fiscal 2019 as compared to fiscal 2018.

The \$7.2 million decrease in the net contribution of non-cash items to cash provided by operating activities was primarily due to a \$5.6 million net change in deferred tax assets, a \$0.7 million decrease in depreciation and amortization, a \$0.6 million decrease in share based compensation, and a \$0.3 million decrease from the recovery of an uncollectible receivable.

Changes in operating assets and liabilities resulted in a decrease of \$5.5 million for fiscal 2019 compared to fiscal 2018. Accounts receivable and unbilled costs fluctuate from period to period, depending on the amount, timing of sales and billing activities and cash collections. The fluctuations in accounts payable and accrued expenses during fiscal 2019 were primarily due to the timing of liabilities incurred and vendor payments. The change in inventories and in customer service inventories during fiscal 2019 were primarily due to demand, our focus on improving our inventory management, and the impact from the adoption of ASC 606. The decrease in customer advance payments and unearned revenue during fiscal 2019 was due to the timing of payment from customers and revenue recognition. We used \$1.3 million in cash during fiscal 2019 on expenses related to restructuring liabilities.

For fiscal 2018 compared to fiscal 2017, cash provided by operating activities declined by \$1.2 million. The net contribution of non-cash items to cash provided by operating activities decreased by \$3.6 million and the net contribution of changes in operating assets and liabilities to cash provided by operating activities decreased by \$0.6 million in fiscal 2018 as compared to fiscal 2017.

Investing Activities

Net cash used in investing activities was \$5.2 million for fiscal year 2019, \$6.3 million for fiscal 2018 and \$4.0 million for fiscal 2017, which consisted primarily of capital expenditures.

For fiscal 2020, we expect to spend approximately \$5.0 million for capital expenditures, primarily on equipment for development and manufacturing of new products and to support customer managed services.

Financing Activities

Financing cash flows consist primarily of proceeds and repayments of short-term debt, repurchase of stock and proceeds from sale of share of common stock through employee equity plans. Net cash used in financing activities was \$3.0 million for fiscal year 2019 primarily due to \$2.3 million for the repurchases of our common stock and a \$0.7 million payment for taxes related to the net settlement of equity awards. Net cash provided by financing activities was \$12,000 for fiscal 2018 and \$21,000 for fiscal 2017.

As of June 28, 2019, our principal sources of liquidity consisted of the \$31.9 million in cash, cash equivalents and short-term investments, \$15.1 million of available credit under our \$25.0 million credit facility with Silicon Valley Bank (“SVB Credit Facility”) which expires on June 29, 2020, and future collections of receivables from customers. We regularly require letters of credit from certain customers and, from time to time, these letters of credit are discounted without recourse

shortly after shipment occurs in order to meet immediate liquidity requirements and to reduce our credit and sovereign risk. Historically, our primary sources of liquidity have been cash flows from operations and credit facilities.

We believe that our existing cash and cash equivalents, the available line of credit under the SVB Credit Facility and future cash collections from customers will be sufficient to provide for our anticipated requirements for working capital and capital expenditures for at least the next 12 months. Our SVB Credit Facility expires on June 29, 2020. While we intend and expect the SVB Credit Facility to be renewed, there can be no assurance that the SVB Credit Facility will be renewed. In addition, there can be no assurance that our business will generate cash flow from operations, that we will be in compliance with the quarterly financial covenants contained in the SVB Credit Facility, or that we will have a sufficient borrowing base under such facility. If we are not in compliance with the financial covenants or do not have sufficient eligible accounts receivable to support our borrowing base, the availability of our credit facility is not certain or may be diminished. Over the longer term, if we are unable to maintain cash balances or generate sufficient cash flow from operations to service our obligations that may arise in the future, we may be required to sell assets, reduce capital expenditures, or obtain financing. If we need to obtain additional financing, we cannot be assured that it will be available on favorable terms, or at all. Our ability to make scheduled principal payments or pay interest on or refinance any future indebtedness depends on our future performance and financial results, which, to a certain extent, are subject to general conditions in or affecting the microwave communications market and to general economic, political, financial, competitive, legislative and regulatory factors beyond our control.

Available Credit Facility, Borrowings and Repayment of Debt

On June 10, 2019, we entered into Amendment No. 2 to Third Amended and Restated Loan and Security Agreement with Silicon Valley Bank. The SVB Credit Facility provides for a \$25.0 million accounts receivable formula based revolving credit facility that can be borrowed by the U.S. company, with a \$25.0 million sublimit that can be borrowed by our Singapore subsidiary. Loans may be advanced under the SVB Credit Facility based on a borrowing base equal to a specified percentage of the value of eligible accounts of all borrowers under the SVB Credit Facility. The borrowing base is subject to certain eligibility criteria. Availability under the accounts receivable formula based revolving credit facility can also be utilized to issue letters of credit with a \$12.0 million sublimit. We may prepay loans under the SVB Credit Facility in whole or in part at any time without premium or penalty. As of June 28, 2019, available credit under the SVB Credit Facility was \$15.1 million reflecting the calculated borrowing base of \$25.0 million less existing borrowings of \$9.0 million and outstanding letters of credit of \$0.9 million.

The SVB Credit Facility carries an interest rate, at our option, computed (i) at the prime rate reported in the Wall Street Journal plus a spread of 0.50% to 1.50%, with such spread determined based on our adjusted quick ratio; or (ii) if we satisfy a minimum adjusted quick ratio, a LIBOR rate determined in accordance with the SVB Credit Facility, plus a spread of 2.75%. Any outstanding Singapore subsidiary borrowed loans shall bear interest at an additional 2.00% above the applicable prime or LIBOR rate. During fiscal 2019, the weighted average interest rate on our outstanding loan was 5.91%. As of June 28, 2019 and June 29, 2018, our outstanding debt balance under the SVB Credit Facility was \$9.0 million, and the interest rate was 6.00% and 5.50%, respectively.

The SVB Credit Facility contains quarterly financial covenants including minimum adjusted quick ratio and minimum profitability (EBITDA) requirements. In the event our adjusted quick ratio falls below a certain level, cash received in our accounts with SVB may be directly applied to reduce outstanding obligations under the SVB Credit Facility. The SVB Credit Facility also imposes certain restrictions on our ability to dispose of assets, enter into a transaction resulting in a change in control, merge or consolidate, make acquisitions, incur indebtedness, grant liens, make investments, make certain restricted payments and enter into transactions with affiliates under certain circumstances. Certain of our assets, including accounts receivable, inventory, and equipment, are pledged as collateral for the SVB Credit Facility. Upon an event of default, outstanding obligations would be immediately due and payable. Under certain circumstances, a default interest rate will apply on all obligations during the existence of an event of default at a per annum rate of interest equal to 5.00% above the applicable interest rate.

As of June 28, 2019, we were in compliance with the quarterly financial covenants, as amended, contained in the SVB Credit Facility. The \$9.0 million borrowing was classified as a current liability as of June 28, 2019 and June 29, 2018. We repaid the \$9.0 million in July 2019.

We also obtained an uncommitted short-term line of credit of \$0.4 million from a bank in New Zealand to support the operations of our subsidiary located there in fiscal 2015. This line of credit provides for \$0.3 million in short-term advances at various interest rates, all of which was available as of June 28, 2019. The line of credit also provides for the issuance of standby letters of credit and company credit cards, of which \$0.1 million was outstanding as of June 28, 2019.

This facility may be terminated upon notice, is reviewed annually for renewal or modification, and is supported by a corporate guarantee.

Restructuring Payments

We had liabilities for restructuring activities totaling \$1.3 million as of June 28, 2019, of which \$1.1 million was classified as current liability and expected to be paid in cash over the next 12 months. We expect to fund these future payments with available cash and cash provided by operations.

Contractual Obligations

The following table summarizes our contractual obligations and commitments as of June 28, 2019:

(In thousands)	Obligations Due by Fiscal Year					
	Total	< 1 year	1 - 3 years	3 - 5 years	> 5 years	Other
Borrowings under credit facility	\$ 9,000	\$ 9,000	\$ —	\$ —	\$ —	\$ —
Purchase obligations ⁽¹⁾⁽⁴⁾	16,272	15,986	178	72	36	—
Other purchase obligations ⁽³⁾⁽⁴⁾	3,101	3,101	—	—	—	—
Operating lease commitments ⁽⁴⁾	6,358	2,052	1,724	492	2,090	—
Reserve for uncertain tax positions ⁽²⁾	3,606	—	—	—	—	3,606
Total contractual cash obligations	\$ 38,337	\$ 30,139	\$ 1,902	\$ 564	\$ 2,126	\$ 3,606

- (1) From time to time in the normal course of business we may enter into purchasing agreements with our suppliers that require us to accept delivery of, and remit full payment for, finished products that we have ordered, finished products that we requested be held as safety stock, and work in process started on our behalf in the event we cancel or terminate the purchasing agreement. Because these agreements do not specify fixed or minimum quantities, do not specify minimum or variable price provisions, and do not specify the approximate timing of the transaction, and we have no present intention to cancel or terminate any of these agreements, we currently do not believe that we have any future liability under these agreements.
- (2) Liabilities for uncertain tax positions of \$3.6 million were included in long-term liabilities in the consolidated balance sheets. At this time, we are unable to make a reasonably reliable estimate of the timing of payments related to this amount due to uncertainties in the timing of tax audit outcomes.
- (3) Contractual obligation related to software as a service and software maintenance support.
- (4) These items are not recorded on our consolidated balance sheets.

Commercial Commitments

We have entered into commercial commitments in the normal course of business including surety bonds, standby letters of credit and other arrangements with financial institutions and insurers primarily relating to the guarantee of future performance on certain tenders and contracts to provide products and services to customers. As of June 28, 2019, we had commercial commitments on outstanding surety bonds and standby letters of credit as follows:

(In thousands)	Expiration of Commitments by Fiscal Year				
	Total	2020	2021	2022	After 2022
Standby letters of credit used for:					
Bids	\$ 35	\$ —	\$ 35	\$ —	\$ —
Payment guarantees	263	263	—	—	—
Performance	582	564	18	—	—
	880	827	53	—	—
Surety bonds used for:					
Performance	56,651	49,465	7,186	—	—
Payment guarantees	100	—	—	—	100
Tax bonds	2,903	2,901	2	—	—
	59,654	52,366	7,188	—	100
Total commercial commitments	\$ 60,534	\$ 53,193	\$ 7,241	\$ —	\$ 100

Historically, we have not paid out any significant amount of our performance guarantees. As such, the outstanding commercial commitments have not been recorded in our consolidated balance sheets.

Off-Balance Sheet Arrangements

In accordance with the definition under SEC rules (Item 303(a) (4) (ii) of Regulation S-K), any of the following qualify as off-balance sheet arrangements:

- any obligation under certain guarantee contracts;
- a retained or contingent interest in assets transferred to an unconsolidated entity or similar entity or similar arrangement that serves as credit, liquidity or market risk support to that entity for such assets;
- any obligation, including a contingent obligation, under certain derivative instruments; and
- any obligation, including a contingent obligation, under a material variable interest held by us in an unconsolidated entity that provides financing, liquidity, market risk or credit risk support to us, or engages in leasing, hedging or research and development services with us.

Currently we are not participating in transactions that generate relationships with unconsolidated entities or financial partnerships, including variable interest entities, and we do not have any material retained or contingent interest in assets as defined above. As of June 28, 2019, we did not have material financial guarantees or other contractual commitments that are reasonably likely to adversely affect liquidity. In addition, we are not currently a party to any related party transactions that materially affect our results of operations, cash flows or financial condition.

Financial Risk Management

In the normal course of doing business, we are exposed to the risks associated with foreign currency exchange rates and changes in interest rates. We employ established policies and procedures governing the use of financial instruments to manage our exposure to such risks.

Exchange Rate Risk

We conduct business globally in numerous currencies and are therefore exposed to foreign currency risks. We use derivative instruments to reduce the volatility of earnings and cash flows associated with changes in foreign currency exchange rates. We do not hold or issue derivatives for trading purposes or make speculative investments in foreign currencies.

We also enter into foreign exchange forward contracts to mitigate the change in fair value of specific non-functional currency assets and liabilities on the balance sheet. All balance sheet hedges are marked to market through earnings every

period. Changes in the fair value of these derivatives are largely offset by re-measurement of the underlying assets and liabilities.

As of June 28, 2019, we had two foreign currency forward contracts outstanding as follows:

Currency	Notional Contract Amount (Local Currency)	Notional Contract Amount (USD)
	(In thousands)	
New Zealand dollar	500	\$ 329
British pound	500	\$ 647
Total of all currency forward contracts		<u>\$ 976</u>

Net foreign exchange gain (loss) recorded in our consolidated statements of operations during fiscal 2019, 2018 and 2017 was as follows:

(In thousands)	Fiscal Year		
	2019	2018	2017
Amount included in costs of revenues	\$ (664)	\$ 402	\$ (847)
Amount included in other (expense) income	—	(188)	135
Total foreign exchange (loss) gain, net	<u>\$ (664)</u>	<u>\$ 214</u>	<u>\$ (712)</u>

A 10% adverse change in currency exchange rates for our foreign currency derivatives held as of June 28, 2019 would have an impact of approximately \$0.1 million on the fair value of such instruments.

Certain of our international business are transacted in non-U.S. dollar currency. As discussed above, we utilize foreign currency hedging instruments to minimize the currency risk of international transactions. The impact of translating the assets and liabilities of foreign operations to U.S. dollars is included as a component of stockholders' equity. As of June 28, 2019 and June 29, 2018, the cumulative translation adjustment decreased our stockholders' equity by \$12.7 million and \$12.6 million, respectively.

In 2017, we reclassified a \$0.3 million foreign current translation gain from accumulated other comprehensive loss to other income (expense) upon liquidation of a dormant foreign legal entity.

Interest Rate Risk

Our exposure to market risk for changes in interest rates relates primarily to our cash equivalents, short-term investments and borrowings under our credit facility.

Exposure on Cash Equivalents and Short-term Investments

We had \$31.9 million in total cash and cash equivalents and short-term investments as of June 28, 2019. Cash equivalents and short-term investments totaled \$17.1 million as of June 28, 2019 and were comprised of money market funds and certificates of deposit. Cash equivalents and short-term investments have been recorded at fair value on our balance sheets.

We do not use derivative financial instruments in our short-term investment portfolio. We invest in high-credit quality issues and, by policy, limit the amount of credit exposure to any one issuer and country. The portfolio includes only marketable securities with active secondary or resale markets to ensure portfolio liquidity. The portfolio is also diversified by maturity to ensure that funds are readily available as needed to meet our liquidity needs. This policy reduces the potential need to sell securities in order to meet liquidity needs and therefore the potential effect of changing market rates on the value of securities sold.

The primary objective of our short-term investment activities is to preserve principal while maximizing yields, without significantly increasing risk. Our cash equivalents and short-term investments earn interest at fixed rates; therefore, changes in interest rates will not generate a gain or loss on these investments unless they are sold prior to maturity. Actual gains and losses due to the sale of our investments prior to maturity have been immaterial. The investments held as of June 28, 2019,

had weighted-average days to maturity of 41 days, and an average yield of 7.63% per annum. A 10% change in interest rates on our cash equivalents and short-term investments is not expected to have a material impact on our financial position, results of operations or cash flows.

Exposure on Borrowings

During fiscal 2019, we had \$9.0 million of demand borrowings outstanding under our credit facility that incurred interest at the prime rate plus a spread of 0.50% to 1.50%, with such spread determined based on our adjusted quick ratio. During fiscal 2019, our weighted average interest rate was 5.91% and we recorded total interest expense of less than \$0.1 million on these borrowings.

A 10% change in interest rates on the current borrowings or on future borrowings is not expected to have a material impact on our financial position, results of operations or cash flows since interest on our borrowings is not material to our overall financial position.

Critical Accounting Estimates

Our consolidated financial statements are prepared in accordance with U.S. GAAP. These accounting principles require us to make certain estimates, judgments and assumptions. We believe that the estimates, judgments and assumptions upon which we rely are reasonable based upon information available to us.

These estimates, judgments and assumptions can affect the reported amounts of assets and liabilities as of the date of the consolidated financial statements as well as the reported amounts of revenues and expenses during the periods presented. To the extent there are material differences between these estimates, judgments or assumptions and actual results, our financial statements will be affected.

The accounting policies that reflect our more significant estimates, judgments and assumptions and which we believe are the most critical to aid in fully understanding and evaluating our reported financial results include the following:

- revenue recognition and valuation of accounts receivable;
- inventory valuation and provision for excess and obsolete inventory losses;
- impairment of long-lived assets; and
- income taxes valuation.

In some cases, the accounting treatment of a particular transaction is specifically dictated by U.S. GAAP and does not require management's judgment in its application. There are also areas in which management's judgment in selecting among available alternatives would not produce a materially different result. Our senior management has reviewed these critical accounting policies and related disclosures with the Audit Committee of the Board.

The following is not intended to be a comprehensive list of all of our accounting policies or estimates. Our significant accounting policies are more fully described in "Note 1. The Company and Summary of Significant Accounting Policies" in the notes to consolidated financial statements. In preparing our financial statements and accounting for the underlying transactions and balances, we apply those accounting policies. We consider the estimates discussed below as critical to an understanding of our financial statements because their application places the most significant demands on our judgment, with financial reporting results relying on estimates about the effect of matters that are inherently uncertain.

Besides estimates that meet the "critical" accounting estimate criteria, we make many other accounting estimates in preparing our financial statements and related disclosures. All estimates, whether or not deemed critical, affect reported amounts of assets, liabilities, revenue and expenses as well as disclosures of contingent assets and liabilities. Estimates are based on experience and other information available prior to the issuance of the financial statements. Materially different results can occur as circumstances change and additional information becomes known, including for estimates that we do not deem "critical."

Revenue Recognition and Valuation of Accounts Receivable

ASC 606 Adoption

We recorded a net reduction to the opening balance of our accumulated deficit of \$5.6 million as of June 30, 2018 due to the cumulative impact of adopting ASC 606, with the impact primarily related to our bill-and-hold and services revenue. Our revenue was \$243.9 million for fiscal 2019 under ASC 606, compared to \$231.4 million under ASC 605.

The details of the significant changes and quantitative impact of our adoption of ASC 606 are set out below:

- **Bill-and-Hold Sales:** Certain customer arrangements consist of bill-and-hold characteristics under which transfer of control has been met (including the passing of title and significant risk and reward of ownership to the customers). Therefore, the customers can direct the use of the bill-and-hold inventory while we retain physical possession of the product until it is installed at a customer site at a point in time in the future. ASC 606 requires consideration of the indicators of when control has been transferred and sets forth additional criteria to be met in a bill-and-hold arrangement potentially resulting in revenue being recognized earlier than under ASC 605. Upon adoption of ASC 606, we recorded a cumulative effect adjustment to June 30, 2018 opening accumulated deficit consisting of bill-and-hold backlog of \$10.5 million that will not be recognized as revenue under ASC 606, less related cost of product sales and income taxes, resulting in a net decrease to accumulated deficit of \$1.7 million.
- **Professional Services Revenue:** We historically recognized certain professional services revenue upon completion under ASC 605 which changed to over time revenue recognition under ASC 606. We use the input method based on costs incurred, where revenue is calculated based on the percentage of total costs incurred in relation to total estimated costs at completion of the contract. The input method is reasonable because the costs incurred best reflect our efforts toward satisfying the performance obligation over time. The use of the input method requires us to make reasonably dependable estimates. Upon adoption of ASC 606, we recorded a cumulative effect adjustment to June 30, 2018 opening accumulated deficit of \$4.7 million that will not be recognized as revenue under ASC 606, less related cost of services and income taxes, resulting in a net decrease to accumulated deficit of \$1.6 million.
- **Transfer of Control:** Certain of our contracts include penalties, acceptance provisions, or other price variability that precluded revenue recognition under ASC 605 because of the requirement for amounts to be fixed or determinable. ASC 606 requires us to estimate and account for variable consideration as a reduction of the transaction price. Upon adoption of ASC 606, we recorded a cumulative effect adjustment to June 30, 2018 opening accumulated deficit of \$0.6 million that will not be recognized as revenue under ASC 606, less related cost of revenues and income taxes, resulting in a net decrease to accumulated deficit of \$0.4 million.

In addition, revenue allocation under ASC 606 requires an allocation of revenue between deliverables, or performance obligations, within an arrangement. Under ASC 605, the allocation of revenue was restricted to the amount which was not contingent on future deliverables; however, ASC 606 removes this restriction. Upon adoption of ASC 606, we recorded a cumulative effect adjustment to decrease June 30, 2018 opening accumulated deficit by \$0.5 million.

Under ASC 605, we deferred revenue for stand-alone software licenses where vendor-specific objective evidence (VSOE) of fair value had not been established for undelivered items, and revenue was recognized straight line over the term of the maintenance agreement. Under ASC 606, software revenue is allocated to delivered and undelivered elements based on relative fair value resulting in more software arrangement revenue being recognized earlier. Upon adoption of ASC 606, we recorded a cumulative effect adjustment to decrease June 30, 2018 opening accumulated deficit by \$0.7 million.

Previously, we expensed the majority of our commission expense as incurred. Under ASC 606, we capitalize and amortize incremental commission costs to obtain the contract over a benefit period. We elected a practical expedient to exclude contracts with a benefit period of a year or less from this deferral requirement. Upon adoption of ASC 606, we recorded a cumulative effect adjustment to decrease June 30, 2018 opening accumulated deficit by \$0.7 million.

Inventory Valuation and Provisions for Excess and Obsolete Losses

Our inventories have been valued at the lower of cost and net realizable value. Net realizable value is defined as the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. We balance the need to maintain prudent inventory levels to ensure competitive delivery performance with the risk of excess or obsolete inventory due to changing technology and customer requirements, and new product introductions. The manufacturing of our products is handled primarily by contract manufacturers. Our contract manufacturers procure components and manufacture our products based on our forecast of product demand. We regularly review inventory quantities on hand and record a provision for excess and obsolete inventory based primarily on our estimated forecast of product demand, the stage of the product life cycle, anticipated end of product life and production requirements. Several factors may influence the sale and use of our inventories, including decisions to exit a product line, technological change, new product development and competing product offerings. These factors could result in a change in the amount of obsolete inventory quantities on hand. Additionally, our estimates of future product demand may prove to be inaccurate, in which case the provision required for excess and obsolete inventory may be overstated or understated. In the future, if we determine

that our inventory is overvalued, we would be required to recognize such costs in cost of product sales and services in our consolidated statement of operations at the time of such determination. In the case of goods which have been written down below cost at the close of a fiscal quarter, such reduced amount is considered the new lower cost basis for subsequent accounting purposes, and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis. We did not make any material changes in the valuation methodology during the past three fiscal years.

Our customer service inventories are stated at the lower of cost and net realizable value. We carry service parts because we generally provide product warranty for 12 to 36 months and earn revenue by providing enhanced and extended warranty and repair service during and beyond this warranty period. Customer service inventories consist of both component parts, which are primarily used to repair defective units, and finished units, which are provided for customer use permanently or on a temporary basis while the defective unit is being repaired. We record adjustments to reduce the carrying value of customer service inventories to their net realizable value. Factors influencing these adjustments include product life cycles, end of service life plans and volume of enhanced or extended warranty service contracts. Estimates of net realizable value involve significant estimates and judgments about the future, and revisions would be required if these factors differ from our estimates.

Impairment of Long-Lived Assets

We evaluate long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. Impairment is considered to exist if the total estimated future cash flows on an undiscounted basis are less than the carrying amount of the assets. If impairment exists, the impairment loss is measured and recorded based on discounted estimated future cash flows. In estimating future cash flows, assets are grouped at the lowest levels for which there are identifiable cash flows that are largely independent of cash flows from other asset groups.

Our estimate of future cash flows is based upon, among other things, certain assumptions about expected future operating performance, growth rates and other factors. The actual cash flows realized from these assets may vary significantly from our estimates due to increased competition, changes in technology, fluctuations in demand, consolidation of our customers, reductions in average selling prices and other factors. Assumptions underlying future cash flow estimates are therefore subject to significant risks and uncertainties.

Income Taxes Valuation

We record the estimated future tax effects of temporary differences between the tax basis of assets and liabilities of amounts reported in our consolidated balance sheets, as well as operating loss and tax credit carryforwards. Significant judgment is required in evaluating our uncertain tax positions and determining our provision for income taxes. Although we believe our reserves are reasonable, no assurance can be given that the final tax outcome of these matters will not be different from that which is reflected in our historical income tax provisions and accruals. We adjust these reserves in light of changing facts and circumstances, such as the opening and closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences may result in an increase or decrease to our tax provision in a subsequent period in which such determination is made.

We record deferred taxes by applying enacted statutory tax rates to the respective jurisdictions and follow specific and detailed guidelines in each tax jurisdiction regarding the recoverability of any tax assets recorded on the balance sheets and provide necessary valuation allowances as required. Future realization of deferred tax assets ultimately depends on meeting certain criteria in ASC 740, *Income Taxes*. One of the major criteria is the existence of sufficient taxable income of the appropriate character (for example, ordinary income or capital gain) within the carryback or carryforward periods available under the tax law. We regularly review our deferred tax assets for recoverability based on historical taxable income, projected future taxable income, the expected timing of the reversals of existing temporary differences and tax planning strategies. Our judgments regarding future profitability may change due to many factors, including future market conditions and our ability to successfully execute our business plans and/or tax planning strategies. Should there be a change in our ability to recover our deferred tax assets, our tax provision would increase or decrease in the period in which the assessment is changed.

Realization of deferred tax assets is dependent upon future earnings in applicable tax jurisdictions. In the past, due to our U.S. operating losses in previous years and continuing U.S. earnings volatility which did not allow sustainable profitability, we had established and maintained a full valuation allowance for our U.S. deferred tax assets. While there has been a trend of positive evidence that has been strengthening in recent years, it was not sufficiently persuasive to outweigh the negative evidence in future periods. During the third quarter of fiscal 2019, we generated our third consecutive profitable year from a U.S. pre-tax book income perspective. Accordingly, we determined that it was more likely than not that we will

realize a portion of our U.S. deferred tax assets, primarily relating to certain net operating loss carryforwards and current temporary differences. The positive evidence as of March 29, 2019, which outweighed the negative evidence to release a portion of the valuation allowance, included our fiscal 2019 and three-year cumulative U.S. profitability driven by continued demand for our products in North America that have historically resulted in higher margins than international sales, reductions in operating expenses resulting from our previous restructurings, and our forecasted U.S. operating profits in future periods. The negative evidence primarily relates to certain net operating loss carryforwards and credits that are expected to expire prior to utilization. We believed that our positive evidence was strong. The improved financial performance as it relates to U.S. profitability in recent years is an objectively verifiable piece of positive evidence and is the result of a number of factors which have been present to a greater or lesser extent in prior years but have only recently gathered sufficient weight to deliver objectively verifiable, consistent U.S. pre-tax book profits. In performing our analysis, we used the most updated plans and estimates that we currently use to manage the underlying business and calculated the utilization of our deferred tax assets. Accordingly, during fiscal 2019, we released \$7.5 million of valuation allowance as a discrete item on certain deferred tax assets. The remaining valuation allowance relates to deferred tax assets, for which we believe it is not more likely than not to be realized in future periods.

The accounting estimates related to the liability for uncertain tax position require us to make judgments regarding the sustainability of each uncertain tax position based on its technical merits. It is inherently difficult and subjective to estimate our reserves for the uncertain tax positions. Although we believe our estimates are reasonable, no assurance can be given that the final tax outcome of these matters will be same as these estimates. These estimates are updated quarterly based on factors such as change in facts or circumstances, changes in tax law, new audit activity, and effectively settled issues.

Impact of Recently Issued Accounting Pronouncements

See “Note 1. The Company and Summary of Significant Accounting Policies” in the notes to consolidated financial statements for a full description of recently issued accounting pronouncements, including the respective expected dates of adoption and effects on our consolidated financial position and results of operations.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

In the normal course of doing business, we are exposed to the risks associated with foreign currency exchange rates and changes in interest rates. We employ established policies and procedures governing the use of financial instruments to manage our exposure to such risks. For a discussion of such policies and procedures and the related risks, see “Financial Risk Management” in “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations,” which is incorporated by reference into this Item 7A.

Item 8. Financial Statements and Supplementary Data

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Report of Independent Registered Public Accounting Firm

Stockholders and Board of Directors
Aviat Networks, Inc.
Milpitas, California:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Aviat Networks, Inc. (the “Company”) as of June 28, 2019 and June 29, 2018, the related consolidated statements of operations, comprehensive income (loss), equity, and cash flows for each of the three years in the period ended June 28, 2019, the related notes and the financial statement schedule - Valuation and Qualifying Accounts (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 June 28, 2019 and June 29, 2018, and the results of its operations and its cash flows for each of the three years in the period ended June 28, 2019, in conformity with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 3 to the consolidated financial statements, the Company has changed its accounting method for recognizing revenue from contracts with customers during the year ended June 28, 2019, due to the adoption of Topic 606, *Revenue from Contracts With Customers*.

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 Public Company Accounting Oversight Board (United States) (“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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

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/ BDO USA, LLP

We have served as the Company's auditor since 2015.

San Jose, California
August 27, 2019

AVIAT NETWORKS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

	Fiscal Year Ended		
	June 28, 2019	June 29, 2018	June 30, 2017
(In thousands, except per share amounts)			
Revenues:			
Revenue from product sales	\$ 156,724	\$ 151,685	\$ 153,517
Revenue from services	87,134	90,821	88,357
Total revenues	243,858	242,506	241,874
Cost of revenues:			
Cost of product sales	103,517	100,112	105,183
Cost of services	61,071	61,891	61,219
Total cost of revenues	164,588	162,003	166,402
Gross margin	79,270	80,503	75,472
Operating expenses:			
Research and development expenses	21,111	19,750	18,684
Selling and administrative expenses	56,055	58,157	57,184
Restructuring charges	736	1,279	589
Total operating expenses	77,902	79,186	76,457
Operating income (loss)	1,368	1,317	(985)
Interest income	267	198	261
Interest expense	(102)	(29)	(50)
Other income (expense), net	17	(220)	169
Income (loss) before income taxes	1,550	1,266	(605)
(Benefit from) provision for income taxes	(8,188)	(1,036)	16
Net income (loss)	9,738	2,302	(621)
Less: Net income attributable to noncontrolling interest, net of tax	—	457	202
Net income (loss) attributable to Aviat Networks	<u>\$ 9,738</u>	<u>\$ 1,845</u>	<u>\$ (823)</u>
Net income (loss) per share attributable to Aviat Networks:			
Basic	\$ 1.81	\$ 0.35	\$ (0.16)
Diluted	\$ 1.73	\$ 0.33	\$ (0.16)
Weighted average shares outstanding:			
Basic	5,377	5,336	5,292
Diluted	5,618	5,647	5,292

See accompanying Notes to Consolidated Financial Statements

AVIAT NETWORKS, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(In thousands)	Fiscal Year Ended		
	June 28, 2019	June 29, 2018	June 30, 2017
Net income (loss)	\$ 9,738	\$ 2,302	\$ (621)
Other comprehensive loss:			
Foreign currency translation:			
Loss arising during period	(131)	(820)	(279)
Reclassification of gain on liquidation of subsidiary to other income	—	—	(349)
Net change in cumulative translation adjustment	(131)	(820)	(628)
Other comprehensive loss	(131)	(820)	(628)
Comprehensive income (loss)	9,607	1,482	(1,249)
Less: Comprehensive income attributable to noncontrolling interests, net of tax	—	457	202
Comprehensive income (loss) attributable to Aviat Networks	\$ 9,607	\$ 1,025	\$ (1,451)

See accompanying Notes to Consolidated Financial Statements

AVIAT NETWORKS, INC.
CONSOLIDATED BALANCE SHEETS

(In thousands, except share and par value amounts)

	<u>June 28, 2019</u>	<u>June 29, 2018</u>
ASSETS		
Current Assets:		
Cash and cash equivalents	\$ 31,946	\$ 37,425
Restricted cash	—	3
Accounts receivable, net	51,937	43,068
Unbilled receivables	27,780	14,167
Inventories	8,573	21,290
Customer service inventories	936	1,507
Other current assets	4,825	6,006
Total current assets	<u>125,997</u>	<u>123,466</u>
Property, plant and equipment, net	17,255	17,179
Deferred income taxes	13,864	5,600
Other assets	12,077	9,816
TOTAL ASSETS	<u>\$ 169,193</u>	<u>\$ 156,061</u>
LIABILITIES AND EQUITY		
Current Liabilities:		
Short-term debt	\$ 9,000	\$ 9,000
Accounts payable	35,605	30,878
Accrued expenses	22,555	25,864
Advance payments and unearned revenue	13,962	19,300
Restructuring liabilities	1,089	1,426
Total current liabilities	<u>82,211</u>	<u>86,468</u>
Unearned revenue	9,662	6,593
Other long-term liabilities	820	1,250
Reserve for uncertain tax positions	3,606	2,941
Deferred income taxes	1,378	1,293
Total liabilities	<u>97,677</u>	<u>98,545</u>
Commitments and contingencies (Note 11)		
Equity:		
Preferred stock, \$0.01 par value; 50,000,000 shares authorized; none issued	—	—
Common stock, \$0.01 par value; 300,000,000 shares authorized; 5,359,695 and 5,351,155 shares issued and outstanding as of June 28, 2019 and June 29, 2018, respectively	54	54
Additional paid-in-capital	815,196	816,426
Accumulated deficit	(730,998)	(746,359)
Accumulated other comprehensive loss	(12,736)	(12,605)
Total equity	<u>71,516</u>	<u>57,516</u>
TOTAL LIABILITIES AND EQUITY	<u>\$ 169,193</u>	<u>\$ 156,061</u>

See accompanying Notes to Consolidated Financial Statements

AVIAT NETWORKS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)	Fiscal Year Ended		
	June 28, 2019	June 29, 2018	June 30, 2017
Operating Activities			
Net income (loss)	\$ 9,738	\$ 2,302	\$ (621)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization of property, plant and equipment	4,468	5,199	5,840
(Recovery from) provision for uncollectible receivables	(359)	(17)	(580)
Share-based compensation	1,723	2,357	2,111
Deferred tax assets, net	(8,760)	(3,155)	75
Charges for inventory and customer service inventory write-downs	553	364	1,137
Loss on disposition of property, plant and equipment, net	4	75	153
Gain on liquidation of subsidiary	—	—	(349)
Changes in operating assets and liabilities:			
Accounts receivable	(6,395)	2,828	18,178
Unbilled receivables	(4,976)	(2,067)	(6,986)
Inventories	1,228	615	6,383
Customer service inventories	(357)	(445)	90
Accounts payable	5,074	(2,225)	608
Accrued expenses	(2,585)	2,772	(1,310)
Advance payments and unearned revenue	4,170	(995)	(13,099)
Income taxes payable or receivable	338	1,253	1,415
Other assets and liabilities	(920)	(652)	(3,640)
Net cash provided by operating activities	2,944	8,209	9,405
Investing Activities			
Payments for acquisition of property, plant and equipment	(5,246)	(6,563)	(4,021)
Purchase of short-term investments	—	—	(139)
Maturities of short-term investments	—	264	122
Net cash used in investing activities	(5,246)	(6,299)	(4,038)
Financing Activities			
Proceeds from borrowings	36,000	36,000	33,000
Repayments of borrowings	(36,000)	(36,000)	(33,000)
Payments for repurchase of Company stock	(2,316)	(8)	—
Payments for taxes related to net settlement of equity awards	(671)	—	—
Proceeds from issuance of common stock under employee stock plans	35	20	21
Net cash (used in) provided by financing activities	(2,952)	12	21
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	(309)	(727)	(244)
Net (decrease) increase in cash, cash equivalents, and restricted cash	(5,563)	1,195	5,144
Cash, cash equivalents, and restricted cash, beginning of year	37,764	36,569	31,425
Cash, cash equivalents, and restricted cash, end of year	\$ 32,201	\$ 37,764	\$ 36,569

(In thousands)	Fiscal Year Ended		
	June 28, 2019	June 29, 2018	June 30, 2017
Non-cash investing activities:			
Unpaid property, plant and equipment	\$ 578	\$ 805	\$ 1,219
Noncontrolling interests buyout	\$ —	\$ 603	\$ —
Supplemental disclosures of cash flow information:			
Cash paid for interest	\$ 70	\$ 29	\$ 94
Cash paid (refunded) for income taxes, net	\$ 687	\$ 1,282	\$ (313)

See accompanying Notes to Consolidated Financial Statements

AVIAT NETWORKS, INC.

CONSOLIDATED STATEMENTS OF EQUITY

(In thousands, except share amounts)	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Aviat Networks Stockholders' Equity	Noncontrolling Interests	Total Equity
	Shares	\$ Amount						
Balance as of July 1, 2016	5,261,041	\$ 53	\$ 811,601	\$ (747,381)	\$ (11,157)	\$ 53,116	\$ 341	\$ 53,457
Net (loss) income	—	—	—	(823)	—	(823)	202	(621)
Other comprehensive loss, net of tax	—	—	—	—	(628)	(628)	—	(628)
Issuance of common stock under employee stock plans	56,725	—	21	—	—	21	—	21
Share-based compensation	—	—	2,111	—	—	2,111	—	2,111
Balance as of June 30, 2017	5,317,766	53	813,733	(748,204)	(11,785)	53,797	543	54,340
Net income	—	—	—	1,845	—	1,845	457	2,302
Other comprehensive loss, net of tax	—	—	—	—	(820)	(820)	—	(820)
Issuance of common stock under employee stock plans	33,889	1	19	—	—	20	—	20
Stock repurchase	(500)	—	(8)	—	—	(8)	—	(8)
Share-based compensation	—	—	2,357	—	—	2,357	\$ —	2,357
Noncontrolling interests buyout	—	—	325	—	—	325	(1,000)	(675)
Balance as of June 29, 2018	5,351,155	54	816,426	(746,359)	(12,605)	57,516	—	57,516
Cumulative-effect adjustment for ASC Topic 606	—	—	—	5,623	—	5,623	—	5,623
Net income	—	—	—	9,738	—	9,738	—	9,738
Other comprehensive loss, net of tax	—	—	—	—	(131)	(131)	—	(131)
Issuance of common stock under employee stock plans	172,703	2	33	—	—	35	—	35
Shares withheld for taxes related to vesting of equity awards	(7,894)	(1)	(671)	—	—	(672)	—	(672)
Stock repurchase	(156,269)	(1)	(2,315)	—	—	(2,316)	—	(2,316)
Share-based compensation	—	—	1,723	—	—	1,723	—	1,723
Balance as of June 28, 2019	5,359,695	\$ 54	\$ 815,196	\$ (730,998)	\$ (12,736)	\$ 71,516	\$ —	\$ 71,516

See accompanying Notes to Consolidated Financial Statements

AVIAT NETWORKS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1. The Company and Summary of Significant Accounting Policies

The Company

We design, manufacture and sell a range of wireless networking solutions and services to mobile and fixed telephone service providers, private network operators, government agencies, transportation and utility companies, public safety agencies and broadcast system operators across the globe. Our products include broadband wireless access base stations and customer premises equipment for fixed and mobile, point-to-point digital microwave radio systems for access, backhaul, trunking and license-exempt applications, supporting new network deployments, network expansion, and capacity upgrades.

We were incorporated in Delaware in 2006 to combine the businesses of Harris Corporation's Microwave Communications Division ("MCD") and Stratex Networks, Inc. ("Stratex"). On January 28, 2010, we changed our corporate name from Harris Stratex Networks, Inc. to Aviat Networks, Inc. ("the Company", "Aviat Networks," "Aviat", "we," "us," and "our") to more effectively reflect our business and communicate our brand identity to customers. Additionally, the change of our corporate name was to comply with the termination of the Harris Corporation ("Harris") trademark licensing agreement resulting from the spin-off by Harris of its interest in our stock to its stockholders in May 2009.

Basis of Presentation

The consolidated financial statements include the accounts of Aviat Networks and its wholly-owned and majority owned subsidiaries. Significant intercompany transactions and accounts have been eliminated. Certain amounts in the prior-years consolidated financial statements have been reclassified to conform to the current-year presentation.

Our fiscal year ends on the Friday nearest June 30. This was June 28 for fiscal 2019, June 29 for fiscal 2018 and June 30 for fiscal 2017. Fiscal years 2019, 2018 and 2017 presented each included 52 weeks. In these notes to consolidated financial statements, we refer to our fiscal years as "fiscal 2019", "fiscal 2018" and "fiscal 2017."

Use of Estimates

The preparation of consolidated financial statements in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") requires us to make estimates, assumptions and judgments affecting the amounts reported and related disclosures. Estimates are based upon historical factors, current circumstances and the experience and judgment of our management. We evaluate our estimates and assumptions on an ongoing basis and may employ outside experts to assist us in making these evaluations. Changes in such estimates, based on more accurate information, or different assumptions or conditions, may affect amounts reported in future periods. Such estimates affect significant items, including revenue recognition, provision for uncollectible receivables, inventory valuation, valuation allowances for deferred tax assets, uncertainties in income taxes, restructuring obligations, product warranty obligations, share-based awards, contingencies, recoverability of long-lived assets and useful lives of property, plant and equipment.

Cash, Cash Equivalents and Restricted Cash

We consider all highly liquid investments with an original maturity of three months or less at the date of purchase to be cash equivalents. Cash equivalents are carried at amortized cost, which approximates fair value due to the short-term nature of these investments. Investments with an original maturity of greater than three months are accounted for as short-term investments and are classified as such at the time of purchase.

We hold cash and cash equivalents at several major financial institutions, which often significantly exceed Federal Deposit Insurance Corporation insured limits. However, a substantial portion of the cash equivalents is invested in prime money market funds which are backed by the securities in the fund.

As of June 28, 2019 and June 29, 2018, all of our high-quality marketable debt securities were invested in prime money market funds.

Cash and cash equivalents that are restricted as to withdrawal or usage under the terms of contractual agreements are recorded as restricted cash. Our long-term restricted cash included the cash balance in our disability insurance voluntary plan account that cannot be used by us for any operating purposes other than to pay benefits to the insured employees and was recorded in other assets on our consolidated balance sheets and the corresponding liabilities were included in other long-term liabilities on our consolidated balance sheets.

Significant Concentrations

We typically invoice our customers for the sales order (or contract) value of the related products delivered at various milestones, including order receipt, shipment, installation and acceptance and for services when rendered. Our trade receivables are derived from sales to customers located in North America, Africa, Europe, the Middle East, Russia, Asia-Pacific and Latin America.

Accounts receivable is presented net of allowance for estimated uncollectible accounts to reflect any loss anticipated on the collection of accounts receivable balances. We calculate the allowance based on our history of write-offs, level of past due accounts and the economic status of the customers. The fair value of our accounts receivable approximates their net realizable value.

We regularly require letters of credit from certain customers and, from time to time, we discount these letters of credit issued by customers through various financial institutions. The discounting of letters of credit depends on many factors, including the willingness of financial institutions to discount the letters of credit and the cost of such arrangements. Under these arrangements, collection risk is fully transferred to the financial institutions. We record the financing charges on discounting these letters of credit as interest expense.

During fiscal 2019, 2018 and 2017, we had one customer in Africa, Mobile Telephone Networks Group (“MTN Group”) that accounted for 11%, 13% and 14%, respectively, of our total revenue. As of June 28, 2019 and June 29, 2018, MTN Group accounted for approximately 11% and 13%, respectively, of our accounts receivable. No other customers accounted for more than 10% of our revenue or accounts receivable for the years presented. The loss of all business from MTN Group or any other significant customers, could adversely affect our results of operations, cash flows and financial position.

Financial instruments that potentially subject us to a concentration of credit risk consist principally of cash equivalents, marketable debt securities, trade accounts receivable and financial instruments used in foreign currency hedging activities. We invest our excess cash primarily in prime money market funds and certificates of deposit. We are exposed to credit risks related to such instruments in the event of default or decrease in credit-worthiness of the issuers of the investments.

We perform ongoing credit evaluations of our customers and generally do not require collateral on accounts receivable, as the majority of our customers are large, well-established companies. However, in certain circumstances, we may require letters of credit, additional guarantees or advance payments. We maintain allowances for collection losses, but historically have not experienced any significant losses related to any particular geographic area. Our customers are primarily in the telecommunications industry, so our accounts receivable are concentrated within one industry and exposed to concentrations of credit risk within that industry. Accounts receivable are written off when attempts to collect outstanding amounts have been exhausted or there are other indicators that the amounts are no longer collectible.

We rely on third parties to manufacture our products and we purchase raw materials from third-party vendors. We outsource our manufacturing services to two independent manufacturers. In addition, we purchase certain strategic component inventory which is consigned to our third-party manufacturers. Other components included in our products are sourced from various suppliers and are principally industry standard parts and components that are available from multiple vendors. The inability of a contract manufacturer or supplier to fulfill our supply requirements or changes in their financial or business condition could disrupt our ability to supply quality products to our customers, and thereby may have a material adverse effect on our business and operating results.

We have entered into agreements relating to our foreign currency contracts with Silicon Valley Bank, a multinational financial institution. The amounts subject to credit risk arising from the possible inability of any such parties to meet the terms of their contracts are generally limited to the amounts, if any, by which such party’s obligations exceed our obligations to that party.

Inventories

Inventories are valued at the lower of cost and net realizable value. Net realizable value is defined as the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. Cost is determined using standard cost, which approximates actual cost on a weighted-average first-in-first-out basis. We regularly review inventory quantities on hand and record adjustments to reduce the cost of inventory for excess and obsolete inventory based primarily on our estimated forecast of product demand and production requirements. Inventory adjustments are measured as the difference between the cost of the inventory and net realizable value based upon assumptions about future demand and charged to the provision for inventory, which is a component of cost of sales. At the point of the loss

recognition, a new, lower-cost basis for that inventory is established, and any subsequent improvements in facts and circumstances do not result in the restoration or increase in that newly established cost basis.

Customer Service Inventories

Our customer service inventories are stated at the lower of cost and net realizable value. We carry service parts because we generally provide product warranty for 12 to 36 months and earn revenue by providing enhanced and extended warranty and repair service during and beyond this warranty period. Customer service inventories consist of both component parts, which are primarily used to repair defective units, and finished units, which are provided for customer use permanently or on a temporary basis while the defective unit is being repaired. We record adjustments to reduce the carrying value of customer service inventories to their net realizable value. Factors influencing these adjustments include product life cycles, end of service life plans and volume of enhanced or extended warranty service contracts. Estimates of net realizable value involve significant estimates and judgments about the future, and revisions would be required if these factors differ from our estimates.

Property, Plant and Equipment

Property, plant and equipment are stated on the basis of cost less accumulated depreciation and amortization. We capitalize costs of software, consulting services, hardware and other related costs incurred to purchase or develop internal-use software. We expense costs incurred during preliminary project assessment, re-engineering, training and application maintenance.

Depreciation and amortization are calculated using the straight-line method over the estimated useful lives of the respective assets. Leasehold improvements are amortized on the straight-line method over the shorter of the remaining lease term or the estimated useful life of the improvements. The useful lives of the assets are generally as follows:

Buildings	40 years
Leasehold improvements	2 to 10 years
Software	3 to 5 years
Machinery and equipment	2 to 5 years

Expenditures for maintenance and repairs are charged to expense as incurred. Cost and accumulated depreciation of assets sold or retired are removed from the respective property accounts, and any gain or loss is reflected in the consolidated statements of operations.

Impairment of Long-Lived Assets

We evaluate long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. Impairment is considered to exist if the total estimated future cash flows on an undiscounted basis are less than the carrying amount of the assets. If impairment exists, the impairment loss is measured and recorded based on discounted estimated future cash flows. In estimating future cash flows, assets are grouped at the lowest levels for which there are identifiable cash flows that are largely independent of cash flows from other asset groups.

Our estimate of future cash flows is based upon, among other things, certain assumptions about expected future operating performance, growth rates and other factors. The actual cash flows realized from these assets may vary significantly from our estimates due to increased competition, changes in technology, fluctuations in demand, consolidation of our customers, reductions in average selling prices and other factors. Assumptions underlying future cash flow estimates are therefore subject to significant risks and uncertainties.

Warranties

On product sales, we provide for future warranty costs upon product delivery. The specific terms and conditions of those warranties vary depending upon the product sold and the country in which we do business. In the case of products sold by us, our warranties generally start from the delivery date and continue for one to three years, depending on the terms.

Many of our products are manufactured to customer specifications and their acceptance is based on meeting those specifications. Factors that affect our warranty liabilities include the number of product units subject to warranty protection, historical experience and management's judgment regarding anticipated rates of warranty claims and cost per claim. We assess the adequacy of our recorded warranty liabilities every quarter and make adjustments to the liabilities as necessary.

Noncontrolling Interests

A noncontrolling interest represents the equity interest in a subsidiary that is not attributable, either directly or indirectly, to Aviat Networks and is reported as our equity, separately from our controlling interests. The noncontrolling interests related to our ownership interest in a subsidiary company in South Africa with a local partner, where we were the majority owner at 51% prior to our acquisition of the remaining interest of this subsidiary in the fourth quarter of 2018. Revenues, expenses, gains, losses, net loss and other comprehensive income (loss) are reported in the consolidated financial statements at the consolidated amounts, which include the amounts attributable to both the controlling and noncontrolling interests. During the fourth quarter of fiscal year 2018, we acquired the remaining interest of this subsidiary for \$0.6 million which was recorded as “Accrued expenses” on our consolidated balance sheets as of June 29, 2018. This amount was fully paid during fiscal 2019.

Operating Leases

We lease facilities and equipment under various operating leases. These lease agreements generally include rent escalation clauses, and many include renewal periods at our option. We recognize expense for scheduled rent increases on a straight-line basis over the lease term beginning with the date we take possession of the leased space. Leasehold improvements made either at the inception of the lease or during the lease term are amortized over the current lease term, or estimated life, if shorter.

Foreign Currency Translation

The functional currency of our subsidiaries located in the United Kingdom, Singapore, Mexico, Algeria and New Zealand is the United States (“U.S.”) dollar. Determination of the functional currency is dependent upon the economic environment in which an entity operates as well as the customers and suppliers the entity conducts business with. Changes in facts and circumstances may occur which could lead to a change in the functional currency of that entity. Accordingly, all of the monetary assets and liabilities of these subsidiaries are re-measured into U.S. dollars at the current exchange rate as of the applicable balance sheet date, and all non-monetary assets and liabilities are re-measured at historical rates. Income and expenses are re-measured at the average exchange rate prevailing during the period. Gains and losses resulting from the re-measurement of these subsidiaries’ financial statements are included in the consolidated statements of operations.

Our other international subsidiaries use their respective local currency as their functional currency. Assets and liabilities of these subsidiaries are translated at the local current exchange rates in effect at the balance sheet date, and income and expense accounts are translated at the average exchange rates during the period. The resulting translation adjustments are included in accumulated other comprehensive loss.

Gains and losses resulting from foreign exchange transactions and revaluation of monetary assets and liabilities in non-functional currencies are included in either cost of product sales and services or other income (expense) in the accompanying consolidated statements of operations, based on the nature of the transactions. Net foreign exchange gain (loss) recorded in our consolidated statements of operations during fiscal 2019, 2018 and 2017 was as follows:

(In thousands)	Fiscal Year		
	2019	2018	2017
Amount included in costs of revenues	\$ (664)	\$ 402	\$ (847)
Amount included in other (expense) income	—	(188)	135
Total foreign exchange (loss) gain, net	\$ (664)	\$ 214	\$ (712)

Retirement Benefits

As of June 28, 2019, we provided retirement benefits to substantially all employees primarily through our defined contribution retirement plans. These plans have matching and savings elements. Contributions by us to these retirement plans are based on profits and employees’ savings with no other funding requirements. Contributions to retirement plans are expensed as incurred. Retirement plan expense amounted to \$2.0 million, \$1.9 million and \$1.8 million in fiscal 2019, 2018 and 2017, respectively.

Revenue Recognition

Effective June 30, 2018, we adopted Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 606, using the modified retrospective method applied to those contracts that were not completed as

of June 29, 2018. Results for the reporting periods after June 29, 2018 are presented under ASC 606, while prior-period amounts are not adjusted and continue to be reported in accordance with our historical accounting under ASC 605.

We recognize revenue by applying the following five-step approach: (1) identification of the contract with a customer; (2) identification of the performance obligations in the contract; (3) determination of the transaction price; (4) allocation of the transaction price to the performance obligations in the contract; and (5) recognition of revenue when, or as, we satisfy a performance obligation.

Revenue from product sales is generated predominately from the sales of products manufactured by third-party manufacturers to whom we have outsourced our manufacturing processes. Printed circuit assemblies, mechanical housings, and packaged modules are manufactured by contract manufacturing partners, with periodic business reviews of material levels and obsolescence. Product assembly, product testing, complete system integration, and system testing may either be performed within our own facilities or at the locations of our third-party manufacturers.

Revenue from services includes certain installation, extended warranty, customer support, consulting, training, and education. Maintenance and support services are generally offered to our customers over a specified period of time and from sales and subsequent renewals of maintenance and support contracts. The services noted are recognized based on an over-time recognition model using the cost input method.

Revenues related to certain contracts for customized network solutions are recognized over time using the cost input method. In using the cost input method, we generally apply the cost-to-cost method of accounting where sales and profits are recorded based on the ratio of costs incurred to estimated total costs at completion. Recognition of profit on these contracts requires estimates of the total contract value, the total cost at completion, and the measurement of progress towards completion. Significant judgment is required when estimating total contract costs and progress to completion on the arrangements, as well as whether a loss is expected to be incurred on the contract. If circumstances arise that change the original estimates of revenues, costs, or extent of progress toward completion, revisions to the estimates are made. These revisions may result in increases or decreases in estimated revenues or costs, and such revisions are reflected in income in the period in which the circumstances that gave rise to the revision become known to us. We perform ongoing profitability analysis of our service contracts accounted for under this method in order to determine whether the latest estimates of revenues, costs, and profits require updating. If at any time these estimates indicate that the contract will be unprofitable, the entire estimated loss for the remainder of the contract is recorded immediately. We establish billing terms at the time project deliverables and milestones are agreed. Revenues recognized in excess of the amounts invoiced to clients are classified as unbilled receivables on our consolidated balance sheet.

Contracts and customer purchase orders are used to determine the existence of an arrangement. In addition, shipping documents and customer acceptances, when applicable, are used to verify delivery and transfer of control. We typically satisfy our performance obligations upon shipment or delivery of product depending on the contractual terms. Payment terms to customers generally range from net 30 to 120 days from invoice, which are considered to be standard payment terms. We assess our ability to collect from our customers based primarily on the creditworthiness and past payment history of the customer.

While our customers generally do not have the right of return, we reserve for estimated product returns as an offset to revenue based primarily on historical trends. Actual product returns may be different than what was estimated. These factors and unanticipated changes in economic and industry condition could make actual results differ from our return estimates.

Cost of Product Sales and Services

Cost of sales consists primarily of materials, labor and overhead costs incurred internally and amounts incurred for contract manufacturers to produce our products, personnel and other implementation costs incurred to install our products and train customer personnel, and customer service and third party original equipment manufacturer costs to provide continuing support to our customers.

Shipping and handling costs are included as a component of costs of product sales in our consolidated statements of operations because they are also included in revenue that we bill our customers.

Advertising Costs

We expense all advertising costs as incurred. Advertising costs were immaterial during fiscal 2019, 2018 and 2017.

Presentation of Transactional Taxes Collected from Customers and Remitted to Government Authorities

We present transactional taxes such as sales and use tax collected from customers and remitted to governmental authorities on a net basis.

Research and Development Costs

Our research and development costs, which include costs in connection with new product development, improvement of existing products, process improvement, and product use technologies, are charged to operations in the period in which they are incurred.

Share-Based Compensation

We estimate the grant date fair value of our share-based awards and amortize this fair value to compensation expense over the requisite service period or vesting term. To estimate the fair value of our stock option awards, we use the Black-Scholes option pricing model. The determination of the fair value of stock option awards on the date of grant using an option pricing model is affected by our stock price as well as assumptions regarding a number of complex and subjective variables. These variables include our expected stock price volatility over the expected term of the awards, actual and projected employee stock option exercise behaviors, risk-free interest rate and expected dividends. Due to the inherent limitations of option valuation models, including consideration of future events that are unpredictable and the estimation process utilized in determining the valuation of the share-based awards, the ultimate value realized by our employees may vary significantly from the amounts expensed in our financial statements. For restricted stock awards and units and performance share awards and units, we measure the grant date fair value based upon the market price of our common stock on the date of the grant. The fair value of each market-based stock unit with market conditions was estimated using the Monte-Carlo simulation model.

We generally recognize compensation cost for share-based payment awards on a straight-line basis over the requisite service period. For an award that has a graded vesting schedule, compensation expense is recognized on a straight-line basis over the requisite service period for each separately vesting portion of the award as if the award was, in-substance, multiple awards. The amount of compensation cost recognized at any date must at least equal the portion of the grant-date value of the award that is vested at that date.

For awards with a performance condition vesting feature, we recognize share-based compensation costs for the performance awards and units when achievement of the performance conditions is considered probable. Any previously recognized compensation cost would be reversed if the performance condition is not satisfied or if it is not probable that the performance conditions will be achieved. For awards with a market condition vesting feature, we recognize share-based compensation costs over the period the requisite service is rendered, regardless of when, if ever, the market condition is satisfied.

During the fourth quarter of fiscal 2017, we adopted Accounting Standards Update (“ASU”) 2016-09 and elected to account for forfeitures as they occur. Refer to accounting standards adopted below for changes to the accounting for share-based compensation expense.

Restructuring Charges

Our restructuring charges represent expenses incurred in connection with certain cost reduction programs that we have implemented, and consisted of the costs of employee termination costs, lease and other contract termination charges and other costs of exiting activities or geographies. A liability for costs associated with an exit or disposal activity is measured at its fair value when the liability is incurred. Expenses for one-time termination benefits are recognized at the date we notify the employee, unless the employee must provide future service, in which case the benefits are expensed ratably over the future service period. We recognize severance benefits provided as part of an ongoing benefit arrangement when the payment is probable, and the amounts can be reasonably estimated. Liabilities related to termination of an operating lease or contract are measured and recognized at fair value when the contract does not have any future economic benefit to the entity and the fair value of the liability is determined based on the present value of the remaining lease obligations, adjusted for the effects of deferred items recognized under the lease, and reduced by estimated sublease rentals that could be reasonably obtained for the property. The assumptions in determining such estimates include anticipated timing of sublease rentals and estimates of sublease rental receipts and related costs based on market conditions. We expense all other costs related to an exit or disposal activity as incurred.

Income Taxes and Related Uncertainties

We account for income taxes under the asset and liability method. Deferred tax assets and liabilities are determined based on the estimated future tax effects of temporary differences between the financial statement and tax basis of assets and liabilities, as measured by tax rates at which temporary differences are expected to reverse as well as operating loss and tax credit carry forwards. Deferred tax expense (benefit) is the result of changes in deferred tax assets and liabilities. A valuation allowance is established to offset any deferred tax assets if, based upon the available information, it is more likely than not that some or all of the deferred tax assets will not be realized.

We are required to compute our income taxes in each federal, state, and international jurisdiction in which we operate. This process requires that we estimate the current tax exposure as well as assess temporary differences between the accounting and tax treatment of assets and liabilities, including items such as accruals and allowances not currently deductible for tax purposes as well as operating loss and tax credit carry forwards. The income tax effects of the differences we identify are classified as current or long-term deferred tax assets and liabilities in our consolidated balance sheets. Our judgments, assumptions, and estimates relative to the current provision for income taxes take into account current tax laws, our interpretation of current tax laws, and possible outcomes of current and future audits conducted by foreign and domestic tax authorities. Changes in tax laws or our interpretation of tax laws and the resolution of current and future tax audits could significantly impact the amounts provided for income taxes in our consolidated balance sheets and consolidated statements of operations. We must also assess the likelihood that deferred tax assets will be realized from future taxable income and, based on this assessment, establish a valuation allowance, if required. Our determination of our valuation allowance is based upon a number of assumptions, judgments, and estimates, including forecasted earnings, future taxable income, and the relative proportions of revenue and income before taxes in the various domestic and international jurisdictions in which we operate. To the extent we establish a valuation allowance or change the valuation allowance in a period, we reflect the change with a corresponding increase or decrease to our tax provision in our consolidated statements of operations.

We use a two-step process to determine the amount of tax benefit to be recognized for uncertain tax positions. 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 requires us to estimate and measure the tax benefit as the largest amount that is more than 50% likely of being realized upon ultimate settlement. It is inherently difficult and subjective to estimate such amounts, as this requires us to determine the probability of various possible outcomes. We reevaluate these uncertain tax positions on a quarterly basis. This evaluation is based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, effectively settled issues under audit, and new audit activity. Such a change in recognition or measurement would result in the recognition of a tax benefit or an additional charge to the tax provision in the period.

Accounting Standards Adopted

In May 2014, the FASB issued ASC 606 which supersedes nearly all current U.S. GAAP guidance on this topic and eliminates industry-specific guidance. Revenue recognition under ASC 606 depicts the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Additional disclosures are required to enable users to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. In addition, the FASB amended its guidance related to the capitalization and amortization of the incremental costs of obtaining a contract with a customer. The new revenue standard may be applied retrospectively to each prior period presented or retrospectively with the cumulative effect recognized in retained earnings as of the date of adoption. We adopted ASC 606 using the modified retrospective method as of June 30, 2018 with the cumulative effect recognized as an adjustment to the opening balance of our accumulated deficit (net of tax). Prior periods have not been retroactively adjusted and will continue to be reported under the accounting standards in effect for those periods. See Note 3, "Revenue Recognition" to the Notes to consolidated financial statements for more information.

In January 2016, the FASB issued ASU 2016-01, *Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*. This guidance retains the current accounting for classifying and measuring investments in debt securities and loans but requires equity investments to be measured at fair value with subsequent changes recognized in net income, except for those accounted for under the equity method or requiring consolidation. The guidance also changes the accounting for investments without a readily determinable fair value and do not qualify for the practical expedient to estimate fair value. A policy election can be made for these investments whereby estimated fair value may be measured at cost and adjusted in subsequent periods for any impairment or changes in observable prices of identical or similar investments. This ASU is effective for fiscal years beginning after December 15, 2017. We adopted this update during the first quarter of fiscal 2019. The adoption had no material impact on our consolidated financial statements.

In August 2018, the SEC adopted the final rule under SEC Release No. 33-10532, *Disclosure Update and Simplification*, amending certain disclosure requirements that were redundant, duplicative, overlapping, outdated or superseded. In addition, the amendments expanded the disclosure requirements on the analysis of stockholders' equity for interim financial statements. Under the amendments, an analysis of changes in each caption of stockholders' equity presented on the balance sheet must be provided in a note or separate statement. The analysis should present a reconciliation of the beginning balance to the ending balance of each period for which a statement of comprehensive income is required to be filed. We adopted this update during the third quarter of fiscal 2019.

Accounting Standards Not Yet Adopted

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), all of which provides guidance on the recognition, measurement, presentation, and disclosure of leases. Topic 842 requires lessees to recognize operating and financing leases with a term greater than one year as a right-of-use assets and corresponding lease liabilities. The guidance will become effective for us beginning in the first quarter of our fiscal 2020. We are evaluating the impact the pronouncement will have on its consolidated balance sheet and related disclosures, we expect that most of its operating lease commitments will be subject to the new standard and will result in the recognition of right-of-use assets and lease liabilities on its consolidated balance sheet as of June 29, 2019. Additionally, we will elect the package of practical expedients as permitted by the guidance. We are also evaluating the effect of the additional recognition and disclosure requirements under the standard on its current processes and controls.

In June 2018, the FASB issued ASU 2018-07, *Compensation-Stock Compensation: Improvement to Nonemployees Share-Based Payment Accounting* (ASU 2018-07), which expands the scope of Topic 718 to include all share-based payment transactions for acquiring goods and services from nonemployees. ASU 2018-07 specifies that Topic 718 applies to all share-based payment transactions in which the grantor acquires goods and services to be used or consumed in its own operations by issuing share-based payment awards. ASU 2018-07 also clarifies that Topic 718 does not apply to share-based payments used to effectively provide (1) financing to the issuer or (2) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under ASC 606. ASU 2018-07 will be effective for fiscal years beginning after December 15, 2018, including interim periods within those years, with early adoption permitted. We do not expect the adoption of this guidance will have a material impact on our consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement* (ASU 2018-13). The update eliminates, adds, and modifies certain disclosure requirements for fair value measurements. ASU 2018-13 will be effective for us in our first quarter of fiscal 2020 and early adoption is permitted of the entire standard or only the provisions that eliminate or modify disclosure requirements. We are evaluating the impact the adoption of ASU 2018-13 will have on our consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, *Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That is a Service Contract*. This guidance aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. This standard will become effective for interim and annual periods beginning after December 15, 2019, with early adoption permitted. The standard can be adopted either using the prospective or retrospective transition approach. We are evaluating the impact the adoption of the standard will have on our consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* (ASU 2016-13) and also issued subsequent amendments to the initial guidance: ASU 2018-19, ASU 2019-04, and ASU 2019-05 (collectively, Topic 326). Topic 326 requires measurement and recognition of expected credit losses for financial assets held. Topic 326 is effective for us in our first quarter of fiscal 2021, and earlier adoption is permitted. We are evaluating the impact the adoption of Topic 326 will have on our consolidated financial statements.

Note 2. Net Income (Loss) per Share of Common Stock

Net income (loss) per share is computed using the two-class method, by dividing net income (loss) attributable to us by the weighted average number of shares of our outstanding common stock and participating securities outstanding. Our restricted shares contain rights to receive non-forfeitable dividends and therefore are considered to be participating securities and included in the calculations of net income per basic and diluted common share. Undistributed losses are not allocated to unvested restricted shares because the unvested restricted shares are not contractually obligated to share our losses. The impact on earnings per share of the participating securities under the two-class method was immaterial.

The following table presents the computation of basic and diluted net income (loss) per share attributable to our common stockholders:

(In thousands, except per share amounts)	Fiscal Year		
	2019	2018	2017
Numerator:			
Net income (loss) attributable to Aviat Networks	\$ 9,738	\$ 1,845	\$ (823)
Denominator:			
Weighted average shares outstanding, basic	5,377	5,336	5,292
Effect of potentially dilutive equivalent shares	241	311	—
Weighted average shares outstanding, diluted	5,618	5,647	5,292
Net income (loss) per share attributable to Aviat Networks:			
Basic	\$ 1.81	\$ 0.35	\$ (0.16)
Diluted	\$ 1.73	\$ 0.33	\$ (0.16)

The following table summarizes the weighted-average equity awards that were excluded from the diluted net income (loss) per share calculations since they were antidilutive:

(In thousands)	Fiscal Year		
	2019	2018	2017
Stock options	390	270	410
Restricted stock units and performance stock units	32	—	403
Total shares of common stock excluded	422	270	813

Note 3. Revenue Recognition

ASC 606 Adoption

We recorded a net reduction to the opening balance of our accumulated deficit of \$5.6 million as of June 30, 2018 due to the cumulative impact of adopting ASC 606, with the impact primarily related to our bill-and-hold and services revenue. Our revenue was \$243.9 million for fiscal 2019 under ASC 606, compared to \$231.4 million under ASC 605.

The details of the significant changes and quantitative impact of our adoption of ASC 606 are set out below:

- **Bill-and-Hold Sales:** Certain customer arrangements consist of bill-and-hold characteristics under which transfer of control has been met (including the passing of title and significant risk and reward of ownership to the customers). Therefore, the customers can direct the use of the bill-and-hold inventory while we retain physical possession of the product until it is installed at a customer site at a point in time in the future. ASC 606 requires consideration of the indicators of when control has been transferred and sets forth additional criteria to be met in a bill-and-hold arrangement potentially resulting in revenue being recognized earlier than under ASC 605. Upon adoption of ASC 606, we recorded a cumulative effect adjustment to June 30, 2018 opening accumulated deficit consisting of

bill-and-hold backlog of \$10.5 million that will not be recognized as revenue under ASC 606, less related cost of product sales and income taxes, resulting in a net decrease to accumulated deficit of \$1.7 million.

- **Professional Services Revenue:** We historically recognized certain professional services revenue upon completion under ASC 605 which changed to over time revenue recognition under ASC 606. We use the input method based on costs incurred, where revenue is calculated based on the percentage of total costs incurred in relation to total estimated costs at completion of the contract. The input method is reasonable because the costs incurred best reflect our efforts toward satisfying the performance obligation over time. The use of the input method requires us to make reasonably dependable estimates. Upon adoption of ASC 606, we recorded a cumulative effect adjustment to June 30, 2018 opening accumulated deficit of \$4.7 million that will not be recognized as revenue under ASC 606, less related cost of services and income taxes, resulting in a net decrease to accumulated deficit of \$1.6 million.
- **Transfer of Control:** Certain of our contracts include penalties, acceptance provisions, or other price variability that precluded revenue recognition under ASC 605 because of the requirement for amounts to be fixed or determinable. ASC 606 requires us to estimate and account for variable consideration as a reduction of the transaction price. Upon adoption of ASC 606, we recorded a cumulative effect adjustment to June 30, 2018 opening accumulated deficit of \$0.6 million that will not be recognized as revenue under ASC 606, less related cost of revenues and income taxes, resulting in a net decrease to accumulated deficit of \$0.4 million.

In addition, revenue allocation under ASC 606 requires an allocation of revenue between deliverables, or performance obligations, within an arrangement. Under ASC 605, the allocation of revenue was restricted to the amount which was not contingent on future deliverables; however, ASC 606 removes this restriction. Upon adoption of ASC 606, we recorded a cumulative effect adjustment to decrease June 30, 2018 opening accumulated deficit by \$0.5 million.

Under ASC 605, we deferred revenue for stand-alone software licenses where vendor-specific objective evidence (VSOE) of fair value had not been established for undelivered items, and revenue was recognized straight line over the term of the maintenance agreement. Under ASC 606, software revenue is allocated to delivered and undelivered elements based on relative fair value resulting in more software arrangement revenue being recognized earlier. Upon adoption of ASC 606, we recorded a cumulative effect adjustment to decrease June 30, 2018 opening accumulated deficit by \$0.7 million.

Previously, we expensed the majority of our commission expense as incurred. Under ASC 606, we capitalize and amortize incremental commission costs to obtain the contract over a benefit period. We elected a practical expedient to exclude contracts with a benefit period of a year or less from this deferral requirement. Upon adoption of ASC 606, we recorded a cumulative effect adjustment to decrease June 30, 2018 opening accumulated deficit by \$0.7 million.

Termination Rights

The contract term is determined on the basis of the period over which the parties to the contract have present enforceable rights and obligations. Certain customer contracts include a termination for convenience clause that allows the customer to terminate services without penalty, upon advance notification. We concluded that the duration of support contracts does not extend beyond the non-cancellable portion of the contract.

Variable Consideration

The consideration associated with customer contracts is generally fixed. Variable consideration includes discounts, rebates, refunds, credits, incentives, penalties, or other similar items. The amount of consideration that can vary is not a substantial portion of total consideration.

Variable consideration estimates will be re-assessed at each reporting period until a final outcome is determined. The changes to the original transaction price due to a change in estimated variable consideration will be applied on a retrospective basis, with the adjustment recorded in the period in which the change occurs. Changes to variable consideration will be tracked and material changes disclosed.

Stand-alone Selling Price

Stand-alone selling price is the price at which an entity would sell a good or service on a stand-alone (or separate) basis at contract inception. Under the model, the observable price of a good or service sold separately provides the best evidence of stand-alone selling price. However, in certain situations, stand-alone selling prices will not be readily observable and the entity must estimate the stand-alone selling price.

When allocating on a relative stand-alone selling price basis, any discount provided in the contract is allocated proportionately to all of the performance obligations in the contract.

The majority of products and services that we offer have readily observable selling prices. For products and services that do not, we estimate stand-alone selling price using the market assessment approach based on expected selling price and adjust those prices as necessary to reflect our costs and margins. As part of our stand-alone selling price policy, we review product pricing on a periodic basis to identify any significant changes and revise our expected selling price assumptions as appropriate.

Shipping and Handling

Shipping and handling costs are included as a component of costs of product sales in our consolidated statements of operations because they are also included in revenue that we bill our customers.

Costs to Obtain a Contract

We have assessed the treatment of costs to obtain or fulfill a contract with a customer. Sales commissions have historically been expensed as incurred. Under ASC 606, we capitalize sales commissions related to multi-year service contracts and amortize the asset over the period of benefit, which is the estimated service period. Sales commissions paid on contract renewals, including service contract renewals, is commensurate with the sales commissions paid on the initial contracts.

We elected ASC 606's practical expedient to expense sales commissions as incurred when the amortization period of the related asset is one year or less. These costs are recorded as sales and marketing expense and included on the consolidated balance sheet as accrued expenses until paid. Our amortization expense was not material for fiscal 2019.

Contract Balances, Performance Obligations, and Backlog

The following table provides information about receivables and liabilities from contracts with customers (in thousands):

	<u>June 28, 2019</u>	<u>At Adoption on June 30, 2018</u>
Contract Assets		
Accounts receivable, net	\$ 51,937	\$ 45,571
Unbilled receivables	\$ 27,780	\$ 22,794
Capitalized commissions	\$ 955	\$ 656
Contract Liabilities		
Advance payments and unearned revenue	\$ 13,962	\$ 12,700
Unearned revenue, long-term	\$ 9,662	\$ 7,295

Significant changes in contract balances may arise as a result of recognition over time for services, transfer of control for equipment, and periodic payments (both in arrears and in advance).

From time to time, we may experience unforeseen events that could result in a change to the scope or price associated with an arrangement. We would update the transaction price and measure of progress for the performance obligation and recognize the change as a cumulative catch-up to revenue. Because of the nature and type of contracts we engage in, the timeframe to completion and satisfaction of current and future performance obligations can shift; however, this will have no impact on our future obligation to bill and collect.

As of June 28, 2019, we had \$23.6 million in advance payments and unearned revenue and long-term unearned revenue, of which approximately 60.0% is expected to be recognized as revenue in fiscal 2020 and the remainder thereafter. During fiscal 2019, we recognized approximately \$8.0 million in maintenance service revenue which was included in advance payments and unearned revenue at June 29, 2018.

Remaining Performance Obligations

The aggregate amount of transaction price allocated to the unsatisfied performance obligations (or partially unsatisfied) was approximately \$71.7 million at June 28, 2019. Of this amount, we expect to recognize approximately 70% as revenue during fiscal 2020, with the remaining amount to be recognized as revenue within two to five years.

Impacts on Financial Statements

The following tables summarize the impacts of adopting ASC 606 on our consolidated statements of operations for fiscal 2019 and our consolidated balance sheet as of June 28, 2019 (in thousands):

(In thousands)	Fiscal 2019		
	As Reported	Adjustments	Balances without Adoption of ASC 606
Income Statement			
Revenues:			
Revenue from product sales	\$ 156,724	\$ (7,387)	\$ 149,337
Revenue from services	87,134	(5,098)	82,036
Total revenues	\$ 243,858	\$ (12,485)	\$ 231,373
Cost of revenues:			
Cost of product sales	\$ 103,517	\$ (4,967)	\$ 98,550
Cost of services	61,071	(3,355)	57,716
Total cost of revenues	\$ 164,588	\$ (8,322)	\$ 156,266
Selling and administrative expenses	\$ 56,055	\$ 295	\$ 56,350
Net income	\$ 9,738	\$ (7,253)	\$ 2,485

See Note 9, "Segment and Geographic Information" to the Notes to Consolidated Financial Statements for discussion on the impact of additional information, including disaggregated revenue disclosures.

(In thousands)	Balances as of June 29, 2018	Adjustments due to ASC 606	As Adjusted Balances as of June 30, 2018
	Balance Sheet		
Assets			
Accounts receivable, net	\$ 43,068	\$ 2,503	\$ 45,571
Unbilled receivables	\$ 14,167	\$ 8,627	\$ 22,794
Inventories	\$ 21,290	\$ (11,516)	\$ 9,774
Other current assets	\$ 6,006	\$ 476	\$ 6,482
Deferred income taxes	\$ 5,600	\$ (545)	\$ 5,055
Other assets	\$ 9,816	\$ 180	\$ 9,996
Liabilities			
Advance payments and unearned revenue	\$ 19,300	\$ (6,600)	\$ 12,700
Unearned revenue - long term	\$ 6,593	\$ 702	\$ 7,295
Equity			
Accumulated deficit	\$ (746,359)	\$ 5,623	\$ (740,736)

The effects of the adoption of the new revenue recognition guidance on our June 28, 2019 consolidated balance sheet were as follows:

(In thousands)	As of June 28, 2019		
	As Reported	Adjustments due to ASC 606	Balances without Adoption of ASC 606
Balance Sheet			
Assets			
Accounts receivable, net	\$ 51,937	\$ (6,079)	\$ 45,858
Unbilled receivables	\$ 27,780	\$ (16,567)	\$ 11,213
Inventories	\$ 8,573	\$ 19,289	\$ 27,862
Other current assets	\$ 4,825	\$ (587)	\$ 4,238
Deferred income taxes	\$ 13,864	\$ (2,274)	\$ 11,590
Other assets	\$ 12,077	\$ (368)	\$ 11,709
Liabilities			
Accrued expenses	\$ 22,555	\$ (45)	\$ 22,510
Advance payments and unearned revenue	\$ 13,962	\$ 8,414	\$ 22,376
Unearned revenue - long term	\$ 9,662	\$ (2,022)	\$ 7,640
Reserve for uncertain tax positions	\$ 3,606	\$ (55)	\$ 3,551
Equity			
Accumulated deficit	\$ (730,998)	\$ (12,877)	\$ (743,875)

Note 4. Balance Sheet Components

Cash, Cash Equivalents, and Restricted Cash

The following table provides a summary of cash, cash equivalents, and restricted cash reported within the Consolidated Balance Sheets that reconciles to the corresponding amount in the Consolidated Statements of Cash Flows:

(In thousands)	June 28, 2019	June 29, 2018
Cash and cash equivalents	\$ 31,946	\$ 37,425
Restricted cash	—	3
Restricted cash included in Other assets	255	336
Total cash, cash equivalents, and restricted cash in the Statements of Cash Flows	\$ 32,201	\$ 37,764

Accounts Receivable, net

Our net accounts receivable are summarized below:

(In thousands)	June 28, 2019	June 29, 2018
Accounts receivable	\$ 53,539	\$ 44,656
Less: allowances for collection losses	(1,602)	(1,588)
Total accounts receivable, net	\$ 51,937	\$ 43,068

Inventories

Our inventories are summarized below:

(In thousands)	June 28, 2019	June 29, 2018
Finished products	\$ 4,894	\$ 15,496
Work in process	—	3,246
Raw materials and supplies	3,679	2,548
Total inventories	\$ 8,573	\$ 21,290
Deferred cost of revenue included within finished goods	\$ —	\$ 3,667
Consigned inventories included within raw materials	\$ 1,649	\$ 1,492

During fiscal 2019, 2018 and 2017, we recorded charges to adjust our inventory and customer service inventory due to excess and obsolete inventory resulting from lower sales forecasts, product transitioning or discontinuance. Such (recovery) charges incurred during fiscal 2019, 2018 and 2017 were classified in cost of product sales as follows:

(In thousands)	Fiscal Year		
	2019	2018	2017
Excess and obsolete inventory (recovery) charges	\$ (352)	\$ (443)	\$ 39
Customer service inventory write-downs	905	807	1,098
	\$ 553	\$ 364	\$ 1,137
As % of revenue	0.2%	0.2%	0.5%

Property, Plant and Equipment, net

Our property, plant and equipment, net is summarized below:

(In thousands)	June 28, 2019	June 29, 2018
Land	\$ 710	\$ 710
Buildings and leasehold improvements	11,668	11,597
Software	17,556	15,498
Machinery and equipment	49,733	48,076
	79,667	75,881
Less accumulated depreciation and amortization	(62,412)	(58,702)
	\$ 17,255	\$ 17,179

Included in the total plant, property and equipment above were \$2.8 million and \$3.5 million of assets in progress which have not been placed in service as of June 28, 2019 and June 29, 2018, respectively. Depreciation and amortization expense related to property, plant and equipment, including amortization of internal use software and capital lease equipment, was \$4.5 million, \$5.2 million and \$5.8 million, respectively, in fiscal 2019, 2018 and 2017.

Accrued Expenses

Our accrued expenses are summarized below:

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(In thousands)	June 28, 2019	June 29, 2018
Accrued compensation and benefits	\$ 7,583	\$ 8,574
Accrued agent commissions	2,035	1,774
Accrued warranties	3,323	3,196
Other	9,614	12,320
	<u>\$ 22,555</u>	<u>\$ 25,864</u>

We accrue for the estimated cost to repair or replace products under warranty. Changes in our warranty liability, which is included as a component of accrued expenses in the consolidated balance sheets, were as follows:

(In thousands)	Fiscal Year		
	2019	2018	2017
Balance as of the beginning of the fiscal year	\$ 3,196	\$ 3,056	\$ 3,944
Warranty provision recorded during the period	1,974	2,529	1,604
Consumption during the period	(1,847)	(2,389)	(2,492)
Balance as of the end of the period	<u>\$ 3,323</u>	<u>\$ 3,196</u>	<u>\$ 3,056</u>

Advance payments and Unearned Income

Our advance payments and unearned income are summarized below:

(In thousands)	June 28, 2019	June 29, 2018
Advance payments	\$ 1,534	\$ 7,151
Unearned income	12,428	12,149
	<u>\$ 13,962</u>	<u>\$ 19,300</u>

Note 5. Fair Value Measurements of Assets and Liabilities

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in the principal market (or most advantageous market, in the absence of a principal market) for the asset or liability in an orderly transaction between market participants as of the measurement date. We maximize the use of observable inputs and minimize the use of unobservable inputs in measuring fair value and establish a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. The three levels of inputs used to measure fair value are as follows:

- Level 1 — Observable inputs such as quoted prices in active markets for identical assets or liabilities;
- Level 2 — Observable market-based inputs or observable inputs that are corroborated by market data; and
- Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The carrying amounts, estimated fair values and valuation input levels of our assets and liabilities that are measured at fair value on a recurring basis as of June 28, 2019 and June 29, 2018 were as follows:

(In thousands)	June 28, 2019		June 29, 2018		Valuation Inputs
	Carrying Amount	Fair Value	Carrying Amount	Fair Value	
Assets:					
Cash and cash equivalents:					
Money market funds	\$ 15,121	\$ 15,121	\$ 13,871	\$ 13,871	Level 1
Bank certificates of deposit	\$ 1,989	\$ 1,989	\$ 1,645	\$ 1,645	Level 2
Liabilities:					
Other accrued expenses:					
Foreign exchange forward contracts	\$ 7	\$ 7	\$ 158	\$ 158	Level 2

We classify items within Level 1 if quoted prices are available in active markets. Our Level 1 items mainly are money market funds purchased from two major financial institutions. As of June 28, 2019, these money market funds were valued at \$1.00 net asset value per share by these financial institutions.

We classify items in Level 2 if the observable inputs to quoted market prices, benchmark yields, reported trades, broker/dealer quotes or alternative pricing sources are available with reasonable levels of price transparency. Our bank certificates of deposit and foreign exchange forward contracts are classified within Level 2. Foreign currency forward contracts are measured at fair value using observable foreign currency exchange rates. The assets and liabilities related to our foreign currency forward contracts were not material as of June 28, 2019 and June 29, 2018. We did not have any recurring assets or liabilities that were valued using significant unobservable inputs.

Our policy is to recognize asset or liability transfers among Level 1, Level 2 and Level 3 as of the actual date of the events or change in circumstances that caused the transfer. During fiscal 2019, 2018 and 2017, we had no transfers between levels of the fair value hierarchy of our assets or liabilities measured at fair value.

Note 6. Credit Facility and Debt

On June 10, 2019, we entered into Amendment No. 2 to Third Amended and Restated Loan and Security Agreement with Silicon Valley Bank (the "SVB Credit Facility"). The SVB Credit Facility expires on June 29, 2020. The SVB Credit Facility provides for a \$25.0 million accounts receivable formula based revolving credit facility that can be borrowed by our U.S. company, with a \$25.0 million sublimit that can be borrowed by our Singapore subsidiary. Loans may be advanced under the SVB Credit Facility based on a borrowing base equal to a specified percentage of the value of eligible accounts of the borrowers under the SVB Credit Facility. The borrowing base is subject to certain eligibility criteria. Availability under the accounts receivable formula based revolving credit facility can also be utilized to issue letters of credit with a \$12.0 million sublimit. We may prepay loans under the SVB Credit Facility in whole or in part at any time without premium or penalty. As of June 28, 2019, available credit under the SVB Credit Facility was \$15.1 million reflecting the calculated borrowing base of \$25.0 million less existing borrowings of \$9.0 million and outstanding letters of credit of \$0.9 million.

The SVB Credit Facility carries an interest rate, at our option, computed (i) at the prime rate reported in the Wall Street Journal plus a spread of 0.50% to 1.50%, with such spread determined based on our adjusted quick ratio; or (ii) if we satisfy a minimum adjusted quick ratio, a LIBOR rate determined in accordance with the SVB Credit Facility, plus a spread of 2.75%. Any outstanding Singapore subsidiary borrowed loans shall bear interest at an additional 2.00% above the applicable prime or LIBOR rate. During fiscal 2019, the weighted average interest rate on our outstanding loan was 5.91%. As of June 28, 2019 and June 29, 2018, our outstanding debt balance under the SVB Credit Facility was \$9.0 million, and the interest rate was 6.00% and 5.50%, respectively.

The SVB Credit Facility contains quarterly financial covenants including minimum adjusted quick ratio and minimum profitability (EBITDA) requirements. In the event our adjusted quick ratio falls below a certain level, cash received in our accounts with Silicon Valley Bank may be directly applied to reduce outstanding obligations under the SVB Credit Facility. The SVB Credit Facility also imposes certain restrictions on our ability to dispose of assets, permit a change in control, merge or consolidate, make acquisitions, incur indebtedness, grant liens, make investments, make certain restricted payments and enter into transactions with affiliates under certain circumstances. Certain of our assets, including accounts receivable, inventory, and equipment, are pledged as collateral for the SVB Credit Facility. Upon an event of default, outstanding obligations would be immediately due and payable. Under certain circumstances, a default interest rate will apply on all obligations during the existence of an event of default at a per annum rate of interest equal to 5.00% above the applicable interest rate. As of June 28, 2019, we were in compliance with the quarterly financial covenants, as amended, contained in

the SVB Credit Facility. The \$9.0 million borrowing was classified as a current liability as of June 28, 2019 and June 29, 2018. We repaid the \$9.0 million outstanding as of June 28, 2019 in July 2019.

Note 7. Restructuring Activities

The following tables summarize our restructuring related activities during fiscal year 2019, 2018 and 2017:

(In thousands)	Severance and Benefits				Total
	Fiscal 2018-2019 Plan	Fiscal 2016-2017 Plan	Fiscal 2015-2016 Plan	Fiscal 2013-2014 Plan	
Balance as of July 1, 2016	\$ —	\$ 1,512	\$ 357	\$ 68	\$ 1,937
Charges, net	—	345	36	—	381
Cash payments	—	(1,542)	(294)	(4)	(1,840)
Balance as of June 30, 2017	—	315	99	64	478
Charges, net	1,532	(5)	—	—	1,527
Cash payments	—	(295)	(66)	—	(361)
Foreign currency translation gain (loss)	—	(1)	3	—	2
Balance as of June 29, 2018	1,532	14	36	64	1,646
Charges, net	736	—	—	—	736
Cash payments	(1,245)	(12)	(36)	—	(1,293)
Balance as of June 28, 2019	\$ 1,023	\$ 2	\$ —	\$ 64	\$ 1,089

(In thousands)	Facilities and Other			Total
	Fiscal 2015-2016 Plan	Fiscal 2014-2015 Plan	Fiscal 2013-2014 Plan	
Balance as of July 1, 2016	\$ 550	\$ 582	\$ 1,746	\$ 2,878
Charges, net	—	162	46	208
Cash payments	13	(576)	(1,287)	(1,850)
Balance as of June 30, 2017	563	168	505	1,236
Charges, net	(253)	1	4	(248)
Cash payments	(63)	(169)	(509)	(741)
Foreign currency translation gain	19	—	—	19
Balance as of June 29, 2018	266	—	—	266
Cash payments	(23)	—	—	(23)
Foreign currency translation gain	(5)	—	—	(5)
Balance as of June 28, 2019	\$ 238	\$ —	\$ —	\$ 238

As of June 28, 2019, \$1.1 million of the accrual balance was in short-term restructuring liabilities while \$0.2 million was included in other long-term liabilities on the consolidated balance sheets.

Fiscal 2018-2019 Plan

During the fourth quarter of fiscal 2018, our Board of Directors approved a restructuring plan (the “Fiscal 2018-2019 Plan”) to consolidate back-office support functions and align resources by geography to lower our expense structure. We completed the restructuring activities under the Fiscal 2018-2019 Plan at the end of fiscal 2019. Payments related to the accrued restructuring liability balance for this plan are expected to be fully paid in fiscal 2020.

Fiscal 2016-2017 Plan

During the fourth quarter of fiscal 2016, we initiated a restructuring plan (the “Fiscal 2016-2017 Plan”) to streamline our operations and align expenses with current revenue levels. Activities under the Fiscal 2016-2017 Plan primarily include reductions in workforce in marketing, selling and general and administrative functions. We completed the restructuring activities under the Fiscal 2016-2017 Plan by the end of fiscal 2017. Payments related to the accrued restructuring liability balance for this plan are expected to be fully paid in fiscal 2020.

In June 2016, we entered into a lease termination agreement for our headquarters lease in Santa Clara, California (“Termination Agreement”). The noncash adjustments in the table above represents a \$1.2 million deferred rent credit write-off to the restructuring expenses. Under the Termination Agreement, we agreed to pay a termination fee of \$1.9 million payable over 14 months. The termination fee was included in the restructuring liabilities as of July 1, 2016 under the Fiscal 2014-2015 Plan and the Fiscal 2013-2014 Plan and fully paid during fiscal 2018.

Fiscal 2015-2016 Plan

In January 2018, we reached a settlement with certain foreign government for grant liabilities which allowed us to reduce our estimated payments relating to the fiscal 2014-2015 restructuring plan by \$0.3 million. During the third quarter of fiscal 2015, with the intent to bring our operational cost structure in line with the changing dynamics of the microwave radio and telecommunications markets, we initiated a restructuring plan (the “Fiscal 2015-2016 Plan”) to lower fixed overhead costs and operating expenses and to preserve cash flow. Activities under the Fiscal 2015-2016 Plan primarily included reductions in workforce across the Company, but primarily in operations outside the United States. We completed the restructuring activities under the Fiscal 2015-2016 Plan as of July 1, 2016. Payments related to the accrued restructuring liability balance for this plan are expected to be paid in fiscal 2021.

Fiscal 2014-2015 Plan

During the third quarter of fiscal 2014, in line with the decrease in revenue that we experienced and our reduced forecast for the immediate future, we initiated a restructuring plan (the “Fiscal 2014-2015 Plan”) to reduce our operating costs, primarily in North America, Europe and Asia. Activities under the Fiscal 2014-2015 Plan primarily included reductions in workforce and additional facility downsizing of our Santa Clara, California headquarters. We completed the restructuring activities under the Fiscal 2014-2015 Plan as of July 1, 2016. Payments related to the accrued restructuring liability balance for this plan were fully paid in fiscal 2018.

Fiscal 2013-2014 Plan

During the fourth quarter of fiscal 2013, we initiated a restructuring plan (the “Fiscal 2013-2014 Plan”) that was intended to reduce our operating expenses primarily in North America, Europe and Asia. Activities under the Fiscal 2013-2014 Plan included reductions in workforce and facility downsizing of our Santa Clara, California headquarters and certain international field offices. We completed the restructuring activities under the Fiscal 2013-2014 Plan as of June 27, 2014. Payments related to the accrued restructuring liability balance for this plan are expected to be fully paid in fiscal 2020.

Note 8. Stockholders’ Equity**Stock Repurchase Program**

In May 2018, our board of directors approved a repurchase program pursuant to which authorized repurchase of up to \$7.5 million of our common stock.

The following table summarizes the repurchase of our common stock:

(In thousands, except share and per-share amounts)	Shares	Weighted Average Price Paid per Share	Aggregate purchase price
Fiscal 2019	156,269	\$ 14.78	\$ 2,309
Fiscal 2018	500	\$ 15.54	\$ 8

All repurchased shares were retired. As of June 28, 2019, \$5.2 million remained available under our stock repurchase program.

Stock Incentive Programs

Stock Equity Plan

At June 28, 2019, we had one stock incentive plan for our employees and nonemployee directors, the 2018 Incentive Plan. The 2018 Incentive Plan (the “2018 Plan”) was approved by the stockholders’ at the fiscal year 2017 Annual Stockholders’ Meeting and it added 500,000 shares to the equity pool of shares available to grant to employees and nonemployee directors. The 2018 Plan replaced the 2007 Plan as our primary long-term incentive program (“LTIP”). The 2007 Plan was discontinued following stockholder approval of the 2018 Plan, but the outstanding awards under the 2007 Plan will continue to remain in effect in accordance with their terms; provided that, as shares are returned under the 2007 Plan upon cancellation, termination or otherwise of awards outstanding under the 2007 Plan, such shares will be available for grant under the 2018 Plan. The 2018 Plan provides for accelerated vesting of certain share-based awards if there is a change in control of the Company. The 2018 Plan also provides for the issuance of share-based awards in the form of stock options, stock appreciation rights, restricted stock awards and units, and performance share awards and units.

Under the 2018 Plan, option exercise prices are equal to the fair market value on the date the options are granted using our closing stock price. After vesting, options generally may be exercised within seven years after the date of grant.

Restricted stock units are not transferable until vested and the restrictions lapse upon the achievement of continued employment or service over a specified time period. Restricted stock units issued to employees generally vest three years from the date of grant. Restricted stock units issued to non-executive board members annually generally vest on the day before the annual stockholders’ meeting.

Vesting of performance share awards and units is subject to the achievement of pre-determined financial performance criteria and continued employment through the end of the applicable period. Market-based stock units vest upon meeting certain pre-determined share price performance criteria and continued employment through the end of the applicable period. The performance criteria of the performance share awards and units and the market-based stock units can be achieved before the end of the vesting period.

We issue new shares of our common stock to our employees upon the exercise of stock options, vesting of restricted stock awards and units or vesting of performance share awards and units. All awards that are canceled prior to vesting or expire unexercised are returned to the approved pool of reserved shares under the 2018 Plan and made available for future grants. Shares of our common stock remaining available for future issuance under the 2018 Plan totaled 880,614 as of June 28, 2019.

On September 6, 2016, the Board authorized and declared a dividend distribution of one right (a “Right”) for each outstanding share of our common stock, par value \$0.01 per share (the “Common Shares”), to our stockholders of record as of the close of business on September 16, 2016. Each Right entitles the registered holder to purchase from the Company one one-thousandth of a share of Series A Participating Preferred Stock, par value \$0.01 per share (the “Preferred Shares”), of the Company at an exercise price of \$35.00 (the “Exercise Price”) per one one-thousandth of a Preferred Share, subject to adjustment. Until the rights become exercisable, they will not be evidenced by separate certificates and will trade automatically with shares of the Company’s common stock. The Rights have a de minimis fair value. The complete terms of the Rights are set forth in a Tax Benefit Preservation Plan (the “Plan”), dated as of September 6, 2016, between the Company and Computershare Inc., as rights agent. By adopting the Plan, we are helping to preserve the value of certain deferred tax benefits, including those generated by net operating losses (collectively, the “Tax Benefits”), which could be lost in the event of an “ownership change” as defined under Section 382 of the Internal Revenue Code of 1986, as amended. The Plan reduces the likelihood that changes in our investor base have the unintended effect of limiting our use of the Tax Benefits.

Also, on September 6, 2016, our Board of Directors adopted certain amendments to our Amended and Restated Certificate of Incorporation, as amended (the “Charter Amendments”). The Charter Amendments are designed to preserve the Tax Benefits by restricting certain transfers of our common stock.

Both the Plan and the Charter Amendments were approved at our 2016 annual meeting of stockholders on November 16, 2016. No actions were taken under the Plan as of June 29, 2018.

Employee Stock Purchase Plan

Under the Employee Stock Purchase Plan (“ESPP”), employees are entitled to purchase shares of our common stock at a 5% discount from the fair market value at the end of a three-month purchase period. As of June 28, 2019, 58,846 shares were reserved for future issuances under the ESPP. We issued 1,171 shares under the ESPP during fiscal 2019.

Share-Based Compensation

Total following table presents the compensation expense for share-based awards included in our consolidated statements of operations for fiscal 2019, 2018 and 2017:

(In thousands)	Fiscal Year		
	2019	2018	2017
By Expense Category:			
Cost of product sales and services	\$ 170	\$ 201	\$ 208
Research and development	150	147	138
Selling and administrative	1,403	2,009	1,765
Total share-based compensation expense	<u>\$ 1,723</u>	<u>\$ 2,357</u>	<u>\$ 2,111</u>
By Types of Award:			
Options	\$ 389	\$ 139	\$ 260
Restricted stock awards and units	879	1,696	1,473
Performance share awards and units and market-based stock units	455	522	378
Total share-based compensation expense	<u>\$ 1,723</u>	<u>\$ 2,357</u>	<u>\$ 2,111</u>

The following table summarizes the unamortized compensation expense and the remaining years over which such expense would be expected to be recognized, on a weighted-average basis, by type of award:

	June 28, 2019	
	Unamortized Expense	Weighted Average Remaining Recognition Period
	(In thousands)	(Years)
Options	\$ 1,022	2.19
Restricted stock awards and units	\$ 258	0.31
Performance share awards and units	\$ 373	1.27

Stock Options

A summary of the combined stock option activity under our equity plans during fiscal 2019 is as follows:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value (In thousands)
Options outstanding as of June 29, 2018	336,185	\$ 25.90	1.94	\$ 81
Granted	156,466	\$ 17.80		
Exercised	(1,166)	\$ 14.88		
Forfeited	(19)	\$ 14.88		
Expired	(122,462)	\$ 27.84		
Options outstanding as of June 28, 2019	369,004	\$ 21.85	3.37	\$ —
Options vested and expected to vest as of June 28, 2019	369,004	\$ 21.85	3.37	\$ —
Options exercisable as of June 28, 2019	212,538	\$ 24.84	1.30	\$ —

The aggregate intrinsic value represents the total pre-tax intrinsic value or the aggregate difference between the closing price of our common stock on June 28, 2019 of \$13.70 and the exercise price for in-the-money options that would have been received by the optionees if all options had been exercised on June 28, 2019.

The fair value of each option grant under our 2018 Stock Plan was estimated using the Black-Scholes option pricing model on the date of grant. No options were granted during fiscal 2018 and fiscal 2017.

The following summarizes all of our stock options outstanding and exercisable as of June 28, 2019:

Actual Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
\$14.88 — \$15.60	69,868	2.22	\$ 15.40	69,868	\$ 15.40
\$17.80 — \$17.80	156,466	6.19	\$ 17.80	—	\$ —
\$23.52 — \$30.72	77,386	0.75	\$ 27.66	77,386	\$ 27.66
\$31.20 — \$31.20	63,099	0.97	\$ 31.20	63,099	\$ 31.20
\$39.84 — \$39.84	291	0.53	\$ 39.84	291	\$ 39.84
\$43.44 — \$43.44	1,894	0.58	\$ 43.44	1,894	\$ 43.44
\$14.88 — \$43.44	369,004	3.37	\$ 21.85	212,538	\$ 24.84

Additional information related to our stock options is summarized below:

(In thousands)	Fiscal Year		
	2019	2018	2017
Intrinsic value of options exercised	\$ 2	\$ 1	\$ 3
Fair value of options vested	\$ 23	\$ 140	\$ 654

Restricted Stock Awards and Units

A summary of the status of our restricted stock as of June 28, 2019 and changes during fiscal 2019 is as follows:

	Shares		Weighted Average Grant Date Fair Value
Restricted stock outstanding as of June 29, 2018	363,177	\$	10.96
Granted	15,584	\$	14.71
Vested and released	(177,186)	\$	12.49
Forfeited	(30,008)	\$	9.86
Restricted stock outstanding as of June 28, 2019	171,567	\$	9.90

The fair value of each restricted stock grant is based on the closing price of our common stock on the date of grant. The total fair value of restricted stock that vested during fiscal 2019, 2018 and 2017 was \$2.2 million, \$0.4 million and \$0.5 million, respectively.

Market-Based Stock Units

A summary of the status of our market-based stock units as of June 28, 2019 and changes during fiscal 2019 is as follows:

	Shares		Weighted Average Grant Date Fair Value
Market-based stock units outstanding as of June 29, 2018	96,089	\$	3.55
Forfeited	(96,089)	\$	3.55
Market-based stock units outstanding as of June 28, 2019	—		

The fair value for each market-based stock unit with market condition was estimated using the Monte-Carlo simulation model and for each stock option the Black-Scholes option pricing model was used. A summary of the significant weighted average assumptions we used is as follows:

	Fiscal Year		
	2019	2018	2017
Expected Dividends	—%	N/A	—%
Expected volatility	59.0%	N/A	58.1%
Risk-free interest rate	2.80%	N/A	1.20%
Weighted average grant date fair value per share granted	\$ 8.93	N/A	\$ 6.83

The fair value of the market-based stock units with market condition criteria is expensed over the derived service period for each separate vesting tranche. If the derived service period is rendered, the total fair value of the award at the date of the grant is recognized as compensation expense even if the market condition is not achieved.

Performance Share Awards and Units

A summary of the status of our performance shares awards and units as of June 28, 2019 and changes during fiscal 2019 is as follows:

	Shares	Weighted Average Grant Date Fair Value
Performance share awards and units outstanding as of June 29, 2018	72,941	\$ 9.18
Granted	78,236	\$ 17.80
Released	(26,580)	\$ 9.18
Performance share awards and units outstanding as of June 28, 2019	<u>124,597</u>	<u>\$ 14.59</u>

No performance share awards or units vested during fiscal 2018.

Note 9. Segment and Geographic Information

We operate in one reportable business segment: the design, manufacturing and sale of a range of wireless networking products, solutions and services. We conduct business globally and our sales and support activities are managed on a geographic basis. Our Chief Executive Officer is the Chief Operating Decision Maker (the “CODM”). Our CODM manages our business primarily by function globally and reviews financial information on a consolidated basis, accompanied by disaggregated information about revenues by geographic region, for purposes of allocating resources and evaluating financial performance. The profitability of our geographic regions is not a determining factor in allocating resources and the CODM does not evaluate profitability below the level of the consolidated company.

We report revenue by region and country based on the location where our customers accept delivery of our products and services. Revenue by region for 2019, 2018 and 2017 were as follows:

(In thousands)	Fiscal Year		
	2019	2018	2017
North America	\$ 132,884	\$ 131,078	\$ 132,078
Africa and Middle East	48,305	58,459	60,150
Europe and Russia	16,933	18,205	14,128
Latin America and Asia Pacific	45,736	34,764	35,518
Total Revenue	<u>\$ 243,858</u>	<u>\$ 242,506</u>	<u>\$ 241,874</u>

Revenue by country comprising more than 5% of our total revenue for fiscal 2019, 2018 and 2017 were as follows:

(In thousands, except percentages)	Revenue	% of Total Revenue
Fiscal 2019:		
United States	\$ 129,929	53.3%
Philippines	\$ 24,368	10.0%
Fiscal 2018:		
United States	\$ 128,269	52.9%
South Africa	\$ 13,929	5.7%
Philippines	\$ 13,838	5.7%
Fiscal 2017:		
United States	\$ 127,889	52.9%
Nigeria	\$ 18,147	7.5%
Philippines	\$ 13,733	5.7%

Our long-lived assets, consisting primarily of property, plant and equipment, by geographic areas based on the physical location of the assets as of June 28, 2019 and June 29, 2018 were as follows:

(In thousands)	June 28, 2019	June 29, 2018
United States	\$ 4,984	\$ 5,084
United Kingdom	2,654	2,708
New Zealand	8,368	7,747
Other countries	1,249	1,640
Total	\$ 17,255	\$ 17,179

Note 10. Income Taxes

Income (loss) before provision for income taxes during fiscal year 2019, 2018 and 2017 consisted of the following:

(In thousands)	Fiscal Year		
	2019	2018	2017
United States	\$ 5,827	\$ 7,718	\$ 10,979
Foreign	(4,277)	(6,452)	(11,584)
Total income (loss) before income taxes	\$ 1,550	\$ 1,266	\$ (605)

Provision for (benefit from) income taxes from continuing operations for fiscal year 2019, 2018 and 2017 were summarized as follows:

(In thousands)	Fiscal Year		
	2019	2018	2017
Current provision (benefit):			
Federal	\$ —	\$ —	\$ (14)
Foreign	527	2,043	(52)
State and local	45	76	7
	<u>572</u>	<u>2,119</u>	<u>(59)</u>
Deferred provision (benefit):			
Federal	(7,482)	(3,397)	168
Foreign	(1,278)	242	(93)
	<u>(8,760)</u>	<u>(3,155)</u>	<u>75</u>
Total (benefit from) provision for income taxes	\$ (8,188)	\$ (1,036)	\$ 16

The provision for (benefit from) income taxes differed from the amount computed by applying the federal statutory rate of 21.0%, 28.1% and 35% for fiscal 2019, 2018 and 2017, respectively, to our income before provision for income taxes as follows:

(In thousands)	Fiscal Year		
	2019	2018	2017
Tax provision (benefit) at statutory rate	\$ 308	\$ 442	\$ (196)
Valuation allowances	(12,743)	(53,308)	(1,346)
Non-deductible expenses	664	348	628
State and local taxes, net of U.S. federal tax benefit	2,008	441	358
Foreign income taxed at rates less than the U.S. statutory rate	1,488	22	2,062
Tax credit/deductions - generated and expired	1,938	—	—
Foreign withholding taxes	911	1,287	1,116
Brazil withholding tax receivable	(1,877)	—	—
Singapore refund	—	(1,325)	(3,778)
Change in uncertain tax positions	859	508	1,173
Impact from tax reform	—	50,115	—
Other	(1,744)	434	(1)
Total (benefit from) provision for income taxes	\$ (8,188)	\$ (1,036)	\$ 16

Our (benefit from) provision for income taxes was \$8.2 million of benefit for fiscal 2019, \$1.0 million of benefit for fiscal 2018 and \$16 thousand of expense for fiscal 2017. Our tax benefit for fiscal 2019 was primarily due to the release of certain U.S. federal and state valuation allowances of \$7.5 million and refundable foreign withholding tax credit, partially offset by losses in tax jurisdictions in which we cannot recognize tax benefits. During the first quarter of fiscal 2019, we received notification from the Department of Federal Revenue of Brazil that our withholding tax refund request had been approved. We recorded a net discrete income tax benefit of \$1.6 million for the release of valuation allowance previously recorded as a deferred tax asset for the withholding tax credits. This consisted of an income tax benefit of \$1.9 million for the refundable withholding tax credit, less tax expense of \$0.3 million from recognizing an ASC 740-10 reserve previously recorded as a reduction to the withholding tax credits.

During fiscal 2018, we received a refund of \$1.3 million from the Inland Revenue Authority of Singapore (“IRAS”) related to a \$13.2 million tax assessment we paid in fiscal year 2014. The tax refund was recorded as a discrete tax benefit during the year the payment was received. During fiscal 2018, we recorded a valuation allowance release of \$3.3 million related to refundable alternative minimum tax credit under the Tax Cuts and Jobs Act (the “2017 Tax Act”). We expect to receive the refund of this tax benefit starting in our fiscal year 2021. The 2017 Tax Act reduced the corporate tax rate from 35% to 21%, effective January 1, 2018. Since we have a fiscal year end during the middle of the calendar year, it is subject to rules relating to transitional tax rates. As a result, our fiscal 2018 federal statutory rate was a blended rate of 28.1%.

The components of deferred tax assets and liabilities were as follows:

(In thousands)	June 28, 2019	June 29, 2018
Deferred tax assets:		
Inventory	\$ 1,032	\$ 2,145
Accruals and reserves	1,127	999
Bad debts	98	285
Amortization	1,916	1,984
Stock compensation	(13)	1,646
Deferred revenue	2,583	1,896
Unrealized exchange gain/loss	(44)	11
Other	4,587	3,335
Tax credit carryforwards	6,105	9,887
Tax loss carryforwards	141,409	141,972
Total deferred tax assets before valuation allowance	158,800	164,160
Valuation allowance	(143,583)	(157,283)
Total deferred tax assets	15,217	6,877
Deferred tax liabilities:		
Branch undistributed earnings reserve	801	796
Depreciation	1,681	1,491
Other	249	283
Total deferred tax liabilities	2,731	2,570
Net deferred tax assets	\$ 12,486	\$ 4,307
As Reported on the Consolidated Balance Sheets		
Deferred income tax assets	\$ 13,864	\$ 5,600
Deferred income tax liabilities	1,378	1,293
Total net deferred income tax assets	\$ 12,486	\$ 4,307

Our valuation allowance related to deferred income taxes, as reflected in our consolidated balance sheets, was \$143.6 million as of June 28, 2019 and \$157.3 million as of June 29, 2018. The change in valuation allowance for June 28, 2019 and June 29, 2018 was a decrease of \$13.7 million and \$40.7 million, as revised for the correction of immaterial items described below, respectively. The decrease in the valuation allowance in fiscal 2019 was primarily due to the release of certain U.S. federal, state, and foreign valuation allowances, partially offset by losses in tax jurisdictions in which we cannot recognize tax benefits.

We corrected the prior year balance of deferred tax assets relating to tax loss carryforwards as well as the valuation allowance related to those assets by an equal and offsetting amount. The tax loss carryforwards and valuation allowance as of June 29, 2018 have both been increased in the table above by \$19.0 million relating to L3 Harris Technologies, Inc. (“formerly Harris”) tax loss carryforwards from a tax sharing agreement (see below) which had previously been reflected on a net basis. We carry a full valuation allowance against these Harris tax loss carryforwards, therefore these immaterial adjustments to the disclosures had no effect on the consolidated balance sheets, statements of operations and cash flows for any periods presented.

We entered into a tax sharing agreement with Harris effective on January 26, 2007, the date of the acquisition of Stratex. The tax sharing agreement addresses, among other things, the settlement process associated with pre-merger tax liabilities and tax attributes, including tax loss carryforwards that are attributable to the Microwave Communication Division when it was a division of Harris. There were no settlement payments recorded since the acquisition date.

Realization of deferred tax assets is dependent upon future earnings in applicable tax jurisdictions. In the past, due to our U.S. operating losses in previous years and continuing U.S. earnings volatility which did not allow sustainable

profitability, we had established and maintained a full valuation allowance for our U.S. deferred tax assets. While there has been a trend of positive evidence that has been strengthening in recent years, it was not sufficiently persuasive to outweigh the negative evidence in future periods. During the third quarter of fiscal 2019, we generated our third consecutive profitable year from a U.S. pre-tax book income perspective. Accordingly, we determined that it was more likely than not that we will realize a portion of our U.S. deferred tax assets, primarily relating to certain net operating loss carryforwards and current temporary differences. The positive evidence as of March 29, 2019, which outweighed the negative evidence to release a portion of the valuation allowance, included our fiscal 2019 and three-year cumulative U.S. profitability driven by continued demand for our products in North America that have historically resulted in higher margins than international sales, reductions in operating expenses resulting from our previous restructurings, and our forecasted U.S. operating profits in future periods. The negative evidence primarily relates to certain net operating loss carryforwards and credits that are expected to expire prior to utilization. We believed that our positive evidence is strong. The improved financial performance as it relates to U.S. profitability in recent years is an objectively verifiable piece of positive evidence and is the result of a number of factors which have been present to a greater or lesser extent in prior years but have only recently gathered sufficient weight to deliver objectively verifiable, consistent U.S. pre-tax book profits. In performing our analysis, we used the most updated plans and estimates that we currently use to manage the underlying business and calculated the utilization of our deferred tax assets. Accordingly, during fiscal 2019, we released \$7.5 million of valuation allowance as a discrete item on certain deferred tax assets. During fiscal 2018, we released \$3.4 million of valuation allowance as a discrete item related to refundable alternative minimum tax credit under the Tax Cuts and Jobs Act. The remaining valuation allowance relates to deferred tax assets, for which we believe it is not more likely than not to be realized in future periods.

Tax loss and credit carryforwards as of June 28, 2019 have expiration dates ranging between one year and no expiration in certain instances. The amount of U.S. federal tax loss carryforwards as of June 28, 2019 and June 29, 2018 were \$408.2 million (\$329.7 million and \$78.5 million related to Harris tax attributes) and \$408.9 million (\$332.5 million and \$76.4 million to Harris tax attributes), respectively, and begin to expire in fiscal 2023. The amount of U.S. federal and state tax credit carryforwards as of June 28, 2019 was \$8.7 million, and certain credits will begin to expire in fiscal 2020. The amount of foreign tax loss carryforwards as of June 28, 2019 was \$212.8 million and certain losses begin to expire in fiscal 2020. The amount of foreign tax credit carryforwards as of June 28, 2019 were \$2.6 million, and certain credits will begin to expire in fiscal 2023.

United States income taxes have not been provided on basis differences in foreign subsidiaries of \$0.8 million and \$0.6 million, respectively, as of June 28, 2019 and June 29, 2018, because of our intention to reinvest these earnings indefinitely. The residual U.S. tax liability, if such amounts were remitted, would be nominal.

As of June 28, 2019 and June 29, 2018, we had unrecognized tax benefits of \$16.5 million and \$16.1 million, respectively, for various federal, foreign, and state income tax matters. Unrecognized tax benefits increased by \$0.4 million. Our total unrecognized tax benefits that, if recognized, would affect our effective tax rate were \$3.6 million and \$2.9 million, respectively, as of June 28, 2019 and June 29, 2018. These unrecognized tax benefits are presented on the accompanying consolidated balance sheets net of the tax effects of net operating loss carryforwards.

We account for interest and penalties related to unrecognized tax benefits as part of our provision for income taxes. The interest accrued was \$0.3 million as of June 28, 2019 and \$0.3 million as of June 29, 2018. No penalties have been accrued.

Our unrecognized tax benefit activity for fiscal 2019, 2018 and 2017 was as follows:

(In thousands)	Amount
Unrecognized tax benefit as of July 1, 2016	\$ 27,038
Additions for tax positions in prior periods	626
Additions for tax positions in current periods	831
Decreases for tax positions in prior periods	(9,279)
Decreases related to change of foreign exchange rate	(477)
Unrecognized tax benefit as of June 30, 2017	18,739
Additions for tax positions in prior periods	509
Additions for tax positions in current periods	349
Decreases for tax positions in prior periods	(3,481)
Decreases related to change of foreign exchange rate	31
Unrecognized tax benefit as of June 29, 2018	16,147
Additions for tax positions in prior periods	287
Additions for tax positions in current periods	1,501
Decreases for tax positions in prior periods	(1,451)
Decreases related to change of foreign exchange rate	33
Unrecognized tax benefit as of June 28, 2019	\$ 16,517

We have a number of years with open tax audits which vary from jurisdiction to jurisdiction. Our major tax jurisdictions that are open and subject to potential audits include the U.S., Singapore, Nigeria, Saudi Arabia and the Ivory Coast. The earliest years for these jurisdictions are as follows: U.S. - 2003; Singapore - 2011; Nigeria - 2006; Saudi Arabia - 2010, and Ivory Coast - 2016.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin (SAB) No. 118, which provides guidance on accounting for the tax effects of the Tax Act. SAB 118 provides a measurement period that should not extend beyond one year from the Tax Act enactment date for companies to complete the accounting under ASC 740. In accordance with SAB 118, a company must reflect the income tax effects of those aspects of the Tax Act for which the accounting under ASC 740 is complete. To the extent that a company's accounting for certain income tax effects of the Tax Act is incomplete but it is able to determine a reasonable estimate, it must record a provisional estimate in its financial statements. If a company cannot determine a provisional estimate to be included in its financial statements, it should continue to apply ASC 740 on the basis of the provisions of the tax laws that were in effect immediately before the enactment of the Tax Act.

In connection with our initial analysis of the impact of the Tax Act, we recorded provisional estimates related to the remeasurement of deferred taxes and the Deemed Repatriation Transition Tax in our financial statements for our fiscal year ended June 29, 2018. The measurement period ended in the second quarter of fiscal 2019. As of December 28, 2018, we have completed the accounting for the impact of the Tax Act based on the guidance, interpretations, and data available. No adjustments to these provisional estimates have been recorded. Although the measurement period has closed, the accounting for the impact of the Tax Act may change to account for additional factors such as the issuance of further regulatory guidance, changes in interpretations, the collection and analysis of additional information, and any deferred adjustments related to the filing of our 2017 federal and state income tax returns. In accordance with ASC 740, we will recognize any additional effects of the guidance in income tax expense (benefit) in the period that such guidance is issued.

For tax years beginning after December 31, 2017, the Tax Act introduced new provisions of U.S. taxation of certain Global Intangible Low-Taxed Income (GILTI). As of June 28, 2019, we have made a policy election to account for taxes on GILTI using the period cost method. For fiscal 2019, we did not generate a GILTI inclusion due to an overall net loss for our foreign subsidiaries.

Note 11. Commitments and Contingencies

Operating Lease Commitments

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We lease office and manufacturing facilities under non-cancelable operating leases expiring at various dates through 2028. We lease approximately 19,000 square feet of office space in Milpitas, California as our corporate headquarters with a term of 60 months. As of June 28, 2019, future minimum lease payments for our Milpitas headquarters total \$0.7 million.

As of June 28, 2019, our future minimum lease payments under all non-cancelable operating leases with an initial lease term in excess of one year were as follows:

Fiscal Years	Amount
	(In thousands)
2020	\$ 2,052
2021	1,268
2022	456
2023	243
2024	249
Thereafter	2,090
Total	<u>\$ 6,358</u>

These commitments do not contain any material rent escalations, rent holidays, contingent rent, rent concessions, leasehold improvement incentives or unusual provisions or conditions. We sublease a portion of our facilities to third parties and the total minimum rents to be received in the future under our non-cancelable subleases were \$0.1 million as of June 28, 2019. The future minimum lease payments are not reduced by the minimum sublease rents.

Rental expense for operating leases, including rentals on a month-to-month basis was \$3.7 million, \$3.7 million and \$4.0 million in fiscal 2019, 2018 and 2017, respectively.

Purchase Orders and Other Commitments

From time to time in the normal course of business, we may enter into purchasing agreements with our suppliers that require us to accept delivery of, and remit full payment for, finished products that we have ordered, finished products that we requested be held as safety stock, and work in process started on our behalf in the event we cancel or terminate the purchasing agreement. Because these agreements do not specify fixed or minimum quantities, do not specify minimum or variable price provisions, and do not specify the approximate timing of the transaction, and we have no present intention to cancel or terminate any of these agreements, we currently do not believe that we have any future liability under these agreements. As of June 28, 2019, we had outstanding purchase obligations with our suppliers or contract manufacturers of \$16.3 million. In addition, we had contractual obligations of approximately \$3.1 million associated with software as a service and software maintenance support as of June 28, 2019.

Financial Guarantees and Commercial Commitments

Guarantees issued by banks, insurance companies or other financial institutions are contingent commitments issued to guarantee our performance under borrowing arrangements, such as bank overdraft facilities, tax and customs obligations and similar transactions or to ensure our performance under customer or vendor contracts. The terms of the guarantees are generally equal to the remaining term of the related debt or other obligations and are generally limited to two years or less. As of June 28, 2019, we had no guarantees applicable to our debt arrangements.

We have entered into commercial commitments in the normal course of business including surety bonds, standby letters of credit agreements and other arrangements with financial institutions primarily relating to the guarantee of future performance on certain contracts to provide products and services to customers. As of June 28, 2019, we had commercial commitments of \$60.5 million outstanding that were not recorded on our consolidated balance sheets. During the second quarter of fiscal 2017, we recorded a payout in cost of revenues of \$0.4 million on the performance guarantees to a contractor in the Middle East region. We believe the customer improperly drew down on the performance bond and intend to pursue all remedies available to recover the payment. We do not believe, based on historical experience and information currently available, that it is probable that any significant amounts will be required to be paid on the performance guarantees in the future.

Indemnifications

Under the terms of substantially all of our license agreements, we have agreed to defend and pay any final judgment against our customers arising from claims against such customers that our products infringe the intellectual property rights of a third party. As of June 28, 2019, we have not received any notice that any customer is subject to an infringement claim arising from the use of our products; we have not received any request to defend any customers from infringement claims arising from the use of our products; and we have not paid any final judgment on behalf of any customer related to an infringement claim arising from the use of our products. Because the outcome of infringement disputes is related to the specific facts of each case and given the lack of previous or current indemnification claims, we cannot estimate the maximum amount of potential future payments, if any, related to our indemnification provisions. As of June 28, 2019, we had not recorded any liabilities related to these indemnifications.

Legal Proceedings

We are subject from time to time to disputes with customers concerning our products and services. In May 2016, we received notification of a claim for \$1.0 million in damages from a customer in Austria alleging that certain of our products were defective. We are continuing to investigate this claim, and at this time an estimate of the reasonably possible loss or range of loss cannot be made. We believe that we have numerous contractual and legal defenses to these disputes, and we intend to dispute them vigorously.

From time to time, we may be involved in various other legal claims and litigation that arise in the normal course of our operations. We are aggressively defending all current litigation matters. Although there can be no assurances and the outcome of these matters is currently not determinable, we currently believe that none of these claims or proceedings are likely to have a material adverse effect on our financial position. We expect to defend each of these disputes vigorously. There are many uncertainties associated with any litigation and these actions or other third-party claims against us may cause us to incur costly litigation and/or substantial settlement charges. As a result, our business, financial condition, results of operations, and cash flows could be adversely affected. The actual liability in any such matters may be materially different from our estimates, if any.

We record accruals for our outstanding legal proceedings, investigations or claims when it is probable that a liability will be incurred and the amount of loss can be reasonably estimated. We evaluate, at least on a quarterly basis, developments in legal proceedings, investigations or claims that could affect the amount of any accrual, as well as any developments that would result in a loss contingency to become both probable and reasonably estimable. We have not recorded any accrual for loss contingencies associated with such legal claims or litigation discussed above.

Contingent Liabilities

We record a loss contingency as a charge to operations when (i) it is probable that an asset has been impaired or a liability has been incurred at the date of the financial statements; and (ii) the amount of the loss can be reasonably estimated. Disclosure in the notes to the financial statements is required for loss contingencies that do not meet both those conditions if there is a reasonable possibility that a loss may have been incurred. Gain contingencies are not recorded until realized. We expense all legal costs incurred to resolve regulatory, legal and tax matters as incurred.

Periodically, we review the status of each significant matter to assess the potential financial exposure. If a potential loss is considered probable and the amount can be reasonably estimated, we reflect the estimated loss in our results of operations. Significant judgment is required to determine the probability that a liability has been incurred or an asset impaired and whether such loss is reasonably estimable. Further, estimates of this nature are highly subjective, and the final outcome of these matters could vary significantly from the amounts that have been included in our consolidated financial statements. As additional information becomes available, we reassess the potential liability related to our pending claims and litigation and may revise estimates accordingly. Such revisions in the estimates of the potential liabilities could have a material impact on our results of operations and financial position.

Note 12. Quarterly Financial Data (Unaudited)

The following financial information reflects all normal recurring adjustments, which are, in the opinion of management, necessary for a fair statement of the results of the interim periods. Our fiscal quarters end on the Friday nearest the end of the calendar quarter. Summarized quarterly data for fiscal 2019 and 2018 were as follows:

(In thousands, except per share amounts)	Q1 Ended 9/28/2018	Q2 Ended 12/28/2018	Q3 Ended 3/29/2019	Q4 Ended 6/28/2019
Fiscal 2019				
Revenue	\$ 60,504	\$ 65,088	\$ 54,037	\$ 64,229
Gross margin	17,925	22,490	16,255	22,600
Operating (loss) income	(1,514)	2,883	(2,503)	2,502
Net (loss) income	(750)	2,310	4,339	3,839
Net (loss) income attributable to Aviat Networks	(750)	2,310	4,339	3,839
Per share data:				
Basic net (loss) income per common share	\$ (0.14)	\$ 0.43	\$ 0.81	\$ 0.71
Diluted net (loss) income per common share	(0.14)	0.41	0.78	0.69

(In thousands, except per share amounts)	Q1 Ended 9/29/2017	Q2 Ended 12/29/2017	Q3 Ended 3/30/2018	Q4 Ended 6/29/2018
Fiscal 2018				
Revenue	\$ 56,182	\$ 61,723	\$ 62,093	\$ 62,508
Gross margin	17,296	21,890	18,132	23,185
Operating (loss) income	(1,226)	2,894	(1,365)	1,014
Net (loss) income	(565)	5,351	(2,390)	(94)
Net (loss) income attributable to Aviat Networks	(657)	5,071	(2,623)	54
Per share data:				
Basic net (loss) income per common share	\$ (0.12)	\$ 0.95	\$ (0.49)	\$ 0.01
Diluted net (loss) income per common share	(0.12)	0.90	(0.49)	0.01

The following tables summarize charges (recoveries) included in our results of operations for each of the fiscal quarters presented:

(In thousands)	Q1 Ended 9/28/2018	Q2 Ended 12/28/2018	Q3 Ended 3/29/2019	Q4 Ended 6/28/2019
Fiscal 2019				
Restructuring charges (recovery)	\$ 796	\$ —	\$ —	\$ (60)
WTM inventory recovery	(88)	(2)	—	(65)
Strategic alternative costs	—	—	491	102
Tax receivable from Department of Federal Revenue of Brazil	(1,646)	—	—	—
Release of valuation allowance	—	—	(7,054)	(432)

(In thousands)	Q1 Ended 9/29/2017	Q2 Ended 12/29/2017	Q3 Ended 3/30/2018	Q4 Ended 6/29/2018
Fiscal 2018				
Restructuring charges (recovery)	\$ 2	\$ (252)	\$ (2)	\$ 1,531
Nigeria foreign exchange loss on dividend receivable	1	136	51	—
WTM inventory recovery	(9)	(181)	(127)	(195)
Strategic alternative costs	394	483	43	—
AMT credit related to valuation allowance release	—	(3,303)	—	—
Tax refund from Inland Revenue Authority of Singapore	(1,322)	—	—	—

Note 13. Subsequent Event

On August 21, 2019 our Board of Directors approved a restructuring plan (the “2020 Plan”) to primarily consolidate product development, right size our resources to support our International business and other support functions. The 2020 Plan is anticipated to entail a reduction in force of approximately 48 employees to be implemented during our fiscal 2020 while adding certain employees in key areas. We estimate our restructuring charges will be approximately \$1.7 million, the majority of which are expected to be incurred in the first half of fiscal 2020, relating to one-time severance charges, continuation of health benefits and outplacement services. We anticipate we will generate approximately \$1.7 million in annualized savings in fiscal 2021. The majority of these savings will be allocated to growth-related initiatives.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Based on management’s evaluation, with participation of our Chief Executive Officer (CEO) and Principal Financial Officer (PFO), as of the end of the period covered by this report, our CEO and PFO have concluded that our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), are effective to provide reasonable assurance that the information required to be disclosed in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms, and is accumulated and communicated to management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosures.

Changes in Internal Controls Over Financial Reporting

There were no changes to our internal control over financial reporting as defined in Rules 13a-15(f) or 15d-15(f) that occurred during the quarter ended June 28, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of consolidated financial statements for external purposes in accordance with U.S. GAAP.

Management, including our CEO and PFO, assessed our internal control over financial reporting as of June 28, 2019, the end of our fiscal year. Management based its assessment on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Management's assessment included evaluation of elements such as the design and operating effectiveness of key financial reporting controls, process documentation, accounting policies, and our overall control environment.

Based on this assessment, management has concluded that our internal control over financial reporting was effective as of the end of the fiscal year to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external reporting purposes in accordance with U.S. GAAP. We reviewed the results of management's assessment with the Audit Committee of our Board of Directors.

This Annual Report on Form 10-K does not include an attestation report of our independent registered public accounting firm regarding internal controls over financial reporting because Aviat is a non-accelerated filer and is not subject to auditor attestation requirements under the applicable rules of the Securities Exchange Commission.

Inherent Limitations on Effectiveness of Controls

Our management, including the CEO and PFO, does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well-designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of the effectiveness of controls to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

Item 9B. Other Information

None.

PART III

Certain information required by Part III is omitted from this Annual Report on Form 10-K because we will file a definitive Proxy Statement with the SEC within 120 days after the end of our fiscal year ended June 28, 2019.

Item 10. *Directors, Executive Officers and Corporate Governance*

We adopted a Code of Conduct that is available at www.aviatnetworks.com. No amendments to our Code of Business Ethics or waivers from our Code of Conduct with respect to any of our executive officers or directors have been made. If, in the future, we amend our Code of Conduct or grant waivers from our Code of Conduct with respect to any of our executive officers or directors, we will make information regarding such amendments or waivers available on our corporate website (www.aviatnetworks.com) for a period of at least 12 months.

For information with respect to Executive Officers, see Part I, Item 1 of this Annual Report on Form 10-K, under “Executive Officers of the Registrant.”

Information regarding our directors and compliance with Section 16(a) of the Exchange Act by our directors and executive officers will appear in our definitive Proxy Statement and is incorporated herein by reference.

Item 11. *Executive Compensation*

Information regarding our executive compensation will appear in our definitive Proxy Statement and is incorporated herein by reference.

Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*

Information regarding security ownership of certain beneficial owners and management and related stockholder matters will appear in our definitive Proxy Statement and is incorporated herein by reference.

Item 13. *Certain Relationships and Related Transactions, and Director Independence*

Information regarding certain relationships and related transactions, and director independence will appear in our definitive Proxy Statement and is incorporated herein by reference.

Item 14. *Principal Accountant Fees and Services*

Information regarding our principal accountant fees and services will appear in our definitive Proxy Statement and is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) The following documents are filed as part of this report.

1. Financial Statements

The financial statements of Aviat Networks, Inc. are set forth in Item 8 of this Annual Report on Form 10-K.

2. Financial Statement Schedules

Schedule	Page
Schedule II — Valuation and Qualifying Accounts for the three fiscal years ended June 28, 2019	86

All other schedules have been omitted because the required information is not present or is not present in amounts sufficient to require submission of the schedules or because the information required is included in the consolidated financial statements or notes thereto.

(b) Exhibits.

The information required by this Item is set forth on the Exhibit Index (following the Signatures section of this report) and is included, or incorporated by reference, in this Form 10-K.

SIGNATURES

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

AVIAT NETWORKS, INC.
(Registrant)

Date: August 27, 2019

By: /s/ Walter Stanley Gallagher, Jr.
Walter Stanley Gallagher, Jr.
Senior Vice President and Chief Operating Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Michael A. Pangia</u> Michael A. Pangia	President and Chief Executive Officer (Principal Executive Officer)	August 27, 2019
<u>/s/ Walter Stanley Gallagher, Jr.</u> Walter Stanley Gallagher, Jr.	Senior Vice President and Chief Operating Officer (Principal Financial Officer)	August 27, 2019
<u>/s/ Eric Chang</u> Eric Chang	Vice President, Corporate Controller and Principal Accounting Officer (Principal Accounting Officer)	August 27, 2019
<u>/s/ John Mutch</u> John Mutch	Chairman of the Board	August 27, 2019
<u>/s/ Kenneth Kong</u> Kenneth Kong	Director	August 27, 2019
<u>/s/ John Quicke</u> John Quicke	Director	August 27, 2019
<u>/s/ James C. Stoffel</u> James C. Stoffel	Director	August 27, 2019

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS**AVIAT NETWORKS, INC.****Years Ended June 28, 2019, June 29, 2018 and June 30, 2017**

(In thousands)	Balance at Beginning of Period	Charged to (Credit from) Costs and Expenses	Deductions	Balance at End of Period
Allowances for collection losses:				
Year ended June 28, 2019	\$ 1,588	\$ 120	\$ 106 ^(A)	\$ 1,602
Year ended June 29, 2018	\$ 3,919	\$ (513)	\$ 1,818 ^(B)	\$ 1,588
Year ended June 30, 2017	\$ 7,967	\$ (484)	\$ 3,564 ^(C)	\$ 3,919

Note A - Consisted of changes to allowance for collection losses of \$0 for foreign currency translation gain and \$107,000 for uncollectible accounts charged off, net of recoveries on accounts previously charged off.

Note B - Consisted of changes to allowance for collection losses of \$3,000 for foreign currency translation gain and \$1,820,000 for uncollectible accounts charged off, net of recoveries on accounts previously charged off.

Note C - Consisted of changes to allowance for collection losses of \$607,000 for foreign currency translation losses and \$4,172,000 for uncollectible accounts charged off, net of recoveries on accounts previously charged off.

EXHIBIT INDEX

The following exhibits are filed herewith or are incorporated herein by reference to exhibits previously filed with the SEC:

Ex. #	Description
3.1	Amended and Restated Certificate of Incorporation of Aviat Networks, Inc., as amended (incorporated by reference to Exhibit 3.1 to the Quarterly Report on Form 10-Q filed with the SEC on February 10, 2017, File No. 001-33278)
3.2	Certificate of Designation of Rights, Preferences and Privileges of Series A Participating Preferred Stock (incorporated by reference to Exhibit 3.2 to the Current Report on Form 8-K filed with the SEC on September 7, 2016, File No. 001-33278)
3.3	Amended and Restated Bylaws of Aviat Networks, Inc. (incorporated by reference to Exhibit 3.2 to the Current Report on Form 8-K filed with the SEC on October 2, 2015, File No. 001-33278)
3.4	Certificate of Ownership and Merger Merging Aviat Networks, Inc. into Harris Stratex Networks, Inc., effective January 27, 2010, as filed with the Secretary of State of the State of Delaware on January 27, 2010 (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed with the SEC on January 28, 2010, File No. 001-33278)
3.5	Certificate of Elimination of Series A Participating Preferred Stock (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed with the SEC on September 7, 2016, File No. 001-33278)
4.1	Tax Benefit Preservation Plan, dated as of September 6, 2016, by and between Aviat Networks, Inc. and Computershare Inc., as Rights Agent (incorporated by reference to exhibit 4.1 to the Current Report on Form 8-K filed with the SEC on September 7, 2016, File No. 001-33278)
4.1.1	Specimen common stock certificate, adopted as of January 29, 2010 (incorporated by reference to Exhibit 4.1.1 to the Annual Report on Form 10-K for fiscal year end July 2, 2010 filed with the SEC on September 9, 2010, File No. 001-33278)
4.2	Aviat Networks, Inc. 2018 Incentive Plan (incorporated by reference to Appendix A to the Registrant's Proxy Statement on schedule 14A filed with the SEC on February 12, 2018, File No. 001-33278)
10.1	Letter Agreement, dated September 13, 2016, among Aviat Networks, Inc., JDS 1, LLC, Julian Singer and David S. Oros (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed with the SEC on September 15, 2016 and to Exhibit 10.1 to the Current Report Form 8-K/A filed with the SEC on September 16, 2016, File No. 001-33278)
10.2	Intellectual Property Agreement between Harris Stratex Networks, Inc. and Harris Corporation dated January 26, 2007 (incorporated by reference to Exhibit 10.4 to the Current Report on Form 8-K filed with the SEC on February 1, 2007, File No. 001-33278)
10.3	Tax Sharing Agreement between Harris Stratex Networks, Inc. and Harris Corporation dated January 26, 2007 (incorporated by reference to Exhibit 10.11 to the Current Report on Form 8-K filed with the SEC on February 1, 2007, File No. 001-33278)
10.4*	Standard Form of Executive Employment Agreement between Harris Stratex Networks, Inc. and certain executives (incorporated by reference to Exhibit 10.16 to the Current Report on Form 8-K filed with the SEC on February 1, 2007, File No. 001-33278)
10.5	Aviat Networks, Inc. 2007 Stock Equity Plan (as Amended and Restated Effective November 13, 2015) (incorporated by reference to Appendix A to Schedule 14A filed with the SEC on October 1, 2015, File No. 001-33278)
10.6	Third Amended and Restated Loan and Security Agreement, dated as of June 29, 2018, by and among Aviat Networks, Inc., Aviat U.S. Inc., Aviat Networks (S) Pte. Ltd. and Silicon Valley bank (incorporated by reference to Exhibit 10.1 to the Current Report on Forms 8-K filed with the SEC on June 29, 2018, File No. 001-33278)
10.6.1	Amended #1 to Third Amended and Restated Loan and Security Agreement, dated as of September 28, 2018, by and among Aviat Networks, Inc., Aviat U.S., Inc., Aviat Networks (S) Pte. Ltd. and Silicon Valley Bank (incorporated by reference to Exhibit 10.1 to the Current Report on Forms 8-K filed with the SEC on October 4, 2018, File No. 001-33278)
10.6.2	Amended #2 to Third Amended and Restated Loan and Security Agreement, dated as of June 10, 2019, by and among Aviat Networks, Inc., Aviat U.S., Inc., Aviat Networks (S) Pte. Ltd. and Silicon Valley Bank (incorporated by reference to Exhibit 10.1 to the Current Report on Forms 8-K filed with the SEC on June 12, 2019, File No. 001-33278)

Ex. #	Description
10.8*	Employment Agreement, dated as of May 14, 2002, between Stratex Networks, Inc. and Shaun McFall (incorporated by reference to Exhibit 10.25 to the Annual Report on Form 10-K for the fiscal year ended July 3, 2009 filed with the SEC on September 4, 2009, File No. 001-33278)
10.8.1*	Amendment, effective April 1, 2006, to Employment Agreement, dated May 14, 2002, between Stratex Networks, Inc. and Shaun McFall (incorporated by reference to Exhibit 10.25.1 to the Annual Report on Form 10-K for the fiscal year ended July 3, 2009 filed with the SEC on September 4, 2009, File No. 001-33278)
10.9*	Employment Agreement, dated July 18, 2011, between Aviat Networks, Inc. and Michael Pangia (incorporated by reference to the Current Report on Form 8-K filed with the SEC on July 20, 2011, File No. 001-33278)
10.10*	Employment Agreement, dated April 29, 2015, between Aviat Networks, Inc. and Ralph S. Marimon (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed with the SEC on May 14, 2015, File No. 001-33278)
10.11	Letter Agreement, dated as of January 11, 2015, among Aviat Networks, Inc., Steel Partners Holdings L.P., Lone Star Value Management, LLC and certain other parties (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed with the SEC on January 12, 2015, File No. 001-33278)
10.12*	Employment Agreement, dated January 20, 2016, between Aviat Networks, Inc. and Eric Chang (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed with the SEC on January 21, 2016, File No. 001-33278)
10.12.1*	Amendment to Employment Agreement, dated June 20, 2018, between Aviat Networks, Inc. and Eric Chang (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed with the SEC on June 25, 2018, File No. 001-33278)
10.13	Employment Agreement, dated June 20, 2018, between Aviat Networks, Inc. and Stan Gallagher (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed with the SEC on June 25, 2018, File No. 001-33278)
10.14	Lease Agreement, dated June 8, 2016, between Aviat Networks, Inc., through its wholly owned subsidiary Aviat U.S., Inc., and The Irvine Company LLC (incorporated by reference to Exhibit 10.34 to the Annual Report on Form 10-K for fiscal year end July 1, 2016 filed with the SEC on September 9, 2016, File No. 001-33278)
21	List of Subsidiaries of Aviat Networks, Inc.
23.1	Consent of BDO USA, LLP
31.1	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer
31.2	Rule 13a-14(a)/15d-14(a) Certification of Principal Financial Officer
32.1	Section 1350 Certification of Chief Executive Officer
32.2	Section 1350 Certification of Principal Financial Officer
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* Management compensatory contract, arrangement or plan required to be filed as an exhibit pursuant to Item 15(b) of this report.

AVIAT NETWORKS, INC.

SUBSIDIARIES AS OF June 28, 2019

(100% direct or indirect ownership by Aviat Networks, Inc.)

<u>Name of Subsidiary</u>	<u>State or Other Jurisdiction of Incorporation</u>
Aviat Networks Algeria S.A.R.L.	Algeria
Aviat Networks (Australia) Pty. Ltd. .	Australia
Aviat Networks (Bangladesh) Limited	Bangladesh
Aviat Networks Brasil Servicos em Comunicacoes Ltda.	Brazil
Aviat Networks Canada ULC	Canada
Aviat Communications Technology (Shenzhen) Company Ltd.	The People's Republic of China
Aviat Networks Congo	Congo - Brazzaville
Aviat Networks France S.A.S.	France
Aviat Networks Ghana Limited	Ghana
Aviat Networks Holland B.V.	The Netherlands
Aviat Networks HK Limited	Hong Kong
Aviat Networks (India) Private Limited	India
Telsima Communications Private Limited	India
Pt. Aviat Networks Indonesia	Indonesia
Aviat Networks Côte d'Ivoire	Ivory Coast
Aviat Networks (Kenya) Limited	Kenya
Aviat Networks Malaysia Sdn. Bhd.	Malaysia
Digital Microwave (Mauritius) Private Limited	Mauritius
Aviat Networks México S.A. de C.V.	Mexico
Aviat Networks (NZ) Limited	New Zealand
Aviat Networks Communication Solutions Limited	Nigeria
Stratex Networks Nigeria Limited	Nigeria
Aviat Networks (Clark) Corporation	The Philippines
Aviat Networks Philippines, Inc.	The Philippines
Aviat Networks Polska Sp. z.o.o.	Poland
Aviat Networks Communications Solutions LLC	Russia
Aviat Networks (S) Pte. Ltd.	Republic of Singapore
Aviat storitveno podjetje, d.o.o.	Slovenia
Aviat Networks (South Africa) (Proprietary) Limited	Republic of South Africa
MAS Technology Holdings (Proprietary) Limited	Republic of South Africa
DMC Stratex Networks (South Africa) (Proprietary) Limited	Republic of South Africa
Aviat Umholi Networks (Pty) Limited	Republic of South Africa
Aviat Networks Tanzania Limited	Tanzania
Aviat Networks (Thailand) Ltd.	Thailand
Aviat Networks (UK) Limited	Delaware
Aviat International Holdings, Inc.	Delaware
Aviat U.S., Inc.	Delaware
Telsima Corporation	Delaware
Aviat Networks Telecommunications Zambia Limited	Zambia

Consent of Independent Registered Public Accounting Firm

Aviat Networks, Inc.
Milpitas, California

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-224957, 333-209462, 333-178467, 333-163542 and 333-140442) of Aviat Networks, Inc. of our report dated August 27, 2019 relating to the consolidated financial statements and financial statement schedule, which appears in this Form 10-K.

/s/ BDO USA, LLP

San Jose, California
August 27, 2019

CERTIFICATION

I, Michael A. Pangia, certify that:

1. I have reviewed this Annual Report on Form 10-K for the fiscal year ended June 28, 2019, of Aviat Networks, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 27, 2019

/s/ Michael A. Pangia

Name: Michael A. Pangia

Title: President and Chief Executive Officer

CERTIFICATION

I, Walter Stanley Gallagher, Jr., certify that:

1. I have reviewed this Annual Report on Form 10-K for the fiscal year ended June 28, 2019, of Aviat Networks, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 27, 2019

/s/ Walter Stanley Gallagher, Jr.

Name: Walter Stanley Gallagher, Jr.
Title: Senior Vice President and Chief Operating
Officer, Principal Financial Officer

Certification

Pursuant to Section 1350 of Chapter 63 of Title 18 of the United States Code as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the filing of the Annual Report on Form 10-K of Aviat Networks, Inc. (“Aviat Networks”) for the fiscal year ended June 28, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned, Michael A. Pangia, hereby certifies, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. §1350, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Aviat Networks as of the dates and for the periods expressed in the Report

Date: August 27, 2019

/s/ Michael A. Pangia

Name: Michael A. Pangia
Title: President and Chief Executive Officer

Certification

Pursuant to Section 1350 of Chapter 63 of Title 18 of the
United States Code as Adopted Pursuant to Section 906
of the Sarbanes-Oxley Act of 2002

In connection with the filing of the Annual Report on Form 10-K of Aviat Networks, Inc. ("Aviat Networks") for the fiscal year ended June 28, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Walter Stanley Gallagher, Jr., hereby certifies, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. §1350, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Aviat Networks as of the dates and for the periods expressed in the Report

Date: August 27, 2019

/s/ Walter Stanley Gallagher, Jr.

Name: Walter Stanley Gallagher, Jr.

Title: Senior Vice President and Chief Operating
Officer, Principal Financial Officer