UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

Form 10-K

ANNUAL REPORT PU		the fiscal year ended December	THES EXCHANGE ACT OF 1934 31, 2020	
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	Delaware			
	r Other Jurisdiction of ration or Organization)		(I.R.S. Employer Identification Number)	
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	oomingdale IL		60108	
(Address of I	Principal Executive Office)		(Zip Code)	
	· -	(630) 372-6800 strant's Telephone Number, Including registered pursuant to Section 12		
Title of ea		Trading Symbol(s)	Name of each exchange on which registered	
Common Stock, \$.001		PCTI	The Nasdaq Global Select Market	
	Securities	registered pursuant to Section 12 None	2(g) of the Act:	
Indicate by check mark whe	ther the registrant is a well-kno	own seasoned issuer, as defined in I	— Rule 405 of the Securities Act. Yes □ No ⊠	
Indicate by check mark if th	e registrant is not required to fi	le reports pursuant to Section 13 or	Section 15(d) of the Act. Yes \square No \boxtimes	
			ection 13 or 15(d) of the Securities Exchange Act of 1934 durind (2) has been subject to such filing requirements for the past	
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Indicate by check mark who As of June 30, 2020, the las stock outstanding, and the aggregate Global Select Market on June 30, 20 entity that owns 5% or more of the affiliate status is not necessarily a co	t business day of the registrant' e market value of such shares h 020) was approximately \$125,5 registrant's outstanding commo	eld by non-affiliates of the registration of the registrant's constock have been excluded becaus to other purposes.	the Act). Yes □ No ⊠ iscal quarter, there were 18,640,295 shares of the registrant's cont (based upon the closing sale price of such shares on the Nascommon stock held by each executive officer and director and by e such persons may be deemed to be affiliates. This determinates	laq y each
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Certain sections of the regis	trant's definitive proxy stateme	9	sholders' Meeting to be held on May 26, 2021 are incorporated tement within 120 days after the end of its fiscal year end to where the second	

PCTEL, Inc.

Form 10-K

For the Fiscal Year Ended December 31, 2020

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PART I

Item 1: Business

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These statements include, among other things, statements concerning our future operations, financial condition prospects, business strategies, anticipated revenues, profits, costs and expenses, revenue mix and the impact on our business from the COVID-19 pandemic. These forward-looking statements include, among others, those statements including the words "may," "will," "plans," "seeks," "expects," "anticipates," "intends," "believes" and words of similar meaning. Investors in our common stock are cautioned not to place undue reliance on these forward-looking statements. Our actual results could differ materially from those projected in these forward-looking statements. Specifically, the statements about our expectations regarding the impact of the COVID-19 pandemic; our future financial performance; growth of our antenna solutions and Industrial Internet of Things ("Industrial IoT) and test and measurement businesses; the impact of our transition plan for manufacturing inside and outside China; the impact of the uncertainty regarding the renewal of our lease of our Tianjin, China manufacturing premises; the anticipated demand for certain products including those related to public safety, Industrial IoT, 5G and intelligent transportation; the impact of tariffs on certain imports from China; and the anticipated growth of public and private wireless systems are forward-looking statements. These statements are based on management's current expectations and actual results may differ materially from those projected as a result of certain risks and uncertainties, including the disruptions to our workforce, operations, supply chain and customer demand caused by the COVID-19 pandemic and impact of the pandemic on our results of operations, financial condition and stock price; the impact of data densification and IoT on capacity and coverage demand; the impact of 5G; customer demand and growth generally in our defined market segments, including demand from customers in China; and our ability to grow our business and create, protect and implement new technologies and solutions. These forward-looking statements are made only as of the date hereof. We do not undertake, and expressly disclaim, any obligation to update or revise any forward-looking statements whether because of new information, future events or otherwise, except as may be required by applicable law. Investors should carefully review the information contained in Item 1A Risk Factors.

Overview

PCTEL, Inc. ('PCTEL', the 'Company', 'we', 'ours', and 'us') formerly filed as PC-Tel, Inc. We were incorporated in California in 1994 and reincorporated in Delaware in 1998. PCTEL is a leading global provider of wireless technology, including purpose-built Industrial Internet of Things ("Industrial IoT") devices, antenna systems, and test and measurement solutions. We solve complex wireless challenges to help organizations stay connected, transform, and grow. We have a strong brand presence and expertise in radio frequency ("RF"), digital and mechanical engineering. We have two businesses (antennas/Industrial IoT devices and test & measurement products) that address three market segments: Enterprise Wireless, Intelligent Transportation, and Industrial IoT. Our antennas and Industrial IoT devices include antennas deployed in small cells, enterprise Wi-Fi access points, fleet management and transit systems, and in network equipment and devices for Industrial IoT. Our test & measurement products improve the performance of wireless networks globally. Mobile operators, neutral hosts, and network equipment manufacturers rely on our products to analyze, design, and optimize next generation wireless networks. We seek out product applications that command a premium for product design and performance, and we avoid commodity markets. Our strength is solving complex wireless challenges for our customers through our products and solutions. To this end, we are constantly innovating and improving antenna and wireless testing products and capabilities to capture the opportunities of the rapidly evolving wireless industry. We focus on engineering, research, and development to maintain and expand our competitiveness.

Antennas and Industrial IoT Devices

PCTEL designs and manufactures precision antennas and Industrial IoT devices, and we offer in-house wireless product development for our customers, including design, testing, radio integration, and manufacturing capabilities. Revenue growth in these markets is driven by the increased use and complexity of wireless communications. Our antenna portfolio includes Wi-Fi, Bluetooth, Land Mobile Radio ("LMR"), Tetra, Global Navigation Satellite System ("GNSS"), Cellular, industrial, scientific, medical ("ISM"), LoRa, and combination antenna solutions. Our Industrial IoT device portfolio includes access points, radio modules, and wireless communication sensors. Consistent with our mission to solve complex network engineering problems and to compete effectively in the antenna market, PCTEL maintains expertise in the following areas: radio frequency engineering, wireless network engineering, mechanical engineering, mobile antenna design, manufacturing, and product quality and testing. Competition among providers of antennas and Industrial IoT devices is fragmented. Competitors include Airgain, Amphenol, Laird, Panorama, and Taoglas.

Test & Measurement Products

PCTEL provides RF test & measurement products that improve the performance of wireless networks globally, with a focus on LTE, public safety, and 5G technologies. Revenue growth in this market is driven by the implementation and roll out of new wireless technology standards (i.e., 3G to 4G, 4G to 5G) and new market applications for public safety and government. Our portfolio includes scanning receivers, scanning receiver software, public safety solutions, interference location systems, and mmwave transmitters. Our

scanning receivers are software defined radios used to 1) confirm adequate RF coverage during deployment, 2) identify interfering signals which decreases capacity, 3) troubleshoot system performance issues as networks expand, and 4) benchmark competing networks because our scanning receivers can scan all technologies across all frequencies during one test. They are necessary for initial network deployment and throughout the entire life cycle of the mobile network. Most of our 4G scanners can be upgraded to 5G via firmware. Consistent with our mission to solve complex network engineering problems and to compete effectively in the RF test & measurement market, PCTEL maintains expertise in the following areas: radio frequency engineering, digital signal processing ("DSP") engineering, wireless network engineering, mechanical engineering, manufacturing, and product quality and testing. Competitors for PCTEL's test & measurement products include OEMs such as Anritsu, Berkley Varitronics, Digital Receiver Technology, Rohde and Schwarz, and Viavi.

Vision and Strategy

As a global leader for RF hardware that enables wireless connectivity, we are focused on four key strategies:

Launch products: We respond rapidly to market trends and demand. Our vision is to provide the most robust and capable RF hardware products for our OEMs, distributors, and direct customers. We work with world class customers that are experts in their vertical applications. Our commitment to our customers is to provide the RF hardware that enables the most reliable wireless connectivity for their systems, whether it is for monitoring factory equipment, electricity distribution through smart grids, or other industrial applications. Our products include antennas, IoT radio devices, IoT sensor and modem platforms and our 4G/5G test & measurement equipment.

Expand Distribution Channels: Our strategy is to leverage the reach and vertical market knowledge of our OEMs and distributors. We focus on key distributors who align with our targeted market segments, including Industrial IoT, intelligent transportation and enterprise wireless. In addition to making the most of our R&D investments to develop new products, we believe we can increase shareholder value by adding key distribution partners that have specific expertise such as providing Industrial IoT solutions, or have regional strength.

Increase Market Share: We leverage our existing customer relationships to provide access points, sensors and other Industrial IoT RF products. We have made significant investments in developing new products that we can market and sell to our existing customer base using our same go-to-market strategy. Many of our customers who purchase antennas for IoT applications also need other products we offer, such as sensors, interface cards and access points.

Drive Operational and Financial Efficiency: We have a disciplined management team, and we will continuously improve processes and productivity.

Markets and Market Opportunity

There are two key market drivers for our long-term growth: Industrial IoT and 5G. We believe that Industrial IoT has the greatest long-term potential for our antennas and ruggedized radio devices to support smart utilities and automation for manufacturing and commercial applications. Industrial IoT will continue to be a growing market to address remote control and data analysis. The critical link for many of these systems is the wireless connection between the device and the core system, which is where PCTEL adds value with our antennas, radio devices and sensors. Enabling reliable and robust wireless connections is critical for wireless Industrial IoT.

5G is still in the early phases of deployment to address capacity in dense user areas. It has better reliability, security, and lower latency than Wi-Fi. Future releases and the availability of new shared spectrum such as Citizens Broadband Radio Service ("CBRS") will drive further investment in 5G to support private networks and neutral host services in valuable mid-range spectrum. Private networks provide a lower cost solution than cellular operators to support enterprises and rural areas.

To capitalize on the market opportunities, we focus on the Industrial IoT, intelligent transportation and enterprise wireless markets:

Industrial IoT

Industrial IoT is about the efficient use of data to make better operating decisions. Wireless connectivity is often the most critical link in an Industrial IoT system, and our long-term strategy is to be the RF hardware supplier of choice for these systems. From a hardware perspective, wireless Industrial IoT solutions require antennas, radio modules, access points or modems, and sensors. Our strategy is to provide a "toolbox" of hardware solutions to our existing OEMs and distributors for Industrial IoT systems. We provide all of the field hardware required for wireless Industrial IoT systems - antennas, ruggedized Wi-Fi access points, radio modules, and integrated cellular sensors for Industrial IoT. Our go-to-market strategy for this growing sector is to sell more RF hardware components to our customers that traditionally purchase antennas from PCTEL. We believe we are uniquely positioned to grow in IoT markets given our current antennas sales and our RF, radio hardware and mechanical expertise.

Intelligent Transportation Products

In the intelligent transportation market segment, we provide antenna systems for smart roadways and smart rail, and we are recognized for our high-performance fleet applications. Many of these transportation systems require multi-frequency and multi-element antennas housed in customized and ruggedized radomes. Smart traffic management antennas support multiple technologies and frequency bands, and are housed in a ruggedized antenna radomes because these units are deployed at street level. Fleet antennas for public safety, including police vehicles, is a key market. We not only manufacture the antennas, but we also provide engineering design services to determine the layout of multi-antenna installations to minimize potential interference between each antenna element. Our customized solutions often result in general purpose products with advance capabilities, such as multi-element 6-in-1, 7-in-1, or 8-in-1 antenna systems in a single radome. These systems can include several LTE bands, Wi-Fi bands and GPS navigation elements, all in one housing. An antenna designed for one application can be modified to be used for other applications.

We have RF and mechanical engineering expertise to rapidly design performance critical antennas with integrated electronics that can withstand some of the harshest industrial conditions. Our antennas for autonomous farming support multiple wireless technologies and satellite navigation systems operate effectively in extreme heat, humidity, dirt, grease, and rain.

Enterprise Wireless

Our enterprise wireless market segment addresses Wi-Fi, cellular, 5G and public safety markets. In this market segment, we supply external and embedded Wi-Fi antennas to OEMs and RF scanning receivers to wireless operators for 4G and 5G network testing.

In-building communication is important for first responders and a significant number of U.S. building require in-building wireless communication testing and certification for first responders. In the public safety market segment, we provide antennas for LMR and cellular networks and we provide test & measurement equipment to test public safety networks, including P25, Tetra and digital mobile radio ("DMR").

Customers

Our strategy is to leverage leading global OEMs and distributors to expand the reach of our products across multiple market segments and industries.

Our antennas and Industrial IoT devices are sold to OEMs where they are designed into their customers' solutions. We also sell through distribution channels that promote and sell our products into specialized markets. We support our major stocking distributors, and we sell our antennas directly to customers where integration into larger systems is not required.

Our test & measurement equipment for the cellular market is sold directly to wireless carriers or to OEMs who integrate our products into their solutions which are then sold to wireless carriers. Our test & measurement equipment for public safety markets is sold to distributors and other engineering service providers.

We do not view customer concentration as a significant issue.

Research and Development- Intellectual Property

Given that our mission is to solve complex RF problems for our customers, research and development is essential to our long-term success. We work closely with our customers, consultants, and market research organizations to monitor and predict changes in the wireless industry, including emerging industry standards. We continue to make substantial investments in engineering, talent, research and development and we devote substantial resources to product development, innovation, and patent submissions.

We have approximately 70 patents and over 70 patents pending in the U.S. and other countries worldwide. The patent submissions are primarily for defensive purposes, rather than for potential license revenue generation.

Sales, Marketing and Support

Our marketing strategy is focused on building market awareness and acceptance of new products. Our Global Marketing group is responsible for promotion and lead generation through optimizing our website, managing trade shows, social media, webinars and general marcom material generation. Our sales function is managed under the Chief Sales Officer who has primary responsibility for revenue generation and oversight of the worldwide sales force. PCTEL's direct sales force is technologically sophisticated with many sales personnel having college degrees in engineering and sales executives having strong industry domain knowledge. We supply our products to OEMs, wireless equipment distributors, public and private carriers, wireless infrastructure providers, and value-added resellers ("VARs"). Our direct sales force supports the sales efforts of our distributors and OEM resellers.

Manufacturing

We have historically done final assembly of most of our antennas in-house at our facilities in Tianjin, China, and Bloomingdale, Illinois. To optimize the cost structure of our antennas and reduce our fixed costs in China, we are in the process of transitioning most of the manufacturing activities from our Tianjin facility to contract manufacturers in China and elsewhere. We expect to substantially complete the transition by the end of fiscal year 2021. We do final assembly of all our test & measurement products in-house at our facility in Clarksburg, Maryland.

By transitioning some of our manufacturing to multiple contract manufacturers with a variety of expertise, we avoid becoming dependent on any specific contract manufacturer. If any contract manufacturer is unable to provide timely or satisfactory services for us, our other contract manufacturers will be available, provided, however, that transitioning production to a different contract manufacturer could cause delays, disruption and additional costs that could negatively impact timely delivery of our products and our earnings therefrom. We have no material guaranteed supply contracts or long-term agreements with any of our suppliers, but we do have open purchase orders with several of our suppliers. See the contractual obligations and commercial commitments section of Note 6 for information on purchase commitments.

Human Capital

Our employees are among our most valuable assets and are critical to our ability to deliver on our strategic plans. Our success in delivering high quality and innovative products and solutions for our customers and driving operational excellence is only achievable through the talent, expertise, and dedication of our global team.

We recognize that attracting, developing, and retaining skilled talent and promoting a diverse and inclusive culture are essential to maintaining our leadership positions in the markets we serve. We offer employees competitive compensation and benefits, and resources to continuously improve their skills and performance with the goal of further cultivating the diversity and expertise in our global businesses to fill key positions. We seek to hire people who share our values. We value technology and innovation and the achievement of customer-driven success. From our employees, we expect leadership at every level and to act with integrity, fairness, and respect. We invest in talent development and recognize that the growth and development of our employees is essential for our continued success.

Our employees in Tianjin, China are represented by a labor union, and our employees in Beijing, China are represented by a separate labor union pursuant to the requirements of China's National Labor Law. These two labor unions do not have collective bargaining rights.

The full-time equivalent employees by geography and functional area were as follows:

	December 31, 2020
Operations:	
U.S.	85
China	101
	186
Engineering:	
U.S.	47
China	9
	56
Sales & Marketing:	
U.S.	40
Rest of World	10
	50
Administration:	
U.S.	29
China	5
	34
Total	326

Available Information

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to such reports, are available free of charge through our website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the United States Securities and Exchange Commission (the "SEC"). Our website is located at the following address: *www.pctel.com*. The information within, or that can be accessed through our website, is not part of this Annual Report on Form 10-K. Further, the SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding our filings at www.*sec.gov*.

Item 1A: Risk Factors

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this Annual Report on Form 10-K, including the sections titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes, before making a decision to invest in our common stock. Our business, financial condition, results of operations, or prospects could also be harmed by risks and uncertainties not currently known to us or that we currently do not believe are material. If any of the risks actually occur, our business, financial condition, results of operations, and prospects could be adversely affected. In that event, the market price of our common stock could decline, and you could lose part or all of your investment.

Factors That May Affect Our Business, Financial Condition and Future Operations

Risks Related to Our Business

Our business model depends upon our ability to recognize significant emerging technologies in a timely manner and to innovate to solve the engineering problems presented by such emerging technologies.

In order to provide solutions to complex engineering problems, we must anticipate which technologies are promising and will be adopted by our customers and potential customers, and we need to be engaged early in the development of these new technologies and products. If we expend resources on the wrong technologies or are not included in the development phase of new technologies that are widely adopted in our industry, we may miss the opportunity for meaningful participation or revenue generation. Missed opportunities like these could have a negative impact on our long-term competitiveness.

We must attract and retain specific types of engineers and other skilled professionals who are capable of innovating and solving complex network engineering problems in order to be successful. In addition, we must create intellectual property or obtain it from third parties when necessary. We also must maintain our intellectual property and enforce the protection of our intellectual property. Failure to accomplish these tasks while managing the costs thereof will result in difficulty in distinguishing us from our competitors and may result in a significant loss of business or diminishing margin on our products.

We have significant international operations and face risks related to global public health crises such as the coronavirus epidemic.

Any outbreaks of contagious diseases or other adverse public health developments in countries where we operate could have a material and adverse effect on our business, financial condition, and results of operations. For example, the recent worldwide outbreak of COVID-19 has resulted in significant governmental measures being implemented to control the spread of the virus, including temporary closure of businesses, severe restrictions on travel and the movement of people, and other material limitations on the conduct of business. These measures resulted in temporary work stoppages, shipping delays, material shortages and other disruptions at our manufacturing facilities in China and the United States as well as the facilities of our suppliers, customers, and our contract manufacturers. Most of these disruptions have been resolved or improved; however, if our supply chain experiences extended disruptions, we may need to seek alternate sources of supply or transportation, which may be more expensive. Alternate sources may not be available or may result in delays in shipments to us from our supply chain and subsequently to our customers, each of which would affect our results of operations. Further, if our customers' businesses are similarly affected, they might delay or reduce purchases from us, which could adversely affect our results of operations. In addition, the continuation of the spread of COVID-19 could adversely affect the economies and financial markets of many countries, negatively impacting demand for our products and our end customers' products. The extent to which COVID-19 will impact our business and our financial results will depend on future developments, which are highly uncertain and cannot be predicted.

Competition within the wireless product industry is intense and could result in decreased margins on our products or loss of key customers. Failure to compete successfully could materially harm our prospects and financial results.

Competition in our industry can result from the following:

- competitors, including foreign government-funded competitors, significantly reducing prices on their products causing disruption to our customer relationships.
- customers demanding lower prices and requiring suppliers like us to engage in auctions and other forms of competitive bidding for purchase orders.
- entrance of a significant competitor in the markets for our products, either from new participants, such as emerging low-cost international competitors, or because of a merger of existing competitors; and
- competitors with substantially greater financial, marketing, technical and other resources with which to pursue engineering, manufacturing, marketing, and distribution of their products and delivery of their services. These competitors may succeed in establishing technology standards or strategic alliances in the connectivity products markets, obtain more rapid market acceptance for their products, or otherwise gain a competitive advantage.

The COVID-19 pandemic has adversely impacted, and poses risks to, our business, the nature and extent of which are highly uncertain and unpredictable.

In January 2020, the World Health Organization (the "WHO") declared a Public Health Emergency of International Concern, and on March 11, 2020, the WHO characterized COVID-19 as a pandemic. This pandemic has resulted in a global health crisis that has adversely affected broader economies, financial markets, and our business environment. During 2020, the Company took steps to mitigate risks related to the pandemic by working with our employees, customers, suppliers, and other stakeholders. We continue to monitor the global impact of the COVID-19 pandemic. The pandemic has adversely affected, and is expected to continue to adversely affect, certain elements of our business. For brief periods during 2020, portions of our workforce were unable to work effectively due to illness and containment measures, including quarantines, facility closures, illness precautions, travel restrictions, and other restrictions. While spread of the pandemic has slowed and certain of these restrictions have been lifted, we may continue to experience volatility and delays in customer demand as a result of the impact of the pandemic on their businesses. In addition, we have instituted work-from-home guidelines for all employees who can work remotely. An extended period of remote work arrangements could strain our business plans, introduce operational risk, including, but not limited to, cybersecurity risks, and impair our ability to manage our business. Further, our management is focused on mitigating the spread of COVID-19, which has required and will continue to require a substantial investment of time and resources across our business and could delay other company initiatives. If the pandemic continues, we may experience additional adverse impacts on our operational and commercial activities, including rising costs, volatility in customer orders and purchases and declines in collections of accounts receivable, which may be material. Furthermore, the pandemic has impacted and may further impact the broader economies of affected countries, including negatively impacting economic growth, the proper functioning of financial and capital markets, foreign currency exchange rates and interest rates. Due to the global breadth of the pandemic, and the range of governmental and community reactions thereto, there is uncertainty around its duration, ultimate impact, and the timing of recovery. Therefore, the pandemic could lead to an extended disruption of economic activity, delays in our sales cycle, customers cancelling purchases of our products and the impact on our stock price, consolidated results of operations, financial position and cash flows could be material.

Conducting business in foreign countries involves additional financial, operating, and regulatory risks.

A substantial portion of our manufacturing, and a portion of our research and development and sales activities is conducted outside the United States, primarily in China.

On March 5, 2020, PCTEL (Tianjin) Wireless Telecommunications Products, Co. Ltd., a wholly owned subsidiary of the Company ("PCTEL Tianjin"), entered into a letter agreement with Wang Zhuang Village Committee of Tianjin, China (the "Letter Agreement") specifying the terms for extension of the lease of the premises on which PCTEL Tianjin currently conducts its manufacturing activities in Tianjin, China (the "Tianjin Lease") to October 2022. The Letter Agreement did not, however, effect the lease extension. The Tianjin Lease expired on October 8, 2020 without extension. On October 16, 2020, the Wang Zhuang Village Committee issued a notice informing PCTEL Tianjin that the Chinese Party Central Committee and the State Council are accelerating the layout optimization and transformation of the industrial park in which the leased premises is located, and accordingly leases and lease extensions for all premises in the industrial park have been suspended and rent collection has been postponed. The letter indicates that if the Tianjin Lease extension is subsequently approved, the rent for the period from October 9, 2020 to the date of the Tianjin Lease extension (the "Intervening Period") will then be due and payable. If the Tianjin Lease extension is not approved, PCTEL Tianjin will need to vacate the premises and no rent will be due for the Intervening Period. PCTEL Tianjin has not received an indication of the likelihood of approval of the Tianjin Lease extension, the length of the Intervening Period or the notice period for vacating the leased premises; provided, however,

based upon past practices and verbal assurances, we believe that PCTEL Tianjin will have not less than 30 days to vacate the leased premises if the Lease Extension is not approved.

As a result of the uncertainty regarding the Tianjin Lease renewal, we are refining our transition plan for the manufacturing activities conducted on the leased premises. Under the transition plan, we expect to maintain small operations in Tianjin and will utilize our existing contract manufacturers in China and elsewhere, as well as our Bloomingdale, Illinois facility for production of the products currently produced on the leased premises. Once transitioned, we do not intend to resume production of the transitioned products on the leased premises even if permitted. If PCTEL Tianjin is given an opportunity to extend the Tianjin Lease, PCTEL Tianjin will seek to extend the term for a short period in which the transition will be ongoing. While we believe that we will be able to maintain our supply chain and on-time product delivery during the transition period, the contemplated transition of production may initially result in quality issues, delays of in product deliveries and increased production costs which could negatively impact our revenue, expenses, and reputation. We are devoting substantial resources to assure the least disruptive transition of manufacturing processes allowed by the transition time allotted.

In addition, there are a number of risks inherent in doing business in foreign countries, including: (i) fluctuations in the value of the U.S. dollar relative to other currencies, and in particular the impact of a re-valuation of the Chinese Yuan; (ii) impact of tariffs or trade wars among the countries in which we do business; (iii) difficulties in repatriation of earnings; (iv) disruption to our supply chain, whether as a result of the spread of COVID-19 or other factors which limit our ability to import materials and export products; (v) nationalist sentiment creating advantages for our competitors in their home countries; (vi) impact of labor unrest, potentially in connection with the reduction in force of a significant portion of our workforce in Tianjin, China (vii) unexpected legal or regulatory changes, particularly changes to environmental, labor or manufacturing regulations; (viii) lack of sufficient protection for intellectual property rights and the risk of theft and forced transfer of intellectual property; (ix) difficulties in recruiting and retaining personnel and managing international operations;(x) under-developed infrastructure; and (xi) other unfavorable political or economic factors which could include nationalization of the wireless communications or related industries. If we are unable to successfully manage these and other risks pertaining to our international activities, our operating results, cash flows and financial position could be materially and adversely affected.

All of our imports from mainland China are subject to U.S. tariffs ranging from 7.5% to 25.0%. The tariffs apply to the antennas sent from our facility in Tianjin, China and our China-based contract manufacturers to our U.S.-based customers and components and materials sent from our Tianjin facility and our China-based contract manufacturers to our Bloomingdale, Illinois facility for final assembly. Tariffs impact the gross margin that we earn on sales of our products because we have not been able to adjust all our prices on all of our affected products to cover the entire cost of the imposed tariffs. We will continue to monitor and adjust prices as market conditions permit. The impact of the tariffs on our future revenue and profitability is uncertain. We do not believe these tariffs resulted in a significant loss of revenue in 2019 or 2020.

Any delays in our sales cycles could result in customers canceling purchases of our products.

Sales cycles for our products with major customers can be lengthy, often lasting nine months or longer. In addition, it can take an additional nine months or more before a customer requires volume production of our products. Sales cycles with our major customers are lengthy for several reasons, including:

- our OEM customers and carriers usually complete a lengthy technical evaluation of our products, over which we have no control, before
 placing a purchase order, and
- the development of new technologies and commercialization of products incorporating new technologies frequently are delayed.

A significant portion of our operating expenses is relatively fixed and is largely based on our forecasts of volume and timing of orders. The lengthy sales cycles make forecasting the volume and timing of product orders difficult. In addition, the delays inherent in lengthy sales cycles raise additional uncertainty that customers may decide to cancel or change product phases. If customer cancellations or product changes were to occur, this could result in the loss of anticipated sales without enough time for us to reduce our operating expenses.

Disruption in our manufacturing and supply chains could adversely impact our sales and reputation.

We assemble our antennas in our facilities located in Bloomingdale, Illinois, and Tianjin, China, and test & measurement products at our facility in Clarksburg, Maryland. We may experience delays, disruptions, or capacity constraints (whether due to the non-renewal of our Tianjin, China facility lease, the COVID-19 pandemic or otherwise) or quality control problems at our assembly facilities, which could result in lower yields or delays of product shipments to our customers. In addition, a significant number of our antennas are currently manufactured in China by contract manufacturers and we are transitioning additional products currently manufactured in our Tianjin facility to contract manufacturers in China and elsewhere. Any disruption of our own or contract manufacturers' operations could cause delayed product delivery, which could negatively impact our sales, competitive reputation, and position. Moreover, if we do not

accurately forecast demand for our products, we will have excess or insufficient parts to build our products, either of which could materially affect our operating results and may lead to obsolete inventory.

Given the dynamic nature of the COVID-19 pandemic, our operations, including our manufacturing facilities and those of our contract manufacturers, may slow again depending on whether there are future resurgences in infection rates and the imposition of additional containment measures. Early in the first quarter 2020, our Tianjin, China facility ceased production for approximately one month and our Chinese contract manufacturers ceased production for several weeks due to the COVID-19 outbreak in China, and our U.S. manufacturing facilities shut down for two weeks in April 2020 and operated at less than full capacity in May 2020. We have limited in-house manufacturing capability. For some product lines, we outsource the manufacturing, assembly, and testing of printed circuit board subsystems. For other product lines, we purchase completed hardware platforms and add our proprietary software. While our suppliers have no unique capability, any failure by these suppliers to meet delivery commitments could cause delayed product delivery and potentially disrupt our supply chain and ability to accept new orders for products. The spread of COVID-19 has impacted supply chains worldwide and may impact our ability to produce and sell products.

In addition, in the event that for any reason our suppliers discontinue manufacturing materials used in our products, we would be forced to incur the time and expense of finding a new supplier or to modify our products in such a way that such materials were not necessary. Either of these alternatives could result in increased manufacturing costs and increased prices of our products.

In summary, in order to be successful, we must manage our operations to limit the cost of product production, accurately forecast demand for our products, avoid excess production and inventory that results in waste or obsolescence, dual source critical materials to avoid shortages and delays in shipping, build for manufacturability and avoid excessive quality issues.

Future acquisitions and investments may not yield their intended benefits. Our failure to successfully integrate acquisitions into our existing operations could adversely affect our business.

In the future, we may make acquisitions of, or large investments in, businesses that offer products and technologies that we believe would complement our products, including wireless products and technology. We may also make acquisitions of or investments in businesses that we believe could expand our distribution channels. Even if we were to announce an acquisition, we may not be able to complete it. Additionally, any future acquisition or substantial investment would present numerous risks, including:

- difficulty in integrating the technology, operations, internal accounting controls or work force of the acquired business with our existing business,
- disruption of our on-going business,
- difficulty in realizing the potential financial or strategic benefits of the transaction,
- difficulty in maintaining uniform standards, controls, procedures, and policies,
- tax, employment, logistics, and other related issues unique to international organizations and assets we acquire,
- possible impairment of relationships with employees and customers as a result of integration of new businesses and management personnel,
 and
- impairment of assets related to resulting goodwill, and reductions in our future operating results from amortization of intangible assets.

We expect that future acquisitions may be paid in cash, shares of our common stock, or a combination of cash and our common stock. If consideration for a transaction is paid in common stock, this would further dilute our existing stockholders. We may also incur debt to pay for an acquisition which could impose restrictive covenants on how we conduct our business.

A failure in our information technology systems could negatively impact our business.

We rely on information technology to record and process transactions, manage our business, and maintain the financial accuracy of our records. Our computer systems are subject to damage or interruption from various sources, including power outages, computer and telecommunications failures, computer viruses, security breaches, vandalism, catastrophic events, and human error. If a cyber-incident, such as a phishing or ransomware attack, virus, malware installation, server malfunction, software or hardware failure, impairment of data integrity, loss of data or other computer assets, adware or other similar issue, impairs or shuts down one or more of our computing systems or our information technology network, we may be subject to negative treatment and lawsuits. In addition, attention to remediating cyber incidents may distract our technical or management personnel from their normal responsibilities. Public announcements of such cyber incidents could occur, and negative perception of such cyber incidents could adversely affect the price of our common stock, and we could lose sales and customers. Interruptions of our computer systems could disrupt our business and could result in the loss of business and cause us to incur additional expense.

We, our customers and our third-party service providers face an evolving threat landscape in which cybercriminals, among others, employ a complex array of cyber-attack techniques designed to access sensitive information or disrupt our operations, including, for example, the use of fraudulent or stolen access credentials, malware, ransomware, phishing, denial of service and other types of attacks. While we have engaged experts in cybersecurity to advise us and we have taken protective measures, our information technology security threats are increasing in frequency and sophistication. Our information technology systems could be breached by unauthorized outside parties or misused by employees or other insiders' intent on extracting sensitive information, corrupting information, or disrupting business processes. Such unauthorized access could compromise confidential information, disrupt our business, harm our reputation, result in the loss of assets, customer confidence and business and have a negative impact on our financial results.

Additional income tax expense or exposure to additional income tax liabilities could have a negative impact on our financial results.

We are subject to income tax laws and regulations in the United States, China, and various foreign jurisdictions. Significant judgment is required in evaluating and estimating our provision and accruals for these taxes. Our income tax liabilities are dependent upon the location of earnings among these different jurisdictions. Our income tax provision and income tax liabilities could be adversely affected by the jurisdictional mix of earnings, changes in valuation of deferred tax assets and liabilities and changes in tax laws and regulations. In the ordinary course of our business, we are also subject to continuous examinations of our income tax returns by tax authorities. Although we believe our tax estimates are reasonable, the results of any tax examination or related litigation could be materially different from our related historical income tax provisions and accruals. Adverse developments in an audit, examination, litigation related to previously filed tax returns, or in the relevant jurisdiction's tax laws, regulations, administrative practices, principles, and interpretations could have a material effect on our results of operations and cash flows in the period or periods for which that development occurs, as well as for prior and subsequent periods.

Legislative or regulatory initiatives related to climate change concerns may negatively affect our business.

Concern over climate change may result in new or additional legal, legislative, and regulatory requirements to reduce or mitigate the effects of climate change on the environment, which could result in future tax, transportation, and utility increases, which could adversely affect our business. There is also increased focus, including by investors, customers, and other stakeholders on these and other sustainability matters, including the use of plastic, energy, waste, and worker safety. Our reputation could be damaged if we do not (or are perceived not to) act responsibly with respect to sustainability matters, which could adversely affect our business, results of operations, financial position and cash flows.

Risks Related to our Common Stock.

The trading price of our stock fluctuates, sometimes significantly, based upon a variety of factors, many of which are not under our control.

Over time, our stock experiences significant changes in price on a percentage basis. The closing price of our common stock on the Nasdaq Global Select Market fluctuated between a high of \$9.33 and a low of \$4.25 during 2020. A variety of factors, many of which are not under of our control influence our stock price, including:

- adverse changes in domestic or global economic conditions, including COVID-19 and recessions,
- new products offered by us or our competitors,
- actual or anticipated variations in quarterly operating results,
- changes in financial estimates by securities analysts,
- · announcements of technological innovations,
- · our announcement of significant acquisitions, strategic partnerships, joint ventures, or capital commitments,
- conditions or trends in our industry,
- additions or departures of key personnel,
- mergers and acquisitions,
- sales of common stock by our stockholders or the Company, and
- repurchases of our common stock by the Company.

Provisions in our charter documents may inhibit a change of control or a change of management, which may cause the market price for our common stock to decline and may inhibit a takeover or change in our control that a stockholder may consider favorable.

Provisions in our charter documents could discourage potential acquisition proposals and could delay or prevent a change in control transaction that our stockholders may favor. Specifically, our charter documents do not permit stockholders to act by written consent, do not permit stockholders to call a stockholders meeting, and provide for a classified board of directors, which means stockholders can only elect, or remove, a limited number of our directors in any given year. These provisions could have the effect of discouraging others from making tender offers for our shares, and as a result, these provisions may prevent the market price of our common stock from reflecting the effects of actual or rumored takeover attempts and may prevent stockholders from reselling their shares at or above the price at which they purchased their shares. These provisions may also prevent changes in our management that our stockholders may favor.

Our board of directors has the authority to issue up to 5,000,000 shares of preferred stock in one or more series. The board of directors can fix the price, rights, preferences, privileges, and restrictions of this preferred stock without any further vote or action by our stockholders. The rights of the holders of our common stock will be affected by, and may be adversely affected by, the rights of the holders of any preferred stock that may be issued in the future. Further, the issuance of shares of preferred stock may delay or prevent a change in control transaction without further action by our stockholders. As a result, the market price of our common stock may decline.

Item 1B: Unresolved Staff Comments

None.

Item 2: Properties

The following table lists our main facilities:

Location	Square feet	Owned/Leased	Lease Expiration (Yr)
Bloomingdale, Illinois	75,517	Owned	N/A
Tianjin, China	44,289	Leased (*)	2020 (*)
Clarksburg, Maryland	21,030	Leased	2031
Akron, Ohio	5,977	Leased	2025
Beijing, China	5,393	Leased	2021

Facility Overview

The Bloomingdale facility is used for our corporate headquarters and for antenna manufacturing, engineering, product management, and sales. The Tianjin facility is used for antenna manufacturing. The Clarksburg facility is used for assembly, engineering, and product management for test & measurement products. Our Akron, Ohio office is used for antenna and Industrial IoT device product development and our Beijing, China office is used for antenna product development, product management, and sales. All properties are in good condition and are suitable for the purposes for which they are used. We believe that we have adequate space for our current needs.

Facility Changes

(*) On March 5, 2020, PCTEL (Tianjin) Wireless Telecommunications Products, Co. Ltd., a wholly owned subsidiary of the Company ("PCTEL Tianjin"), entered into a letter agreement with Wang Zhuang Village Committee of Tianjin, China (the "Letter Agreement") specifying the terms for extension of the lease of the premises on which PCTEL Tianjin currently conducts its manufacturing activities in Tianjin, China (the "Tianjin Lease") to October 2022. The Letter Agreement did not, however, effect the lease extension. The Tianjin Lease expired on October 8, 2020 without extension. On October 16, 2020, the Wang Zhuang Village Committee issued a notice informing PCTEL Tianjin that the Chinese Party Central Committee and the State Council are accelerating the layout optimization and transformation of the industrial park in which the leased premises is located, and accordingly leases and lease extensions for all premises in the industrial park have been suspended and rent collection has been postponed. The letter indicates that if the Tianjin Lease extension is subsequently approved, the rent for the period from October 9, 2020 to the date of the Tianjin Lease extension (the "Intervening Period") will then be due and payable. If the Tianjin Lease extension is not approved, PCTEL Tianjin will need to vacate the premises and no rent will be due for the Intervening Period or the notice period for vacating the leased premises; provided, however, based upon past practices and verbal assurances, we believe that PCTEL Tianjin will have not less than 30 days to vacate the leased premises if the Lease Extension is not approved. See risk factors in Section 1A for additional information on the Tianjin lease.

In July 2020, we signed a one-year lease renewal for its engineering design center in Beijing, China. Under the new lease, the square footage was reduced from 11,210 square feet to 5,393 square feet. The lease period ends on June 14, 2021 and the total lease obligation is approximately \$0.1 million. We expect to renew this lease for one year.

In January 2019, we entered into an eleven-year lease ending February 28, 2031 for 21,030 square feet of office space in Clarksburg, Maryland for our test & measurement product line. In January 2020, we completed the move to the new Clarksburg office from our Germantown, Maryland office. The lease for our Germantown facility ended in February 2020. Under the terms of the Clarksburg lease, the total lease payments for the eleven-year lease are \$5.0 million, and we received \$1.5 million in tenant improvement incentives.

Our lease and sublease for our Colorado lease terminated in October 2020.

Item 3: Legal Proceedings

We may, from time to time, be the subject of various pending or threatened legal actions in the ordinary course of our business. All such matters are subject to many uncertainties and outcomes that are not predictable with assurance. To our knowledge, as of December 31, 2020, there were no claims or litigation pending against the Company that would be reasonably likely to have a material adverse effect on our consolidated financial position, results of operations or liquidity.

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

PCTEL's common stock has been traded on the Nasdaq Global Select Market under the symbol PCTI since our initial public offering on October 19, 1999. As of March 12, 2021, there were 35 holders of record of the common stock. A substantially greater number of holders of the common stock are in "street name" or beneficial holders, whose shares are held of record by banks, brokers, and other financial institutions.

We historically have paid a quarterly cash dividend on our common stock. We currently expect that comparable cash dividends will continue to be paid in the future. However, no assurances can be given that any dividends will be declared or paid on our common stock in the future, or, if declared and paid, the amount or frequency of those dividends. Our ability to pay dividends is restricted by certain laws and regulations, and the payment of dividends is within the discretion of our board of directors.

Sales of Unregistered Equity Securities

None.

Issuer Purchases of Equity Securities

All share repurchase programs are authorized by our Board of Directors and are announced publicly. Such purchases may be made from time to time at predetermined prices in the open market, by block purchases, in private transactions or otherwise. Repurchases are funded from cash on hand.

On November 6, 2019, the Board of Directors approved a share repurchase program, and on March 10, 2020, the Board of Directors reauthorized the program pursuant to which the Company was authorized to repurchase of up to \$7.0 million of its common stock through the end of 2020. The Company spent \$2.0 million to repurchase 375,046 shares at an average price of \$5.36 during the three months ended March 31, 2020. Due to uncertainties related to the COVID-19 pandemic and to protect our cash position, on April 1, 2020, our Board of Directors approved the termination of the stock repurchase program.

On November 4, 2020, the Board of Directors approved a new share repurchase program pursuant to which the Company may repurchase up to \$5.0 million of its common stock through the end of 2021. The plan became effective November 10, 2020. The Company spent \$1.8 million to repurchase 288,573 shares at an average price of \$6.30 during the three months ended December 31, 2020.

The Company did not repurchase any shares of its common stock during 2019.

The following table provides the activity of our repurchase program during the three months ended December 31, 2020:

Period	Total Number of Shares Purchased		Average Price per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs	Maximum Number (or Approximate Dollar Value) of Shares That May Yet be Purchased Under the Programs	
October 1 - October 31, 2020	0		NA	0	\$	0
November 1 - November 30, 2020	241,063	\$	6.25	241,063	\$	3,492,772
December 1 - December 31, 2020	47,510	\$	6.52	288,573	\$	3,183,184

Item 6: Selected Financial Data

Not applicable.

Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations

The following commentary presents a discussion and analysis of the Company's financial condition and results of operations by its management. This review highlights the principal factors affecting earnings and the significant changes in balance sheet items for the years 2020 and 2019. Financial information for prior years is presented when appropriate. The objective of this financial review is to enhance investor understanding of the accompanying tables and charts, the consolidated financial statements, notes to financial statements, and financial statistics appearing elsewhere in this Annual Report on Form 10-K. Where applicable, this discussion also reflects management's insights with respect to known events and trends that have or may reasonably be expected to have a material effect on the Company's operations and financial condition.

You should read this discussion of the Company's financial condition and results of operations in conjunction with, and we qualify our discussion in its entirety by, the consolidated financial statements and notes thereto included elsewhere within this annual report, the material contained under Part 1, Item 1. "Description of Business" and Part I, Item 1A. "Risk Factors" of this annual report, and the cautionary disclosure about forward-looking statements at the front of Part I of this annual report.

Introduction

PCTEL is a leading global provider of wireless technology, including purpose-built Industrial Internet of Thing ("IoT") devices, antenna systems, and test and measurement solutions. We solve complex wireless challenges to help organizations stay connected, transform, and grow. We have two businesses (antennas/Industrial IoT devices and test & measurement products) that address three market segments: Enterprise Wireless, Intelligent Transportation, and Industrial IoT. Our antennas and Industrial IoT devices include antennas deployed in small cells, enterprise Wi-Fi access points, fleet management and transit systems, and in network equipment and devices for the Industrial IoT. Our test & measurement products improve the performance of wireless networks globally. Mobile operators, neutral hosts, and network equipment manufacturers rely on our products to analyze, design, and optimize next generation wireless networks.

COVID-19

The COVID-19 pandemic disrupted the global economy and adversely impacted our business, including demand for our products across multiple end-markets as well as our supply chain and operations. Our foremost focus as we respond to the pandemic has been on the health and safety of our employees. We consider our company to be an essential supplier to our customers and business partners as we provide products which our customers rely upon daily to support crucial functions such as public safety, train control, and agriculture. We continue to operate with enhanced health and safety measures across our facilities, including modifying practices to adhere to guidance from the U.S. Centers for Disease Control and Prevention and local health and governmental authorities with respect to social distancing, physical separation, personal protective equipment, and sanitization. We have restricted the number of employees permitted in common areas at any given time. We also have enhanced procedures for dealing with confirmed COVID-19 cases, compliance auditing, and manufacturing line design. Employees whose duties permit working remotely continue to do so, including our executive, sales, engineering, marketing, and customer service teams. Virtually all employees remain subject to travel restrictions and access to our premises by non-employees is restricted. We will continue to closely monitor the risks posed by COVID-19 and adjust our practices accordingly.

In order to mitigate some of the negative financial impact caused by the pandemic, during 2020 we executed a number of temporary cost saving measures: (i) reduced our capital spending for the year without deferring strategic ongoing initiatives; (ii) reduced operating expenses through temporary salary and director fee reductions; (iii) implemented a hiring freeze; (iv) reduced discretionary spending; and (v) terminated our then-existing stock repurchase program as of April 1, 2020 with \$5.0 million remaining. We also deferred payroll taxes under The Coronavirus Aid, Relief, and Economic Security Act. We did not however, terminate or furlough any employees as a result of the pandemic. Because we were able to maintain our profitability and cash position in the second quarter and based on our third quarter outlook, in July 2020 we reinstated the salaries for all employees not identified as an executive or key manager and approved hiring for open positions. In August 2020, the reinstatement of 5% of the salary reductions for executives and key managers and director fees were approved.

The public health situation, global response measures and corresponding impacts on various markets remain fluid and uncertain and may lead to sudden changes in trajectory and outlook. We will continue to proactively respond to the situation and may take further actions that alter our business activity as may be required by governmental authorities, or that we determine are in the best interests of our employees and operations. Although the COVID-19 pandemic adversely impacted our operations and financial results in with lower revenues and profits in 2020 compared to 2019, we remained profitable and we were able pursue our research and development and growth strategies.

Financial Summary

Revenues were \$77.5 million for the year ended December 31, 2020, a decrease of 14.5% from the prior year. By product line, revenues decreased to \$27.6 million by \$0.6 million (2%) for test & measurement products and decreased to \$50.5 million by \$12.2 million (19.4%) for antennas & Industrial IoT devices. Gross profits of \$37.9 million were lower by \$3.6 million due to the impact of lower

revenues, but the gross profit percentage increased by 3.2% in 2020 due to a higher mix of test & measurement products which have a higher gross profit than antennas & Industrial IoT devices and a higher gross profit percentage within the test & measurement product line compared to 2019. Operating expenses of \$34.6 million decreased by \$4.1 million as 2020 included lower employee costs \$1.2 million, mainly cash-based incentive compensation expense, lower stock compensation expense of \$1.5 million, lower sales commissions of \$0.6 million, lower travel expenses of \$1.0 million, and lower restructuring expense of \$0.4 million, partially offset by higher development costs of \$0.2 million for engineering and higher office expense and professional fees of \$0.4 million. Other income declined by \$0.9 million because interest income declined by \$0.4 million, the Company incurred net foreign exchange losses of \$0.4 million, and other income declined by \$0.1 million. The net impact of these changes resulted in income before tax of \$3.4 million in 2020 compared to income before tax of \$3.8 million in 2019.

Results of Operations Years ended December 31, 2020 and 2019 (All amounts in tables, other than percentages, are in thousands)

REVENUES BY PRODUCT LINE

		2020 compared to 2019						
		2020		\$ Change	% Change		2019	
Antennas & Industrial IoT Devices	\$	50,540	\$	(12,168)	-19.4%	\$	62,708	
Test & Measurement Products		27,565		(550)	-2.0%		28,115	
Corporate	<u> </u>	(649)		(443)	not meaningful		(206)	
Total	\$	77,456	\$	(13,161)	-14.5%	\$	90,617	

Revenues for antennas and Industrial IoT devices of \$50.5 million decreased \$12.2 million (19.4%) compared to 2019, as we experienced lower revenues for antennas for public safety applications, small cells, and enterprise wireless applications. The decline in revenues for small cell antennas is primarily due to lower demand from Huawei Technologies Co., Ltd. resulting from restrictions imposed by the U.S. Department of Commerce on sales of certain products to Huawei. Revenues in the other antenna markets were also negatively impacted by delays and demand for customer orders as a result of the COVID-19 pandemic. Revenues from Huawei declined by \$2.0 million for the year ended December 31, 2020 compared to the year ended December 31, 2019.

Revenues for test & measurement products of \$27.6 million decreased by \$0.6 million (2.0%) as higher revenues for 5G products and public safety applications offset lower revenues for products with technologies other than 5G.

GROSS PROFIT BY PRODUCT LINE

	 2020	% of Revenues		2019	% of Revenues
Antennas & Industrial IoT Devices	\$ 17,665	35.0%	\$	21,841	34.8%
Test & Measurement Products	20,244	73.4%		19,640	69.9%
Corporate	18	not meaningful		31	not meaningful
Total	\$ 37,927	49.0%	\$	41,512	45.8%

The gross profit percentage was 49.0% for the year ended December 31, 2020, an increase of 3.2% compared to 2019. Approximately 2.0% of the gross profit percentage increase was due to a higher mix of test & measurement products in 2020. The proportion of revenues from test & measurement products as a percentage of total revenues increased from 31% in 2019 to 36% in 2020. The remainder of the gross profit percentage increase was primarily due to a higher gross profit percentage for test & measurement products in 2020 compared to 2019. For test & measurement products, the gross profit percentage increased by 3.5% primarily due to revenue mix with more software content and lower inventory reserve provision expense as well as reduced intangible amortization expense in cost of sales. The inventory reserve provisions in 2019 were higher because of write-downs for excess inventory related to older components. For antennas & Industrial IoT devices, the gross profit percentage was approximately the same as more favorable product mix and cost reductions in China offset the negative impact of lower volume.

CONSOLIDATED OPERATING EXPENSES

				% of Rev	enues	
	2020		Change	2019	2020	2019
Research and development	\$ 12,519	\$	247	\$ 12,272	16.2%	13.5%
Sales and marketing	11,104		(1,150)	12,254	14.3%	13.5%
General and administrative	10,808		(2,644)	13,452	14.0%	14.8%
Amortization of intangible assets	32		(187)	219	0.0%	0.2%
Restructuring expenses	 124		(383)	 507	0.2%	0.6%
	\$ 34,587	\$	(4,117)	\$ 38,704	44.7%	42.7%

Research and development expenses increased by \$0.2 million from 2019 to 2020. For the year ended December 31, 2020, spending on outside services and materials increased by \$0.8 million and depreciation expense increased by \$0.2 million, offsetting lower incentive compensation expense of \$0.8 million compared to the same period in the prior year. The spending on outside services and materials related to new product development and the depreciation expense was related to test equipment and leasehold improvements in our Clarksburg, Maryland office. We had 56 and 55 full-time equivalent employees in research and development at December 31, 2020 and 2019, respectively.

Sales and marketing expenses include costs associated with the sales and marketing employees, sales representatives, product line management, and other direct marketing expenses. Sales and marketing expenses decreased by approximately \$1.2 million from 2019 to 2020 as lower travel expenses, lower employee sales commissions, and a credit loss recovery offset higher salary expenses. Travel expenses were lower by \$0.8 million, employee sales commissions were lower by \$0.6 million, and recovery of a credit loss contributed \$0.2 million. Salary expenses increased by \$0.4 million due to higher average headcount in marketing, business development, and in the U.S. sales organization. We had 50 and 48 full-time equivalent employees in sales and marketing at December 31, 2020 and 2019, respectively.

General and administrative expenses include costs associated with the general management, finance, human resources, information technology, legal, public company costs, and other operating expenses to the extent not otherwise allocated to other functions. General and administrative expenses decreased by \$2.6 million from 2019 to 2020 primarily due to lower incentive compensation expenses. For the year ended December 31, 2020, performance-based incentive compensation expense decreased by \$2.2 million, and time-based stock-based compensation declined by \$0.3 million. Additionally, administrative expenses declined by \$0.1 million for our China operations. We had 34 and 31 full-time equivalent employees in general and administrative functions at December 31, 2020 and 2019, respectively.

Amortization of intangible assets within operating expenses was approximately \$32 and \$0.2 million for the years ended December 31, 2020 and 2019, respectively. The decrease in amortization expense in 2020 compared to 2019 was because all intangible assets were fully amortized in 2020.

Restructuring expenses of \$0.1 million in 2020 consisted of employee severance and payroll related costs associated with the termination of 12 employees in connection with our transition of manufacturing from our Tianjin, China facility to contract manufacturers. The restructuring expense of \$0.5 million for the year ended December 31, 2019 consisted of employee severance and related costs associated with the termination of 84 employees as a result of transitioning manufacturing from our Tianjin, China facility to contract manufacturers. See Note 4 to the financial statements for additional information related to the Tianjin restructuring.

OPERATING PROFIT

	2020	% of Revenues	2019	% of Revenues	
Total		40 4 3%	\$ 2,808	3.1%	

Total operating profit increased \$0.5 million for the year ended December 31, 2020 compared to 2019 as the positive impact of lower operating expenses offset the negative impact of lower gross profits.

OTHER INCOME, NET

	2020		2019
Interest income	\$	410	\$ 833
Foreign exchange (losses) gains	(294)	130
Other, net		(10)	19
	\$	106	\$ 982
Percentage of revenues		0.1%	1.19

Other income, net consists of interest income, foreign exchange gains and losses, and interest expense. For the year ended December 31, 2020, interest income decreased by \$0.4 million due to lower average interest rates. Foreign exchange losses during the year ended December 31, 2020 were related to fluctuation in the Chinese Yuan compared to the U.S. dollar. The foreign exchange gains during the year ended December 31, 2019 were also related to the fluctuations in the Chinese Yuan compared to the U.S. Dollar.

EXPENSE FOR INCOME TAXES

	2020		2019
Expense for income taxes	\$	29	\$ 40
Effective tax rate		0.8%	1.1%

The effective tax rate for the year ended December 31, 2020 was lower than the statutory rate of 21.0% by approximately 20% primarily because we have a full valuation allowance on our deferred tax assets.

In accordance with ASC 740 "Accounting for Income Taxes" ("ASC 740"), we evaluate our deferred income tax assets quarterly to determine if valuation allowances are required or should be adjusted. ASC 740 requires that companies assess whether valuation allowances should be established against their deferred tax assets based on consideration of all available evidence, both positive and negative, using a "more likely than not" standard of whether the deferred tax assets will be realized. Our net deferred tax assets consist of assets related to net operating losses and credits as well as assets related to timing differences.

We generated net income and tax income during 2020 but our earnings were below our projections. While we recorded pretax book income for 2020 and 2019 and we believe our financial outlook remains positive, we did not meet expectations during two of the past three years and the COVID-19 pandemic has created a high level of uncertainty. Because of difficulties with forecasting financial results historically, and due to the uncertainties associated with the COVID-19 pandemic, we maintained a full valuation allowance on our deferred tax assets at December 31, 2020. The Company's performance versus its 2020 and 2018 projections are considered significant negative evidence that is difficult to overcome on a "more likely than not" standard through objectively verifiable data. While the Company believes its financial outlook remains positive, under the accounting standards, objective verifiable evidence will have greater weight than subjective evidence such as the Company's projections for future growth. Based on an evaluation in accordance with the accounting standards, as of December 31, 2020, we maintained a full valuation allowance on our deferred tax assets. We have a valuation allowance of \$12.1 million recorded against our net U.S. deferred tax assets and a valuation allowance of \$0.8 million recorded against our net China deferred tax assets to measure the deferred tax assets that are more likely than not to be realized based on the weight of all the available evidence.

Until an appropriate level of profitability is attained, we expect to maintain a full valuation allowance on our U.S. net deferred tax assets, and our China net deferred tax assets. Any U.S. or China tax benefits or tax expense recorded on our Consolidated Statement of Income will be offset with a corresponding valuation allowance until such time that we change our determination related to the realization of deferred tax assets. If we change our determination as to the amount of deferred tax assets that can be realized, we will adjust the valuation allowance with a corresponding impact to the provision for income taxes in the period in which such determination is made.

The analysis that we prepared to determine the valuation allowance required significant judgment and assumptions regarding future market conditions as well as forecasts for profits, taxable income, and taxable income by jurisdiction. Due to the sensitivity of the analysis, changes to the assumptions in subsequent periods could have a material effect on the valuation allowance.

See Note 5 of the consolidated financial statements for more information on income taxes.

LIQUIDITY AND CAPITAL RESOURCES

On December 31, 2020, our cash, cash equivalents, and short-term investments were approximately \$36.3 million, and we had working capital of approximately \$52.9 million. In addition, we had \$4.6 million of long-term investments at December 31, 2020. On December 31, 2020 we had \$2.9 million of cash held in China bank accounts. This cash cannot be accessed without incurring a local withholding tax rate of 10%. These funds are currently considered permanently reinvested. Our primary source of liquidity is cash provided by operations and a significant balance of cash, with short term swings in liquidity supported short-term investments. The balance has fluctuated with cash from operations, acquisitions and divestitures, payment of dividends and the repurchase of our common shares.

Within operating activities, we are historically a net generator of operating funds from our income statement activities. In periods of expansion, we expect to use cash from our balance sheet.

Within investing activities, capital spending historically ranges between 2.0% and 4.0% of our revenues and the primary use of capital is for manufacturing and engineering development requirements. Our capital expenditures during the year ended December 31, 2020 were approximately 5.3% of revenues. Capital expenditures were higher than the upper limit of our historical range in 2020 because we spent \$1.4 million for leasehold improvements for the Clarksburg, Maryland facility that opened in 2020.

We historically have significant transfers between investments and cash as we rotate large cash balances and short-term investment balances between money market funds, which are accounted for as cash equivalents, and other investments. We have a history of supplementing our organic revenue growth with acquisitions of product lines or companies, resulting in significant uses of our cash and short-term investment balances from time to time. We expect the historical trend for capital spending and the variability caused by moving money between cash and investments and periodic acquisition activity to continue in the future.

Within financing activities, we are a net user of funds. We have historically used funds for quarterly dividends and generated funds from the exercise of stock options and proceeds from the issuance of common stock through the Employee Stock Purchase Plan ("ESPP"). We also periodically repurchase shares of our common stock through share repurchase programs. We used \$3.8 million of cash during 2020 for the repurchase of 663,619 shares.

We believe that cash generated by operating activities, our short-term investment balances, and cash on our balance sheet will be enough to support our operations for the next 12 months, including dividend payments and capital expenditures.

The following table is a summary of cash flow activity for the years ended December 31, 2020 and 2019:

		Years Ended December 31,			
	<u> </u>	2020		2019	
Net cash flow provided by (used in):		_			
Operating activities	\$	13,420	\$	10,918	
Investing activities	\$	(6,759)	\$	(3,949)	
Financing activities	\$	(8,262)	\$	(4,136)	
Net (decrease) increase in cash and cash equivalents	\$	(1,601)	\$	2,833	

Operating Activities:

We generated \$13.4 million of funds from operating activities during the year ended December 31, 2020. The cash from operating activities includes net income of \$3.4 million, the add-back of \$5.5 million for non-cash expenses, and positive net changes in operating assets and liabilities of \$4.5 million. The balance sheet provided cash due to lower inventories of \$2.1 million, higher accounts payable of \$1.1 million and lower accounts receivables of \$1.0 million. The decrease in inventories was primarily within the antenna product line due to lower revenues in the fourth quarter compared to fourth quarter in 2019, and due to the transition of manufacturing to contract manufactures. Accounts payable were higher due to timing of purchases in the fourth quarter 2020 compared to the fourth quarter 2019 and by extending the payment cycle for certain vendors. Accounts receivable declined because revenues were lower in the fourth quarter 2020 compared to the fourth quarter 2019.

We generated \$10.9 million of funds from operating activities during the year ended December 31, 2019. The cash from operating activities was due to net income of \$3.8 million, the add-back of \$7.9 million for non-cash expenses, offset by changes in operating assets and liabilities of \$0.8 million. We used cash of \$2.8 million for the decrease of accounts payable. Accounts receivable increased by \$1.5 million primarily because revenues were higher in the fourth quarter 2019 by \$1.7 million compared to the fourth quarter 2018. Accrued liabilities were higher by \$2.3 million primarily because the Company's accrual for its Short-Term Incentive Plan was \$2.6 million at December 31, 2019 and was \$0 at December 31, 2018.

Investing Activities:

Our investing activities used \$6.8 million of cash during the year ended December 31, 2020. Redemptions and maturities of our short-term investments during the year provided \$47.0 million in cash and we rotated \$49.7 million of cash into new short-term and long-term investments. We used \$4.1 million of cash for capital expenditures during the year ended December 31, 2020. The capital expenditures during 2020 included \$2.1 million for leasehold improvements and furniture and equipment for the new Clarksburg, Maryland office.

Our investing activities used \$3.9 million of cash during the year ended December 31, 2019. Redemptions and maturities of our short-term investments during the year provided \$46.6 million in cash and we rotated \$48.2 million of cash into new short-term investments. We used \$2.3 million of cash for capital expenditures during the year ended December 31, 2019. The capital expenditures during 2019 included \$0.6 million for leasehold improvements for the new Clarksburg, Maryland office.

Financing Activities:

We used \$8.2 million of cash for financing activities during the year ended December 31, 2020. We used \$2.0 million for the common stock repurchases during the first quarter and \$1.8 million for common stock repurchases during the fourth quarter. We used \$4.1 million for cash dividends paid quarterly during 2020 and we used \$1.1 million for payroll taxes related to stock-based compensation. The tax payments related to our common stock issued for restricted stock awards. We received \$0.9 million in proceeds from the purchase of shares through our ESPP. On April 16, 2020, we received a \$3.5 million paycheck protection program ("PPP") loan from the Small Business Administration. Based upon subsequent guidance regarding PPP loan eligibility, we returned the funds on April 30, 2020.

We used \$4.1 million of cash for financing activities during the year ended December 31, 2019. We used \$4.1 million for cash dividends paid quarterly and we used \$1.2 million for payroll taxes related to stock-based compensation. The tax payments related to our common stock issued for restricted stock awards. We received \$1.2 million in proceeds from the purchase of shares through our ESPP.

Contractual Obligations and Commercial Commitments

The following summarizes our contractual obligations on December 31, 2020 for office and product assembly facility leases, office equipment leases and purchase obligations, and the effect such obligations are expected to have on the liquidity and cash flows in future periods (in thousands):

		Payments Due by Period									
				I	ess than						After
			Total 1 year 1			1 year 1-3 years 4-5 years			years	s 5 years	
Facility leases	(a)	\$	5,356	\$	472	\$	1,708	\$	995	\$	2,181
Future payments for maintenance lease of office equipment	(b)		158		41		117		0		0
Purchase obligations	(c)		10,943		10,942		1		0		0
Total		\$	16,457	\$	11,455	\$	1,826	\$	995	\$	2,181

- (a) Future payments for the lease of office and production facilities.
- (b) Future payments for the maintenance lease of office equipment.
- (c) Purchase orders or contracts for the purchase of inventory, as well as for other goods and services, in the ordinary course of business, and excludes the balances for purchases currently recognized as liabilities on the balance sheet.

We have a liability related to uncertain positions for income taxes of \$0.8 million on December 31, 2020. We do not know when this obligation will be settled.

Off-Balance Sheet Arrangements

None.

Critical Accounting Policies and Estimates

The preparation of our consolidated financial statements in accordance with generally accepted accounting principles requires us to make estimates and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the period reported. By their nature, these estimates and judgments are subject to an inherent degree of uncertainty. Management bases its estimates and judgments on historical experience, market trends, and other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

Revenue Recognition - We sell antennas & Industrial IoT devices and test & measurement products. All our revenue relates to contracts with customers. Our accounting contracts are from purchase orders or purchase orders combined with purchase agreements. Most of our revenue is recognized on a "point-in-time" basis and a nominal amount of revenue is recognized "over time". For the sale of products, we satisfy our performance obligations generally at the time of shipment, or upon delivery based on the contractual terms with our customers. For antennas shipped on consignment, we recognize revenue upon delivery from the consignment location. For our test & measurement software tools, we have performance obligations to provide software maintenance and support for one year. We recognize revenues for the maintenance and support over this period. We allow our major antenna distributors to return a limited number of products under specified terms and conditions and accrue for product returns. See Note 14 for additional information related to revenue policies.

Accounts Receivable and Allowance for Credit Losses - Accounts receivable is recorded at invoiced amount. We extend credit to our customers based on an evaluation of a customer's financial condition and collateral is generally not required. We maintain an allowance

for credit losses for estimated uncollectible accounts receivable. The allowance is based on our assessment of known delinquent accounts, historical experience, and other currently available evidence of the collectability and the aging of accounts receivable. Although management believes the current allowance is sufficient to cover existing exposures, there can be no assurance against the deterioration of a major customer's creditworthiness, or against defaults that are higher than what has been experienced historically.

Excess and Obsolete Inventory - We maintain reserves to reduce the value of inventory to net realizable value and reserves for excess and obsolete inventory. Reserves for excess inventory are calculated based on our estimate of inventory more than normal and planned usage. Reserves for obsolete inventory are based on our identification of inventory where carrying value is above net realizable value. We believe the accounting estimate related to excess and obsolete inventory is a critical accounting estimate because it requires us to make assumptions about future sales volumes and product mix, both of which are highly uncertain. Changes in these estimates can have a material impact on our financial statements.

Warranty Costs - We offer repair and replacement warranties of primarily five years for antennas & Industrial IoT devices and scanning receiver products. Our warranty reserve is based on historical sales and costs of repair and replacement trends. We believe that the accounting estimate related to warranty costs is a critical accounting estimate because it requires us to make assumptions about matters that are highly uncertain, including future rates of product failure and repair costs. Changes in warranty reserves could be material to our financial statements.

Stock-based Compensation - We recognize stock-based compensation expense for all equity awards in accordance with fair value recognition provisions. For service-based equity awards, we amortize stock-based compensation expense over the requisite service period. For performance-based equity awards, we amortize stock-based compensation expense based on the estimated achievement award over the performance period. We record forfeitures as incurred. Stock-based compensation expense is dependent on assumptions used in calculating such amounts. These assumptions include risk-free interest rates, expected term of the stock-based compensation instrument granted, volatility of stock and option prices, expected time between grant date and date of exercise, attrition, performance, and other factors. These factors require us to use judgment. Our estimates of these assumptions typically are based on historical experience and currently available marketplace data. While management believes that the estimates used are appropriate, differences in actual experience or changes in assumptions may affect our future stock-based compensation expense and disclosures.

Income Taxes - Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

Our Company has an international subsidiary located in Tianjin and a representative office located in Hong Kong. Our Tianjin subsidiary has a branch office in Beijing, China. The complexities that arise from operating in different tax jurisdictions inevitably lead to an increased exposure to worldwide taxes. Should review of the tax filings result in unfavorable adjustments to our tax returns, the operating results, cash flows, and financial position could be materially and adversely affected.

We are subject to the continuous examination of our income tax returns by the Internal Revenue Service and other tax authorities. A change in the assessment of the outcomes of such matters could materially impact our consolidated financial statements. The calculation of tax liabilities involves dealing with uncertainties in the application of complex tax regulations. We recognize liabilities for anticipated tax audit issues based on our estimate of whether, and the extent to which, additional taxes may be required. If we ultimately determine that payment of these amounts is unnecessary, then we reverse the liability and recognize a tax benefit during the period in which we determine that the liability is no longer necessary. We also recognize tax benefits to the extent that it is more likely than not that our positions will be sustained if challenged by the taxing authorities. To the extent we prevail in matters for which liabilities have been established or are required to pay amounts in excess of our liabilities, our effective tax rate in a given period may be materially affected. An unfavorable tax settlement would require cash payments and may result in an increase in our effective tax rate in the year of resolution.

Valuation Allowances for Deferred Tax Assets - We establish an income tax valuation allowance when available evidence indicates that it is more likely than not that all or a portion of a deferred tax asset will not be realized. In assessing the need for a valuation allowance, we consider the amounts and timing of expected future deductions or carryforwards and sources of taxable income that may enable utilization. We maintain an existing valuation allowance until enough positive evidence exists to support its reversal. Changes in the amount or timing of expected future deductions or taxable income may have a material impact on the level of income tax valuation allowances. Our assessment of the realizability of the deferred tax assets requires judgment about our future results. Inherent in this estimation is the requirement for us to estimate future book and taxable income and possible tax planning strategies. These estimates require us to exercise judgment about our future results, the prudence and feasibility of possible tax planning strategies, and the

economic environment in which we do business. It is possible that the actual results will differ from the assumptions and require adjustments to the allowance. Adjustments to the allowance would affect future net income.

Impairment Reviews of Goodwill – We perform an annual impairment test of goodwill as of the end of the first month of the fiscal fourth quarter (October 31st), or at an interim date if an event occurs or if circumstances change that would indicate that an impairment loss may have been incurred. In performing our annual impairment test, we may consider qualitative factors that would indicate possible impairment. A quantitative fair value assessment is performed at the reporting unit level. If the carrying value exceeds the fair value, the implied fair value of goodwill is then compared against the carrying value of goodwill to determine the amount of impairment.

The process of evaluating the potential impairment of goodwill is subjective because it requires the use of estimates and assumptions in determining a reporting unit's fair value. We calculate the fair value of each reporting unit by using the income approach based on the present value of future discounted cash flows. The discounted cash flow method requires us to use estimates and judgments about the future cash flows of the reporting units. Although we base cash flow forecasts on assumptions that are consistent with plans and estimates we use to manage the underlying reporting units, there is significant judgment in determining the cash flows attributable to these reporting units, including markets and market share, sales volumes and mix, research and development expenses, tax rates, capital spending, discount rate and working capital changes. Cash flow forecasts are based on reporting unit operating plans for the early years and business projections in later years. We believe the accounting estimate related to the valuation of goodwill is a critical accounting estimate because it requires us to make assumptions that are highly uncertain about the future cash flows of our reporting units.

Impairment Reviews of Finite-Lived Intangible Assets - We evaluate the carrying value of finite-lived intangible assets and other long-lived assets for impairment whenever indicators of impairment exist. We test finite-lived intangible assets for recoverability using undiscounted cash flows. Although we base cash flow forecasts on assumptions that are consistent with plans and estimates we use to manage the underlying reporting units, there is significant judgment in determining the cash flows attributable to these reporting units, including markets and market share, sales volumes and mix, research and development expenses, capital spending and working capital changes. Cash flow forecasts are based on operating plans and business projections. We compare the tax-affected undiscounted cash flows to the carrying value of the asset group. If the carrying value exceeds the sum of the undiscounted cash flows of the asset group, we would assess the fair value of the intangible assets in the group to determine if an impairment charge should be recognized in the financial statements

We believe the accounting estimate related to the valuation of intangible assets is a critical accounting estimate because it requires us to make assumptions about future sales prices and volumes for products that involve new technologies and applications where customer acceptance of new products or timely introduction of new technologies into their networks are uncertain. The recognition of impairment could be material to our financial statements.

Recent Accounting Pronouncements

See Note 1 Organization and Summary of Significant Accounting Policies in Item 1 of this Form 10-K for a discussion of recent accounting pronouncements.

Item 7A: Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risk from changes in interest rates, foreign exchange rates, credit risk, and investment risk as follows:

Interest Rate Risk

We manage the sensitivity of our results of operations to interest rate risk on cash equivalents by maintaining a conservative investment portfolio. The primary objective of our investment activities is to preserve principal without significantly increasing risk. To achieve this objective, we maintain our portfolio of cash equivalents and short-term investments in U.S. government agency bonds or money market funds invested exclusively in government agency bonds and A or higher rated corporate bonds.

Due to changes in interest rates, our future investment income may fall short of expectations. A hypothetical increase or decrease of 10% in market interest rates would not result in a material change in interest income earned through maturity on investments held at December 31, 2020. We do not hold or issue derivatives, derivative commodity instruments or other financial instruments for trading purposes.

Foreign Currency Risk

Cross-border transactions, both with external parties and with our intercompany relationship, result in increased exposure to foreign exchange effects. We are exposed to currency risk primarily with the Chinese yuan due to our operations in China. Fluctuations with the Chinese yuan against the U.S. dollar could have an adverse effect on our results of operations and cash flows. We manage certain operating activities at the local level with revenues, costs, assets, and liabilities generally being denominated in local currencies. However, our results of operations and assets and liabilities are reported in U.S. dollars and thus will fluctuate with changes in exchange rates between such local currencies and the U.S. dollar. For the year ended December 31, 2020, approximately 3% of revenue and 17% of expenses were transacted in foreign currencies as compared to 5% and 25%, respectively for the year ended December 31, 2019. The percentage decline in both revenues and expenses during 2020 was due to the decrease in revenues for antennas & Industrial IoT devices relative to test & measurement products.

We had \$2.9 million of cash in bank accounts in China on December 31, 2020. As of December 31, 2020, we had no intention of repatriating cash in our foreign bank accounts in China. If we decide to repatriate the cash in these foreign bank accounts, the process may be time-consuming and expensive. We may also be exposed to foreign currency fluctuations and taxes if we repatriate these funds.

Credit Risk

The financial instruments that potentially subject us to credit risk consist primarily of trade receivables. For trade receivables, credit risk is the potential for a loss due to a customer not meeting its payment obligations. Our customers are concentrated in the wireless communications industry. Estimates are used in determining an allowance for amounts which we may not be able to collect, based on current trends, the length of time receivables are past due and historical collection experience. Provisions for and recovery of credit losses are recorded as sales and marketing expense in the consolidated statements of income. We perform ongoing evaluations of customers' credit limits and financial condition. We do not require collateral from customers, but for some customers we do require partial or full prepayments. See Note 1 to the consolidated financial statements for additional information on credit losses.

The following tables represents customers that accounted for 10% or more of total trade accounts receivable on December 31, 2020 and 2019.

	As of December 31,				
Trade Accounts Receivable	2020	2019			
Customer A	31%	15%			
Customer B	10%	8%			
Customer C	0%	11%			

Item 8: Financial Statements and Supplementary Data

PCTEL, INC. INDEX TO THE CONSOLIDATED FINANCIAL STATEMENTS

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders PCTEL, Inc.

Opinion on the financial statements

We have audited the accompanying consolidated balance sheets of PCTEL Inc. (a Delaware corporation) and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the years then ended, and the related notes and financial statement schedules included under Item 15(a) (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the years then ended, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), and our report dated March 12, 2021 expressed an unqualified opinion.

Basis for opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the 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 supporting the amounts and disclosures in the 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical audit matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Deferred Tax Asset Valuation Allowance

The Company's deferred tax asset valuation allowance was \$12.9 million as of December 31, 2020. As described in Note 5 to the consolidated financial statements, the Company's deferred tax assets consist of federal and state net operating losses, credits, and timing differences. On a regular basis, the Company evaluates the recoverability of deferred tax assets and the need for a valuation allowance. This evaluation requires significant judgement. We identified the deferred tax asset valuation allowance as a critical audit matter.

The principal considerations for our determination that the deferred tax asset valuation allowance is a critical audit matter are the Company's evaluation of the recoverability of deferred tax assets and the need for a valuation allowance involved a high degree of auditor judgment due to the significant estimation required. In particular, the evaluation of the recoverability of deferred tax assets and the need for a valuation allowance was sensitive to significant judgment and assumptions regarding future market conditions as well as forecasts for profits, taxable income, and taxable income by jurisdiction.

Our audit procedures related to the deferred tax asset valuation allowance included the following procedures, among others. We tested the design and operating effectiveness of key controls over the Company's deferred tax asset valuation allowance, including review of the valuation model and significant assumptions used. We tested the significant judgments and assumptions discussed above by assessing the reasonableness of the Company's forecasts compared to current results and forecasted industry trends. We performed sensitivity analysis of certain assumptions to evaluate potential changes in the assumptions. With the assistance of our tax specialists, we evaluated the reasonability of maintaining a full valuation allowance on the Company's deferred tax assets with respect to the recoverability and utilization of net operating losses. We also tested the underlying source information and the mathematical accuracy of the calculations.

/s/ GRANT THORNTON LLP

We have served as the Company's auditor since 2006.

Chicago, Illinois March 12, 2021

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders PCTEL, Inc.

Opinion on internal control over financial reporting

We have audited the internal control over financial reporting of PCTEL Inc. (a Delaware corporation) and subsidiaries (the "Company") as of December 31, 2020, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated financial statements of the Company as of and for the year ended December 31, 2020, and our report dated March 12, 2021 expressed an unqualified opinion on those financial statements.

Basis for opinion

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

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

Definition and limitations of internal control over financial reporting

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

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

/s/ GRANT THORNTON LLP

Chicago, Illinois March 12, 2021

PCTEL, INC. CONSOLIDATED BALANCE SHEETS (in thousands, except share data)

	Dec	December 31, 2020		cember 31, 2019
ASSETS				
Cash and cash equivalents	\$	5,761	\$	7,094
Short-term investment securities		30,582		32,556
Accounts receivable, net of allowances of \$113 and \$104 at December 31, 2020 and				
December 31, 2019, respectively		16,601		17,380
Inventories, net		9,984		11,935
Prepaid expenses and other assets		1,685		1,842
Total current assets		64,613		70,807
Property and equipment, net		12,505		11,985
Long-term investment securities		4,640		0
Goodwill		3,332		3,332
Intangible assets, net		0		144
Other noncurrent assets		2,441		2,969
TOTAL ASSETS	\$	87,531	\$	89,237
LIABILITIES AND STOCKHOLDERS' EQUITY				
Accounts payable	\$	4,430	\$	3,190
Accrued liabilities		7,316		9,382
Total current liabilities	<u> </u>	11,746		12,572
Long-term liabilities		4,387		3,315
Total liabilities		16,133		15,887
Stockholders' equity:				
Common stock, \$0.001 par value, 50,000,000 and 100,000,000 shares authorized at				
December 31, 2020 and December 31, 2019, respectively, and 18,429,350 and 18,611,289				
shares issued and outstanding at December 31, 2020 and December 31, 2019, respectively		18		19
Additional paid-in capital		128,250		133,954
Accumulated deficit		(56,888)		(60,305)
Accumulated other comprehensive income (loss)		18		(318)
Total stockholders' equity		71,398		73,350
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$	87,531	\$	89,237

PCTEL, INC. CONSOLIDATED STATEMENTS OF INCOME (in thousands, except per share data)

	Ŋ	Years Ended December 31,					
	-	2020 2019					
REVENUES	\$	77,456	\$	90,617			
COST OF REVENUES		39,529		49,105			
GROSS PROFIT		37,927		41,512			
OPERATING EXPENSES:		_					
Research and development		12,519		12,272			
Sales and marketing		11,104		12,254			
General and administrative		10,808		13,452			
Amortization of intangible assets		32		219			
Restructuring expenses		124		507			
Total operating expenses		34,587		38,704			
OPERATING INOME		3,340		2,808			
Other income, net		106		982			
INCOME BEFORE INCOME TAXES		3,446		3,790			
Expense for income taxes		29		40			
NET INCOME	\$	3,417	\$	3,750			
Net Income per Share:							
Basic	\$	0.19	\$	0.21			
Diluted	\$	0.19	\$	0.21			
Weighted Average Shares:							
Basic		18,207		17,853			
Diluted		18,399		18,159			
Cash dividend per share	\$	0.22	\$	0.22			

PCTEL, INC. CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (in thousands, except per share data)

	 Years Ended December 31,						
	 2020 201						
NET INCOME	\$ 3,417	\$	3,750				
OTHER COMPREHENSIVE INCOME (LOSS)							
Foreign currency translation adjustments	 336		(102)				
COMPREHENSIVE INCOME	\$ 3,753	\$	3,648				

PCTEL, INC. CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (in thousands)

	(Common Stock	A	dditional Paid-In Capital		Retained Deficit	ccumulated Other mprehensive Income (Loss)	E	Total ckholders' quity of TEL, Inc.
BALANCE at JANUARY 1, 2019	\$	18	\$	133,859	\$	(64,055)	\$ (216)	\$	69,606
Stock-based compensation expense		0		4,133	_	0	0		4,133
Issuance of shares for stock purchase and option plans		1		1,182		0	0		1,183
Cancellation of shares for payment of withholding tax		0		(1,152)		0	0		(1,152)
Dividends paid		0		(4,068)		0	0		(4,068)
Net income		0		0		3,750	0		3,750
Change in cumulative translation adjustment, net		0		0		0	(102)		(102)
BALANCE at DECEMBER 31, 2019	\$	19	\$	133,954	\$	(60,305)	\$ (318)	\$	73,350
Stock-based compensation expense		0		2,479		0	0		2,479
Issuance of shares for stock purchase and option plans		0		869		0	0		869
Cancellation of shares for payment of withholding tax		0		(1,137)		0	0		(1,137)
Repurchase of common stock		(1)		(3,807)		0	0		(3,808)
Dividends paid		0		(4,108)		0	0		(4,108)
Net income		0		0		3,417	0		3,417
Change in cumulative translation adjustment, net		0		0		0	 336		336
BALANCE at DECEMBER 31, 2020	\$	18	\$	128,250	\$	(56,888)	\$ 18	\$	71,398

PCTEL, INC. CONSOLIDATED STATEMENT OF CASH FLOWS (in thousands)

	Years Ended December 3			ember 31,
		2020		2019
Operating Activities:				
Net income	\$	3,417	\$	3,750
Adjustments to reconcile net income to net cash provided by operating activities:				
Depreciation		3,019		2,870
Intangible asset amortization		144		885
Stock-based compensation		2,479		4,133
Loss on disposal of property and equipment		21		97
Restructuring costs		(29)		(33)
Bad debt recovery		(151)		(2)
Changes in operating assets and liabilities, net of acquisitions:				
Accounts receivable		960		(1,532)
Inventories		2,076		873
Prepaid expenses and other assets		638		385
Accounts payable		1,086		(2,841)
Income taxes payable		(10)		(22)
Other accrued liabilities		(231)		2,263
Deferred revenue		1		92
Net cash provided by operating activities		13,420	_	10,918
rect class provided by operating activities		15,120		10,510
Investing Activities:				
Capital expenditures		(4,093)		(2,263)
Purchase of investments		(49,701)		(48,245)
Redemptions/maturities of short-term investments		47,035		46,559
Net cash used in investing activities	-	(6,759)		(3,949)
Ç.				
Financing Activities:				
Proceeds from issuance of common stock		869		1,183
Proceeds from Paycheck Protection Program Loan		3,500		0
Repayment of Paycheck Protection Program Loan		(3,500)		0
Payment of withholding tax on stock-based compensation		(1,137)		(1,152)
Principle payments on finance leases		(78)		(99)
Purchase of common stock from repurchase program		(3,808)		0
Cash dividends		(4,108)		(4,068)
Net cash used in financing activities		(8,262)		(4,136)
		(=,===)		(1,200)
Net (decrease) increase in cash and cash equivalents		(1,601)		2,833
Effect of exchange rate changes on cash		268		(68)
Cash and cash equivalents, beginning of year		7,094		4,329
Cash and Cash Equivalents, End of Year	\$	5,761	\$	7,094
			÷	1,001
Other information:				
Cash paid for income taxes	\$	29	\$	34
Cash paid for interest	\$	8	\$	9
Non-cash investing and financing information:				
Decreases to additional paid-in capital related to restricted stock	\$	(188)	\$	(1,037)
Issuance of restricted common stock, net of cancellations	\$	28	\$	226
Recognition of ROU assets under operating leases	\$	2	\$	2,116
Recognition of ROU assets under finance leases	\$	0	\$	118

PCTEL, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the Year Ended: December 31, 2020

(in thousands, except share data and numbers disclosed in millions)

1. Organization and Summary of Significant Accounting Policies

Nature of Operations

PCTEL, Inc. (the "Company") was incorporated in California in 1994 and reincorporated in Delaware in 1998. The Company is a leading global provider of wireless technology, including purpose-built Industrial Internet of Thing ("IoT") devices, antenna systems, and test and measurement solutions. We solve complex wireless challenges to help organizations stay connected, transform, and grow and we have expertise in RF, digital and mechanical engineering. We have two businesses (antennas & Industrial IoT devices and test & measurement products) that address three market segments: Enterprise Wireless, Intelligent Transportation, and Industrial IoT.

Our principal executive offices are located at 471 Brighton Drive, Bloomingdale, Illinois 60108. Our telephone number at that address is (630) 372-6800 and our website is www.pctel.com. Additional information about our Company can be obtained on our website; however, the information within, or that can be accessed through, our website, is not part of this report.

Basis of Consolidation

These consolidated financial statements include the accounts of the Company and its subsidiaries. The financial statements have been prepared in conformity with U.S. generally accepted accounting principles ("GAAP"). All intercompany accounts and transactions have been eliminated.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles in the U.S. requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the periods reported. Actual results could differ from those estimates.

Foreign Operations

The Company is exposed to foreign currency fluctuations due to its foreign operations and because products are sold internationally. The functional currency for the Company's foreign operations is predominantly the applicable local currency. Accounts of foreign operations are translated into U.S. dollars using the year-end exchange rate for assets and liabilities and average monthly rates for revenue and expense accounts. Adjustments resulting from translation are included in accumulated other comprehensive income (loss), a separate component of stockholders' equity. Gains and losses resulting from other transactions originally in foreign currencies and then translated into U.S. dollars are included in the consolidated statements of income. For the year ended December 31, 2020, approximately 3% of revenue and 17% of expenses were transacted in foreign currencies as compared to 5% and 25% for the year ended December 31, 2019. For the year ended December 31, 2020, foreign currency transactions resulted in foreign exchange losses of \$0.3 million and for the year ended December 31, 2019, foreign currency transactions resulted in foreign exchange gains of \$0.1 million. Foreign exchange gains and losses are recorded in other income in the consolidated statement of income.

Fair Value of Financial Instruments

The Company follows accounting pronouncements for Fair Value Measurements and Disclosures, which establishes a fair value hierarchy that requires the Company to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, a three-tier fair value hierarchy has been established, which prioritizes the inputs used in measuring fair value as follows:

Level 1: inputs are unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2: inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices in active markets for similar assets and liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of assets or liabilities.

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.

Cash equivalents are measured at fair value and investments are recognized at amortized cost in the Company's financial statements. Accounts receivable and other investments are financial assets with carrying values that approximate fair value due to the short-term nature of these assets. Accounts payable is a financial liability with a carrying value that approximates fair value due to the short-term nature of these liabilities.

Cash and Cash Equivalents and Investments

The Company's cash and cash equivalents and investments consist of the following:

	 ecember 31, 2020	De	cember 31, 2019
Cash	\$ 4,740	\$	5,604
Cash equivalents	1,021		1,490
Short-term investments	30,582		32,556
Long-term investments	4,640		0
	\$ 40,983	\$	39,650

Cash and Cash Equivalents

On December 31, 2020 and 2019, cash and cash equivalents included bank balances and investments with original maturities less than 90 days. On December 31, 2020 and 2019, the Company's cash equivalents were invested in highly liquid AAA rated money market funds that are required to comply with Rule 2a-7 under the Investment Company Act of 1940. Such funds utilize the amortized cost method of accounting, seek to maintain a constant \$1.00 per share price, and are redeemable upon demand. The Company restricts its investments in AAA money market funds to those invested 100% in either short-term U.S. Government Agency securities or bank repurchase agreements collateralized by these same securities. The fair values of these money market funds are established through quoted prices in active markets for identical assets (Level 1 inputs). The cash in the Company's U.S. banks is insured by the Federal Deposit Insurance Corporation up to the insurable limit of \$250.

On December 31, 2020, the Company had \$2.9 million of cash in bank accounts in China. The Company's cash in these foreign bank accounts is not insured. As of December 31, 2020, the Company has no intentions of repatriating the cash in its foreign bank accounts in China. If the Company decides to repatriate the cash in the foreign bank accounts, it may have trouble in doing so in a timely manner. The Company may also be exposed to foreign currency fluctuations and taxes if it repatriates these funds. On December 31, 2019, the Company had \$2.1 million of cash in bank accounts in China.

Investments

On December 31, 2020 and 2019, the Company's short-term investments consisted of A or higher rated corporate bonds and certificates of deposit. All the investments on December 31, 2020 and 2019 were classified as held-to-maturity. The bonds and certificates of deposit classified as short-term investments have original maturities greater than 90 days and mature within one year and the bonds and certificates of deposit classified as long-term investments have maturities greater than one year but less than two years. The Company's bond investments are recorded at the purchase price and carried at amortized cost.

Cash equivalents and Level 1 and Level 2 investments measured at fair value were as follows:

		December 31, 2020				December 31, 201				19				
	L	evel 1		Level 2 Total		Total Lo		Total		Level 1		Level 2		Total
Cash equivalents:														
Corporate bonds	\$	0	\$	0	\$	0	\$	0	\$	708	\$	708		
Certificates of deposit		300		0		300		0		0		0		
Money market funds		721		0		721		782		0		782		
Total Cash Equivalents	\$	1,021	\$	0	\$	1,021	\$	782	\$	708	\$	1,490		
Short-Term Investments:														
Corporate bonds	\$	0	\$	26,318	\$	26,318	\$	0	\$	28,710	\$	28,710		
Certificates of deposit		4,264		0		4,264		3,846		0		3,846		
Total Short-Term Investments	\$	4,264	\$	26,318	\$	30,582	\$	3,846	\$	28,710	\$	32,556		
Long-Term Investments:		,												
Corporate bonds	\$	0	\$	4,382	\$	4,382	\$	0	\$	0	\$	0		
Certificates of deposit		258		0		258		0		0		0		
Total Long-Term Investments	\$	258	\$	4,382	\$	4,640	\$	0	\$	0	\$	0		
Cash equivalents and Investments - book value	\$	5,543	\$	30,700	\$	36,243	\$	4,628	\$	29,418	\$	34,046		
Unrealized gains (losses)	\$	(1)	\$	(7)	\$	(8)	\$	1	\$	(11)	\$	(10)		
Cash equivalents and Investments - fair value	\$	5,542	\$	30,693	\$	36,235	\$	4,629	\$	29,407	\$	34,036		

The Company categorizes its financial instruments within a fair value hierarchy according to accounting guidance for fair value. The fair value hierarchy is described under the Fair Value of Financial Instruments in Note 1. For the Level 2 investments, the Company uses quoted prices of similar assets in active markets. There were no Level 3 investments on December 31, 2020 or 2019. The fair values in the table above reflect net unrealized losses of \$8 and \$10 on December 31, 2020 and December 31, 2019, respectively.

Accounts Receivable and Allowance for Credit Losses

Accounts receivable are recorded at invoiced amount with standard net terms for most customers that range between 30 and 90 days. The Company extends credit to its customers based on an evaluation of a company's financial condition and collateral is generally not required. The Company records allowances for credit losses and credit allowances that reduce the value of accounts receivable to fair value.

The allowances for accounts receivable consisted of the following:

	December 31, 2020			December 31, 2019
Credit losses provision	\$	66	\$	56
Credit allowances		47		48
Total allowances	\$	113	\$	104

Effective January 1, 2020, the Company adopted ASU 2016-13, "Measurement of Credit Losses on Financial Instruments." This ASU replaces the incurred loss impairment model with an expected loss impairment model for financial instruments, including accounts receivable. The amendment requires entities to consider forward-looking information to estimate expected credit losses. The Company did not record an adjustment upon adoption of ASU 2016-13.

The Company is exposed to credit losses primarily through the sale of products. The Company's expected loss methodology for accounts receivable is developed using historical collection experience, current and future economic market conditions, and a review of the current status of customers' trade accounts receivable. Due to the short-term nature of accounts receivable, the estimate of amount of accounts receivable that may not be collected is based on aging of the account receivable balances and the financial condition of customers. Additionally, specific allowance amounts are established to record the appropriate provision for customers that have a higher probability of default. The Company's monitoring activities include timely account reconciliation, dispute resolution, payment confirmation, consideration of customers' financial condition and macroeconomic conditions. Balances are written off when determined to be uncollectible. The Company considered the current and expected future economic and market conditions surrounding the COVID-19 pandemic and determined that the estimate of credit losses was not significantly impacted. However, the Company has adjusted the applicable payment terms for a few of its customers due to the COVID-19 pandemic. The Company's allowance for credit losses was \$0.1 million at December 31, 2020 and at December 31, 2019. During the year ended December 31, 2020, the Company received \$0.2 million pursuant to a customer settlement for an accounts receivable balance that was written off in 2018.

The following table summarizes the allowance for credit losses activity during the year ended December 31, 2020:

Balance at December 31, 2019	\$ 56
Current period benefit for credit losses	(167)
Recovery of amounts previously written off	177
Balance at December 31, 2020	\$ 66

Inventories

Inventories are stated at the lower of cost or net realizable value and include material, labor and overhead costs using the first-in, first-out method of costing. Inventories as of December 31, 2020 and 2019 were composed of raw materials, work-in-process, and finished goods. The Company had consigned inventory of \$0.3 million at December 31, 2020 and 2019. The Company records allowances to reduce the value of inventory to the lower of cost or market, including allowances for excess and obsolete inventory. Reserves for excess inventory are calculated based on the Company's estimate of inventory more than normal and planned usage. Obsolete reserves are based on the Company's identification of inventory where carrying value is above net realizable value. The allowance for inventory losses was \$3.7 million and \$3.4 million as of December 31, 2020 and 2019, respectively.

Inventories consisted of the following:

	Dec	December 31, 2020		December 31, 2019	
Raw materials	\$	5,315	\$	6,502	
Work in process		883		913	
Finished goods		3,786		4,520	
Inventories, net	\$	9,984	\$	11,935	

Prepaid and Other Current Assets

Prepaid assets are stated at cost and are amortized over the useful lives (up to one year) of the assets.

Property and Equipment

Property and equipment are stated at cost and are depreciated using the straight-line method over the estimated useful lives of the assets. The Company depreciates computer equipment and software license over three to five years, office equipment, manufacturing and test equipment and motor vehicles over five years, furniture and fixtures over seven years, and buildings over 30 years. Leasehold improvements are amortized over the shorter of the corresponding lease term or useful life. Depreciation expense and gains and losses on the disposal of property and equipment are included in cost of sales and operating expenses in the consolidated statements of income. Maintenance and repairs are expensed as incurred.

Property and equipment consisted of the following:

	Dec	December 31, 2020		December 31, 2019	
Building	\$	6,868	\$	6,389	
Computers and office equipment		10,039		9,847	
Manufacturing and test equipment		15,394		14,192	
Furniture and fixtures		1,437		1,314	
Leasehold improvements		2,973		2,850	
Motor vehicles		20		20	
Total property and equipment		36,731		34,612	
Less: Accumulated depreciation and amortization		(25,996)		(24,397)	
Land		1,770		1,770	
Property and equipment, net	\$	12,505	\$	11,985	

Depreciation and amortization expense were approximately \$3.0 million and \$2.9 million for the years ended December 31, 2020 and 2019, respectively. Amortization for capital leases is included in depreciation and amortization expense. See Note 7 for information related to finance leases.

Liabilities

Accrued liabilities consisted of the following:

	Dec	December 31, 2020		December 31, 2019	
Inventory receipts	\$	3,049	\$	1,431	
Payroll and other employee benefits		1,083		1,654	
Paid time off		1,028		855	
Professional fees and contractors		316		246	
Warranties		285		444	
Operating leases		269		282	
Deferred revenues		242		241	
Employee stock purchase plan		224		228	
Income and sales taxes		185		133	
Real estate taxes		155		152	
Customer refunds for estimated returns		146		147	
Finance leases		68		77	
Restructuring		15		45	
Short-term incentive plan		0		2,504	
Leasehold improvements		0		702	
Other		251		241	
Total	\$	7,316	\$	9,382	

Long-term liabilities consisted of the following:

	December 31, 2020	D	December 31, 2019		
Operating leases	\$ 3,949	\$	3,021		
Deferred payroll taxes	243		0		
Finance leases	96		164		
Deferred revenue	76		119		
Other	23		11		
Total	\$ 4,387	\$	3,315		

Revenue Recognition

The Company sells antennas & Industrial IoT devices and test & measurement products. All of the Company's revenue relates to contracts with customers. The Company's accounting contracts are from purchase orders or purchase orders combined with purchase agreements. The majority of the Company's revenue is recognized on a "point-in-time" basis and a nominal amount of revenue is recognized "over time." The Company satisfies its performance obligations related to the sale of its products generally at the time of shipment, or upon delivery based on the contractual terms with its customers. For products shipped on consignment, the Company recognizes revenue upon customer delivery from the consignment location. For its test & measurement software tools, the Company has a performance obligation to provide software maintenance and support for one year. The Company recognizes revenues for the maintenance and support over this period. The Company recognizes revenue for sales of its products when control transfers, which is predominantly upon shipment from its factory. For products shipped on consignment, the Company recognizes revenue upon delivery from the consignment location. The Company allows its major antenna product distributors to return product under specified terms and conditions and accrues for product returns. See Note 14 for additional information related to revenue policies.

Research and Development Costs

The Company expenses research and development costs as incurred. To date, the Company has expensed all software development costs related to research and development because the costs incurred subsequent to the products reaching technological feasibility were not significant.

Advertising Costs

Advertising costs are expensed in the period in which they are incurred. Advertising expense was \$0.2 million during the years ended December 31, 2020, and 2019.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, and deferred tax assets are recognized for net operating losses and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are provided against deferred tax assets, which are not likely to be realized. On a regular basis, management evaluates the recoverability of deferred tax assets and the need for a valuation allowance.

The Company recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs.

Deferred tax assets arise when the Company recognizes charges or expenses in the financial statements that will not be allowed as income tax deductions until future periods. The deferred tax assets also include unused tax net operating losses and tax credits that the Company is allowed to carryforward to future years. Accounting rules permit the Company to carry the deferred tax assets on the balance sheet at full value as long as it is more likely than not the deductions, losses, or credits will be used in the future. A valuation allowance must be recorded against a deferred tax asset if this test cannot be met. The Company had a full valuation allowance of \$12.9 million on December 31, 2020 and of \$13.5 million at December 31, 2019. See Note 5 for more information on the deferred tax valuation allowance.

On March 27, 2020, the "Coronavirus Aid, Relief and Economic Security Act" (CARES Act) was signed into law. The CARES Act includes provisions relating to refundable payroll tax credits, deferment of the employer portion of certain payroll taxes, net operating loss carryback periods, alternative minimum tax credit refunds, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property. Under the CARES Act, the Company is deferring the employer portion of social security taxes and will apply for a refund of its Alternative Minimum Tax credit. For the year ended December 31, 2020, the Company has deferred \$0.5 million of payroll taxes. The payroll taxes will be deferred until the due dates of December 31, 2021 and December 31, 2022. The Company records a deferred tax asset for the payroll tax liability that is not deductible in 2020 for income tax purposes.

Sales and Value Added Taxes

Taxes collected from customers and remitted to governmental authorities are presented on a net basis in cost of sales in the accompanying consolidated statements of income.

Shipping and Handling Costs

Shipping and handling costs are included on a gross basis in cost of sales in the accompanying consolidated statements of income.

Goodwill

The Company performs an annual impairment test of goodwill as of the end of the first month of the fourth fiscal quarter (October 31st), or at an interim date if an event occurs or if circumstances change that would indicate that an impairment loss may have been incurred. In performing the annual impairment tests, the Company may consider qualitative factors that would indicate possible impairment. A quantitative fair value assessment is also performed at the reporting unit level. If the fair value exceeds the carrying value, then goodwill is not impaired, and no further testing is performed. If the carrying value exceeds the fair value, the implied fair value of goodwill is then compared against the carrying value of goodwill to determine the amount of impairment.

The process of evaluating the potential impairment of goodwill is subjective because it requires the use of estimates and assumptions in determining a reporting unit's fair value. The Company calculates the fair value of each reporting unit by using the income approach based on the present value of future discounted cash flows. The discounted cash flow method requires the Company to use estimates and judgments about the future cash flows of the reporting units. Although the Company bases cash flow forecasts on assumptions that are consistent with plans and estimates the Company uses to manage the underlying reporting units, there is significant judgment in

determining the cash flows attributable to these reporting units, including markets and market share, sales volumes and mix, research and development expenses, tax rates, capital spending, discount rate and working capital changes. Cash flow forecasts are based on reporting unit operating plans for the early years and business projections in later years. The Company believes the accounting estimate related to the valuation of goodwill is a critical accounting estimate because it requires the Company to make assumptions that are highly uncertain about the future cash flows of the reporting units. Changes in these estimates can have a material impact on the Company's financial statements.

The Company performed its annual goodwill test at October 31, 2020 and at October 31, 2019 for the goodwill of \$3.3 million. The Company performed both a qualitative analysis of goodwill and a quantitative analysis. There were no triggering events during the year, and the fair value of the reporting unit was higher than its carrying value in the quantitative analysis. Based on the Company's analysis, there was no impairment of goodwill as of the testing dates because the fair value of the reporting unit exceeded its carrying value by a significant margin.

Long-Lived and Definite-Lived Intangible assets

The Company reviews definite-lived intangible assets, investments, and other long-lived assets for impairment when events or changes in circumstances indicate that their carrying values may not be fully recoverable. This analysis differs from the Company's goodwill analysis in that definite-lived intangible asset impairment is only deemed to have occurred if the sum of the forecasted undiscounted future cash flows related to the assets being evaluated is less than the carrying value of the assets. The estimate of long-term undiscounted cash flows includes long-term forecasts of revenue growth, gross margins, and operating expenses. All these items require significant judgment and assumptions. There were no impairments related to long-lived assets used for operations during the years ended December 31, 2020, and 2019.

Recent Accounting Pronouncements

In June 2016, the FASB issued Accounting Standards Update No. 2016-13, Financial Instruments - Credit Losses ("ASU 2016-13"), which modifies the measurement of expected credit losses of certain financial instruments. The Company adopted ASU 2016-13 on January 1, 2020 using a modified retrospective approach. Adoption of ASU 2016-13 did not have a material impact on the Company's consolidated financial statements but required changes to its process of estimating expected credit losses. See Note 4 and Note 6 for further information on the Company's allowance for credit losses.

In August 2018, the FASB issued ASU 2018-15, Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract. The amendments in this update align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The accounting for the service element of a hosting arrangement that is a service contract is not affected by the amendments in this update. The Company adopted ASU 2018-15 on January 1, 2020, and it did not have an impact on its 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 modifies the disclosure requirements on fair value measurements. The Company adopted ASU 2018-13 on January 1, 2020, and it did not have a material impact on its consolidated financial statements.

In December 2019, the FASB issued ASU 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes, which simplifies income tax accounting in various areas including, but not limited to, the accounting for hybrid tax regimes, tax implications related to business combinations, and interim period accounting for enacted changes in tax law, along with some codification improvements. The changes related to this update are effective for fiscal years beginning after December 15, 2020, with early adoption permitted. Certain changes in the standard require retrospective or modified retrospective adoption, while other changes must be adopted prospectively. The Company is currently evaluating ASU 2019-12 and its impact on the consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment (ASU 2017-14). This new guidance eliminates the requirement to calculate the implied fair value of goodwill to measure a goodwill impairment charge. Instead, entities will record an impairment charge based on the excess of a reporting unit's carrying amount over its fair value. The changes are effective for smaller reporting companies for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, and early adoption is permitted. The Company is currently evaluating the impact that this guidance will have on its consolidated financial statements.

In March 2020, the FASB issued ASU 2020-04. Reference Rate Reform ("Topic 848"): Facilitation of the Effects of Reference Rate Reform on Financial

In March 2020, the FASB issued ASU 2020-04, Reference Rate Reform ("Topic 848"): Facilitation of the Effects of Reference Rate Reform on Financial Reporting. This update provides optional expedients and exceptions for applying generally accepted accounting

principles to certain contract modifications and hedging relationships that reference London Inter-bank Offered Rate (LIBOR) or another reference rate expected to be discontinued. Topic 848 is effective upon issuance and generally can be applied through December 31, 2022. The Company is currently evaluating the impact of Topic 848 on the consolidated financial statements.

2. Earnings per Share

The Company computes earnings per share data under two different disclosures, basic and diluted, for all periods in which consolidated statements of income are presented. Basic earnings per share is computed by dividing net income by the weighted average number of shares of common stock outstanding, less shares subject to repurchase. Diluted earnings per share are computed by dividing net income by the weighted average number of common stock and common stock equivalents outstanding. Common stock equivalents consist of stock options using the treasury stock method. Common stock options are excluded from the computation of diluted earnings per share if their effect is anti-dilutive.

The following table provides a reconciliation of the numerators and denominators used in calculating basic and diluted earnings per share:

	 Years Ended December 31,			
	2020		2019	
Basic Income Per Share computation:				
Numerator:				
Net income	\$ 3,417	\$	3,750	
<u>Denominator:</u>				
Common shares outstanding	18,207,396		17,852,968	
Net Income per common share - basic				
Net income	\$ 0.19	\$	0.21	
Diluted Income Per Share computation:				
Denominator:				
Common shares outstanding	18,207,396		17,852,968	
Restricted shares subject to vesting	191,392		113,188	
Performance related awards	0		191,247	
Common stock option grants	0		1,256	
Total shares	 18,398,788		18,158,659	
Income per common share - diluted				
Net income	\$ 0.19	\$	0.21	

3. Goodwill and Other Intangible Assets

Goodwill

There were no changes to the goodwill of \$3.3 million during 2020 or 2019. See the goodwill section of Note 1 for more information on the evaluation of goodwill.

Intangible Assets

The summary of other intangible assets, net is as follows:

	December 31, 2020							
	Cost		Accumulated Net Book Amortization Value		Accumulated Cost Amortization			
Customer contracts and relationships	\$ 16,880	\$	16,880	\$ 0				0
Patents and technology	9,644		9,644	0	10,114	10,003		111
Trademarks and trade names	972		972	0	4,834	4,801		33
Other	0		0	0	2,506	2,506		0
	\$ 27,496	\$	27,496	\$ 0	\$ 34,334	\$ 34,190	\$	144

The Company amortizes intangible assets with finite lives on a straight-line basis over the estimated useful lives, which range from one to six years. In the Consolidated Statement of Income, amortization expense was approximately \$0.1 million for the year ended December 31, 2020, and \$0.9 million for the year ended December 31, 2019. Amortization for technology assets is included in cost of revenues and amortization for all other intangible assets is included in operating expenses. For the year ended December 31, 2020, \$0.1 million the intangible asset amortization was included in cost of revenues. For the year ended December 31, 2019, \$0.2 million of the intangible asset amortization was included in operating expenses and \$0.7 million was included in cost of goods revenues.

The assigned lives and weighted average amortization periods by intangible asset category are summarized below:

Intangible Assets	Assigned Life	Weighted Average Amortization Period
Customer contracts and relationships	5 years	5.0
Patents and technology	5 to 6 years	5.1
Trademarks and trade names	5 to 6 years	5.6
Other	1 to 6 years	3.0

4. Restructuring

The following table summarizes the Company's restructuring accrual activity for the years ended December 31, 2020, and 2019:

	China Restructuring Severance	Lease nination	 Total
Balance at January 1, 2019	\$ 0	\$ 77	\$ 77
Restructuring expense	507	0	507
Payments made	(495)	(143)	(638)
Payments received	0	99	99
Balance at December 31, 2019	\$ 12	\$ 33	\$ 45
Restructuring expense	124	0	124
Payments made	(136)	(106)	(242)
Payments received	0	88	88
Balance at December 31, 2020	\$ 0	\$ 15	\$ 15

The restructuring liability is recorded on the balance sheet in accrued liabilities at December 31, 2020 and 2019.

China Restructuring

On August 7, 2019 the Company's Board of Directors approved a transition plan for the Company's China manufacturing operations. As part of the plan, the Company is transitioning high-volume manufacturing from its Tianjin, China facility to contract manufacturers in China and elsewhere in order to reduce fixed costs in China, optimize the cost structure of the antenna product line, and create flexibility in antenna manufacturing due to the uncertainty of the lease of the current manufacturing premises, as described below. For the year ended December 31, 2020, the Company incurred restructuring expenses of \$0.1 million for employee severance related to the separation of 12 employees and for the year ended December 31, 2019, the Company incurred restructuring expenses of \$0.5 million for employee severance and related benefits related to the separation of 84 employees. Severance costs were paid from the Company's cash in its China bank accounts.

On October 8, 2020, the lease of the premises on which the Company's China manufacturing operations are conducted expired and the renewal is pending and uncertain. The Company has been notified that the Chinese Party Central Committee and the State Council are accelerating the layout optimization and transformation of the industrial park in which the Company's leased premises is located and, accordingly, leases and lease extensions for all premises in the industrial park have been suspended and rent collection has been postponed. The Company has not received an indication of the likelihood of approval of its lease extension. As a result of the uncertainty regarding the Tianjin Lease (as defined in Note 7) renewal, the Company is refining its transition plan for the manufacturing activities conducted on the leased premises. As part of the refined transition plan, the Company will retain a group of employees in Tianjin, China, but will reduce additional headcount in Tianjin and incur additional restructuring charges for severance and other non-cash costs. The Company expects additional severance of between \$0.8 million and \$1.0 million in 2021. See Note 7 and the risk factors in Part II, Item 1A for additional information. The Company expects the transition to be substantially completed by the end of the 2021 fiscal year.

Lease Termination

In 2016, the Company exited from its Colorado office to consolidate facility space and in the second quarter 2017 the Company signed a sublease for the office space. The lease and sublease terminated in October 2020.

5. Income Taxes

The domestic and foreign components of the income (loss) before expense for income taxes were as follows:

	 Years Ended December 31,						
	2020		2019				
Domestic	\$ 4,447	\$	4,250				
Foreign	(1,001)		(460)				
Total	\$ 3,446	\$	3,790				

The expense for income taxes consisted of the following:

		Years Ended December 31,				
	20	020	,	2019		
Current:						
Federal	\$	0	\$	0		
State		29		40		
Foreign		0		0		
		29		40		
Deferred:						
Federal		0		0		
State		0		0		
Foreign		0		0		
		0		0		
Total	\$	29	\$	40		

A reconciliation of the expense for income taxes at the federal statutory rate compared to the expense at the effective tax rate is as follows:

	Years Ended Do	cember 31
	2020	2019
Statutory federal income tax rate	21%	21%
State income tax, net of federal benefit	7%	7%
Tax effect of permanent differences	1%	3%
Change in valuation allowance	-19%	-25%
Effective state rate change to deferred tax assets	0%	-1%
Stock-based compensation (windfalls) shortfalls	-1%	3%
Foreign income taxed at different rates	1%	0%
Research and development credits	- 9%	-8%
Other	0%	1%
	1%	1%

The Company recorded net income tax expense of \$29 for the year ended December 31, 2020. The 2020 effective rate differed from the Federal rate of 21% primarily because the Company has a full valuation allowance on its deferred tax assets. The Company's valuation allowance is due to the uncertainty regarding the utilization of the deferred tax assets.

The Company recorded net income tax expense of \$40 for the year ended December 31, 2019. The 2019 effective tax rate differed from the Federal rate of 21% primarily because the Company had a full valuation allowance on its deferred tax assets.

Under the U.S. tax guidelines, a U.S. shareholder of controlled foreign corporations ("CFCs") is required to include in gross income the amount of its global intangible low-taxed income ("GILTI"). Generally, the GILTI inclusion is the U.S. shareholder's allocable share of certain income earned through its CFCs ("net CFC tested income") in excess of a deemed 10% return on the shareholder's allocable share of certain of the CFC's depreciable, tangible assets less certain interest expense items ("net deemed tangible income return"). The Company elected to treat taxes due on future U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred (the period cost method). The amount included for GILTI did not have a significant impact on the Company's tax provision for the years ended December 31, 2020 or December 31, 2019.

The Company recognizes all interest and penalties as income tax expense. There was no income tax expense related to interest and penalties for the years ended December 31, 2020 or 2019.

Deferred Taxes

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

The net deferred tax accounts consist of the following:

	 December 31,			
	 2020	2019)	
Deferred Tax Assets:				
Net operating loss carryforwards	\$ 4,138	\$	4,759	
Amortization	2,942		3,500	
Federal, foreign, and state credits	2,399		2,086	
Inventory reserves	995		1,159	
Deferred gain	866		870	
Deferred rent	498		159	
Stock compensation	465		494	
Accrued vacation	264		220	
Other	401		404	
Gross deferred tax assets	12,968		13,651	
Valuation allowance	(12,938)	(13,490)	
Net deferred tax asset	30		161	
Deferred Tax Liabilities:				
Depreciation	(30)		(161)	
Net Deferred Tax Assets	\$ 0	\$	0	

At December 31, 2020, the Company had gross deferred tax assets of \$13.0 million, deferred tax liabilities of \$30, and a valuation allowance of \$12.9 million. The deferred tax assets consisted of domestic deferred tax assets of \$12.1 million and foreign deferred tax assets of \$0.8 million. At December 31, 2020, \$2.9 million of the deferred tax asset is intangible assets acquired under purchase accounting which are amortized for tax purposes over 15 years, but for shorter periods under generally accepted accounting principles.

At December 31, 2019, the Company had gross deferred tax assets of \$13.7 million, deferred tax liabilities of \$0.2 million, and a valuation allowance of \$13.5 million. The net deferred tax assets at December 31, 2019 consisted of domestic net deferred tax assets of \$13.1 million and foreign net deferred tax assets of \$0.5 million. At December 31, 2019, \$3.5 million of the deferred tax asset is intangible assets acquired under purchase accounting which are amortized for tax purposes over 15 years, but for shorter periods under generally accepted accounting principles.

On a regular basis, the Company evaluates the recoverability of deferred tax assets and the need for a valuation allowance. Such evaluations involve the application of significant judgment. The Company considers multiple factors in its evaluation of the need for a valuation allowance. The Company's net deferred tax assets consist of assets related to net operating losses and credits as well as assets related to timing differences. The Company's net operating losses and credits have a finite life primarily based on the 20-year carryforward rule for federal net operating losses (NOLs) generated through December 31, 2017. The timing differences have a ratable reversal pattern over approximately 10 years. Under the new rules enacted with the Tax Act, tax losses incurred in 2018 and future periods will not expire, thereby extending the period by which the Company's deferred tax assets can be realized. However, these post 2017 losses are subject to a limitation of 80% of current taxable income.

In accordance with ASC 740 "Accounting for Income Taxes" ("ASC 740"), the Company evaluates deferred income tax assets quarterly to determine if valuation allowances are required or should be adjusted. ASC 740 requires that companies assess whether valuation allowances should be established against their deferred tax assets based on consideration of all available evidence, both positive and negative, using a "more likely than not" standard. At December 31, 2020 and December 31, 2019, the Company had a full valuation allowance on its deferred tax assets. The Company generated book and tax income during 2020 but its earnings were below its projections. While the Company has recorded pretax book income for the prior two years and believes its financial outlook remains positive, it did not meet expectations in 2020 and the COVID-19 pandemic has created a high level of uncertainty. Because of difficulties with forecasting financial results historically, and due to the uncertainties associated with the COVID-19 pandemic, the Company maintained a full valuation allowance on its deferred tax assets at December 31, 2020. The Company's performance versus its projections in two of the previous three years are considered significant negative evidence that is difficult to overcome on a "more likely than not" standard through objectively verifiable data. While the Company believes its financial outlook remains positive, under the accounting standards, objective verifiable evidence will have greater weight than subjective evidence such as the Company's projections for future growth. Based on an evaluation in accordance with the accounting standards, as of December 31, 2020, the Company has a valuation allowance of \$12.1 million which was recorded against the net U.S. deferred tax assets and a valuation allowance of \$0.8 million has been recorded against the net China deferred tax assets in order to measure the deferred tax assets that are more likely than not to be realized based on the weight of all the available evidence.

Until an appropriate level of profitability is attained, the Company expects to maintain a full valuation allowance on its U.S. net deferred tax assets, and China net deferred tax assets. Any U.S. or China tax benefits or tax expense recorded on its consolidated statement of income will be offset with a corresponding valuation allowance until such time that the Company changes its determination related to the realization of deferred tax assets. In the event that the Company changes its determination as to the amount of deferred tax assets that can be realized, the Company will adjust its valuation allowance with a corresponding impact to the provision for income taxes in the period in which such a determination is made.

The analysis that the Company prepared to determine the valuation allowance required significant judgment and assumptions regarding future market conditions, as well as forecasts for profits, taxable income, and taxable income by jurisdiction. Due to the sensitivity of the analysis, changes to the assumptions in subsequent periods could have a material effect on the valuation allowance.

Accounting for Uncertainty for Income Taxes

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

		December 31,				
	202	20		2019		
Beginning of period	\$	759	\$	730		
Addition related to tax positions in current year		49		45		
Reversals for uncertain tax positions		0		(16)		
End of period	\$	808	\$	759		

Because the Company has a full valuation allowance against its deferred tax assets, the reversal of these unrecognized tax benefits would have no impact on its effective tax rate. The Company does not anticipate that its unrecognized tax benefits will significantly increase or decrease within the next twelve months.

Audits

The Company and its subsidiaries file income tax returns in the U.S. and various foreign jurisdictions. The Company's U.S. federal tax returns remain subject to examination for 2017 and subsequent periods, although loss carryovers generated in prior years remain subject to examination. The Company's state tax returns remain subject to examination for 2015 and subsequent periods. The Company's foreign tax returns in China remain subject to examination for 2011 and subsequent periods.

Summary of Carryforwards

At December 31, 2020, the Company has a federal net operating loss carryforward of \$5.3 million that expires between 2031 and 2037 and a Federal net operating loss carryforward of \$8.1 million with no expiration. The Company has state net operating loss carryforwards of \$15.7 million that expire between 2021 and 2038. Additionally, the Company has \$1.6 million of federal research credits that expire between 2030 and 2040 and \$1.5 million of state research credits with no expiration. The Company has a China net operating loss carryforward of \$1.0 million that expires between 2025 and 2026 and of China research credits of \$0.3 million that expire between 2024 and 2026.

Investment in Foreign Operations

The Company has recorded income tax related to the deemed dividend of earnings for its subsidiary in China. The Company considers such earnings permanently reinvested. Upon repatriation of these earnings, the Company would be subject to local withholding taxes.

CARES Act

On March 27, 2020, the "Coronavirus Aid, Relief and Economic Security Act" (CARES Act) was signed into law. The CARES Act includes provisions relating to refundable payroll tax credits, deferment of the employer portion of certain payroll taxes, net operating loss carryback periods, alternative minimum tax credit refunds, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property. Under the CARES Act, the Company is deferring the employer portion of social security taxes and will apply for a refund of its Alternative Minimum Tax credit. For the year ended December 31, 2020, the Company has deferred \$0.5 million of payroll taxes. The payroll taxes will be deferred until the due dates of December 31, 2021 and December 31, 2022. The Company recorded a deferred tax asset for the payroll tax liability that is not deductible in 2020 for income tax purposes.

6. Commitments and Contingencies

Warranty Reserve and Sales Returns

The Company allows its major distributors and certain other customers to return unused product under specified terms and conditions. The Company accrues for product returns based on historical sales and return trends. The refund liability was \$0.1 million at December 31, 2020 and 2019 and is included in other accrued liabilities in the accompanying consolidated balance sheets.

The Company offers repair and replacement warranties of primarily five years for antennas & Industrial IoT devices and for scanning receivers. The Company's warranty reserve is based on historical sales and costs of repair and replacement trends. The warranty reserve was \$0.3 million at December 31, 2020 and \$0.4 million at December 31, 2019 and is included in other accrued liabilities in the accompanying consolidated balance sheets.

		Year Ended December 31,				
	2	.020		2019		
Beginning balance	\$	444	\$	339		
Provisions for warranties		44		435		
Consumption of reserves		(203)		(330)		
Ending balance	\$	285	\$	444		

7. Leases

The Company has operating leases for facilities and finance leases for office equipment. Leases with an initial term of 12 months or less are not recorded in the balance sheet. The Company determines if an arrangement is a lease at inception of a contract. Right of Use ("ROU") assets represent the Company's right to use an underlying asset during the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. ROU assets and lease liabilities are recognized at the lease commencement date based on the net present value of fixed lease payments over the lease term. The Company's lease term is deemed to include options to extend or terminate the lease when it is reasonably certain that it will exercise that option. ROU assets also include any advance lease payments made and exclude lease incentives. As most of the Company's operating leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments on a collateralized basis. Finance lease agreements generally include an interest rate that is used to determine the present value of future lease payments. Operating fixed lease expense and finance lease depreciation expense are recognized on a straight-line basis over the lease term.

The Company's lease cost for the year ended December 31, 2020 and 2019 included the following components:

	Years ended December 31,				
	 020		2019		
Operating lease costs	\$ 642	\$	963		
Short-term lease costs	114		92		
Variable lease costs	2		27		
Amortization of finance lease assets	77		99		
Interest on finance lease liabilities	8		9		
Total lease cost	\$ 843	\$	1,190		

The table below summarizes the Company's scheduled future minimum lease payments under operating and finance leases recorded on the balance sheet as of December 31, 2020:

Year	Operating Leases	Finance Leases
2021	\$ 481	\$ 73
2022	558	48
2023	569	32
2024	581	20
2025	501	0
Thereafter	2,675	0
Total minimum payments required	5,365	173
Less: amount representing interest	1,147	9
Present value of net minimum lease payments	4,218	164
Less: current maturities of lease obligations	(269)	(68)
Long-term lease obligations	\$ 3,949	\$ 96

The weighted average remaining lease terms and discount rates for all the Company's operating and finance leases were as follows as of December 31, 2020 and 2019:

	Years ended l	December 31,
	2020	2019
Weighted-average remaining lease term - finance leases	2.9 years	3.6 years
Weighted-average remaining lease term - operating leases	9.6 years	9.7 years
Weighted-average discount rate - finance leases	4%	4%
Weighted-average discount rate - operating leases	5%	5%

The table below presents supplemental balance sheet information related to leases during the year ended December 31, 2020 and 2019:

			Year ended I)ecem	ıber 31,
Leases	Consolidated Balance Sheet Classification		2020		2019
Assets:					
Operating right-of-use assets	Other noncurrent assets	\$	2,272	\$	2,696
Finance right-of-use assets	Other noncurrent assets		157		234
Total lease assets		\$	2,429	\$	2,930
Liabilities:					
Current					
Operating lease liabilities	Accrued liabilities	\$	269	\$	282
Finance lease liabilities	Accrued liabilities		68		77
Noncurrent					
Operating lease liabilities	Long-term liabilities		3,949		3,021
Finance lease liabilities	Long-term liabilities		96		164
Total lease liabilities		\$	4,382	\$	3,544

In January 2019, the Company entered into an eleven-year lease ending February 28, 2031 for 21,030 square feet of office space in Clarksburg, Maryland for the Company's test & measurement product line. The Company moved the operations for its test & measurement product line from its Germantown, Maryland office in January 2020. The Company recognized a present value right of use asset of \$2.1 million in August 2019, which was the lease commencement date for accounting purposes. The present value of the right of use asset on the commencement date reflected 14 months of rent abatement and \$1.5 million in tenant improvement incentives in the form of cash reimbursements which the Company fully utilized during 2019 and 2020.

In July 2020, the Company signed a one-year lease renewal for its engineering design center in Beijing, China. Under the new lease, the square footage was reduced from 11,210 square feet to 5,393 square feet. The lease period ends on June 14, 2021 and the total lease obligation is approximately \$0.1 million.

On March 5, 2020, PCTEL (Tianjin) Wireless Telecommunications Products, Co. Ltd., a wholly owned subsidiary of the Company ("PCTEL Tianjin"), entered into a letter agreement with Wang Zhuang Village Committee of Tianjin, China (the "Letter Agreement") specifying the terms for extension of the lease of the premises on which PCTEL Tianjin currently conducts its manufacturing activities in Tianjin, China (the "Tianjin Lease") to October 2022. The Letter Agreement did not, however, effect the lease extension. The Tianjin Lease expired on October 8, 2020 without extension. On October 16, 2020, the Wang Zhuang Village Committee issued a notice informing PCTEL Tianjin that the Chinese Party Central Committee and the State Council are accelerating the layout optimization and transformation of the industrial park in which the leased premises is located, and accordingly leases and lease extensions for all premises in the industrial park have been suspended and rent collection has been postponed. The letter indicates that if the Tianjin Lease extension is subsequently approved, the rent for the period from October 9, 2020 to the date of the Tianjin Lease extension (the "Intervening Period") will then be due and payable. If the Tianjin Lease extension is not approved, PCTEL Tianjin will need to vacate the premises and no rent will be due for the Intervening Period or the notice period for vacating the leased premises; provided, however, based upon past practices and verbal assurances, the Company believes that PCTEL Tianjin will have not less than 30 days to vacate the leased premises if the Lease Extension is not approved. See risk factors in Section IA for additional information on the Tianjin lease.

8. Shareholders' Equity

Common Stock

The activity related to common shares outstanding is as follows:

	Years Ended D 2020	ecember 31, 2019
Beginning of year	18,611,289	18,271,249
Issuance of common stock on exercise of stock options	19,606	73,680
Restricted stock awards, net of cancellations	202,748	189,578
Director share awards	60,998	79,918
Equity awards under Short-Term Incentive Plan	189,121	0
Issuance of common stock from purchase of Employee Stock		
Purchase Plan shares	157,706	180,859
Cancellation of stock for withholding tax for vested shares	(148,499)	(183,995)
Common stock Repurchases	(663,619)	0
End of Year	18,429,350	18,611,289

Preferred Stock

The Company is authorized to issue up to 5,000,000 shares of preferred stock in one or more series, each with a par value of \$0.001 per share. As of December 31, 2020, and 2019, no shares of preferred stock were issued or outstanding.

9. Stock-Based Compensation

Stock Plans

Common Stock Reserved for Future Issuance

A summary of the reserved shares of common stock for future issuance are as follows:

	December 31,			
Stock Plan	2020	2019		
PCTEL, Inc. 2019 Stock Incentive Plan	2,109,184	2,240,669		
PCTEL, Inc. 2015 Stock Incentive Plan	299,979	489,100		
PCTEL, Inc. 2019 Employee Stock Purchase Plan	1,642,294	1,800,000		
Total shares reserved	4,051,457	4,529,769		

These shares available exclude stock options outstanding.

Stock Incentive Plans

On May 29, 2019, at the Annual Meeting of Shareholders, the shareholders adopted and approved the PCTEL, Inc. 2019 Stock Incentive Plan (the "2019 Stock Plan") upon the recommendation of the Board of Directors. The purpose of the 2019 Stock Plan is to promote the interests of the Company and its stockholders by aiding the Company in attracting and retaining employees, officers, consultants, independent contractors, and non-employee directors capable of assuring the future success of the Company, to provide such persons with opportunities for stock ownership in the Company and to offer such persons incentives to put forth maximum effort for the success of the Company's business. The 2019 Stock Plan replaced the PCTEL, Inc. Stock Incentive Plan adopted in 2015 (the "2015 Stock Plan").

The 2019 Stock Plan, which is administered by the Compensation Committee of the Company's Board of Directors, authorizes the grant of stock options, stock appreciation rights, restricted stock, restricted stock units, and other stock-based awards. The aggregate number of shares that may be issued under all stock-based awards made under the 2019 Stock Plan will be (i) the sum of 2,213,000 shares and (ii) any shares subject to any outstanding award under the 2015 Stock Plan that after the effective date of the 2019 Stock Plan are not purchased, are forfeited, or are reacquired by the Company or otherwise not delivered to the participant due to termination or cancellation of such award. At December 31, 2020, the number of shares available in the 2019 Stock Plan that were from the 2015 Plan was 103,865. The Board of Directors may from time to time amend, suspend, or terminate the 2019 Stock Plan, subject to its terms. Currently the 2019 Stock Plan does not allow share "recycling", repricing of stock options or stock appreciation rights or dividend equivalents to be paid on unvested awards, and does not contain an "evergreen" provision that will automatically increase the number of shares authorized for issuance under the 2019 Stock Plan.

Employee Stock Purchase Plan

At the 2019 Annual Meeting of Shareholders, the shareholders adopted and approved the PCTEL, Inc. 2019 Employee Stock Purchase Plan (the "2019 ESPP") upon recommendation of the Board of Directors. The purpose of the 2019 ESPP is to provide employees with an opportunity to purchase shares of PCTEL common stock through accumulated payroll deductions. Encouraging employees to acquire equity ownership in PCTEL assures a closer alignment of the interests of participating employees with those of the Company's stockholders. The 2019 ESPP replaced the 2014 ESPP effective for the trading period commencing October 1, 2019. On October 1, 2019, the remaining shares from the 2014 ESPP were cancelled.

The 2019 ESPP is administered by the Compensation Committee of the Company's Board of Directors. Subject to change by the administrator, shares of PCTEL common stock may be purchased during consecutive offering periods that begin approximately every six months commencing on the first trading day on or after April 1 and terminating on the last trading day of the offering period ending on September 30 and commencing on the first trading day on or after October 1 and terminating on the last trading day of the offering period ending on March 31. The maximum number of shares of common stock which are available for sale under the 2019 ESPP is 1,800,000 shares. Unless and until the administrator determines otherwise, the purchase price will be equal to 85% of the fair market value of PCTEL common stock on the first day of an offering period or the last day of an offering period, whichever is lower. The administrator may from time to time amend, suspend, or terminate the 2019 ESPP, subject to its terms.

Stock-Based Compensation Expense

The consolidated statements of income include \$2.5 million and \$4.1 million of stock compensation expense for the years ended December 31, 2020 and 2019, respectively. The Company did not capitalize any stock compensation expense during the years ended December 31, 2020, and 2019.

The stock-based compensation expense by type is as follows:

	Years Ended December 31,			
	2020			2019
Service-based awards	\$	1,803	\$	1,963
Director awards		402		402
Performance-based awards (long-term incentive plan)		28		226
Performance-based awards (short-term incentive plan)		0		1,335
Employee stock purchase plan		245		205
Stock options		1		2
Total	\$	2,479	\$	4,133

The stock-based compensation is reflected in the consolidated statements of income as follows:

	<u></u>	Years Ended December 31,			
	2	020		2019	
Cost of revenues	\$	272	\$	408	
Research and development		530		652	
Sales and marketing		559		672	
General and administrative		1,118		2,401	
Total	\$	2,479	\$	4,133	

The following table presents a summary of the remaining unrecognized share-based compensation expense related to our outstanding share-based awards as of December 31, 2020:

Award Type Service-based awards		Remaining Unrecognized Compensation Expense	Weighted Average Life (Years)
		1,425	1.4
Performance-based awards	\$	446	1.8

Service-Based Awards

Restricted Stock

The Company grants service-based restricted shares as employee incentives under the 2019 Stock Plan. During the years ended December 31, 2020 and 2019, the Company awarded executives and key-managers long-term incentives comprised one-third of service-

based restricted stock and two-thirds of performance-based restricted stock. When service-based restricted stock is granted to employees, the Company records deferred stock compensation within additional paid-in capital, representing the fair value of the common stock on the date the restricted shares are granted. The Company records stock compensation expense on a straight-line basis over the vesting period of the applicable service-based restricted shares. These grants vest over various periods; however, the restricted stock grants in 2020 and 2019 vest over three years in equal increments.

The following table summarizes service-based restricted stock activity:

	Years ended December 31,					
	2020			19		
W ID 10. 10. 1	Weighted Average Shares Fair Value Sha			Weighted Average		
Unvested Restricted Stock Awards	Shares	Shares Fair Value		Fair Value		
Beginning of year	477,187	\$ 6.11	838,967	\$ 6.21		
Shares awarded	201,233	7.91	190,159	5.25		
Shares vested	(239,615)	6.18	(538,137)	5.96		
Shares cancelled	(3,967)	6.19	(13,802)	6.27		
End of year	434,838	\$ 6.91	477,187	\$ 6.11		

In February 2020, the Company issued to employees 153,694 service-based restricted stock awards that vest in three substantially equal annual increments commencing in 2021. In April 2020, as part of our efforts to reduce expenses and conserve cash, the Company reduced the salary of each executive and key manager by 10% and in connection therewith issued restricted stock, under the LTIP, with a one-year vesting period to such employee equal to 5% of his/her salary. In total 47,539 service-based restricted stock awards were issued. The intrinsic values of service-based restricted shares that vested were \$1.9 million and \$3.3 million during the years ended December 31, 2020, and 2019, respectively.

Restricted Stock Units

The Company grants service-based restricted stock units as employee incentives. Restricted stock units are primarily granted to foreign employees for long-term incentive purposes. Employee restricted stock units are service-based awards and are amortized over the vesting period. At the vesting date, these units are converted to shares of common stock. The Company records expense on a straight-line basis for restricted stock units.

The following summarizes the service-based restricted stock unit activity:

Years Ended December 31,							
20	20		2019				
Weighted Average			Chaves	P	Veighted Average air Value		
	Fair value		Fair value			Fe	
8,117	\$	5.83	18,638	\$	5.66		
6,448		7.48	2,700		5.27		
(5,482)		5.80	(13,221)		5.35		
9,083	\$	7.02	8,117	\$	5.83		
	Shares 8,117 6,448 (5,482)	Shares 8,117 \$ 6,448 (5,482)	2020 Weighted Average Fair Value 8,117 \$ 5.83 6,448 7.48 (5,482) 5.80	2020 20 Weighted Average Fair Value Shares 8,117 \$ 5.83 18,638 6,448 7.48 2,700 (5,482) 5.80 (13,221)	Shares Weighted Average Fair Value Shares Fair Value Shares Fair Value Shares Fair Value Shares Sh		

The intrinsic values of service-based restricted stock units that vested were \$44 and \$97, during the years ended December 31, 2020, and 2019, respectively.

Stock Options

The Company may grant stock options to purchase common stock to new employees. The Company issues stock options with exercise prices no less than the fair value of the Company's stock on the grant date. Employee options are subject to installment vesting and although the vesting may vary from year to year, it is typically over a period of three years. Stock options may be exercised at any time prior to their expiration date or within 180 days of termination of employment, or such shorter time as may be provided in the related stock option agreement. The Company grants stock options with a tenyear life.

The following table summarizes the Company's stock option activity:

	Years Ended December 31,							
	20	20		20				
	Options Outstanding			Average Exercise		Options Outstanding		
Beginning of Year	150,246	\$	7.11	423,534	\$	7.15		
Options exercised	(61,767)		7.13	(154,409)		7.18		
Options forfeited	(188)		5.00	0		0.00		
Options cancelled/expired	(72,041)		7.23	(118,879)		7.16		
End of Year	16,250	\$	6.54	150,246	\$	7.11		
Exercisable	15,620	\$	6.52	147,394	\$	7.13		

The Company did not grant any stock options during 2020 or 2019. During the year ended December 31, 2020, the Company received proceeds of \$0.1 million from the exercise of 9,412 options and issued 10,194 shares for the exercise of 52,355 options. The intrinsic value of the options exercised was \$0.1 million.

During the year ended December 31, 2019, the Company received proceeds of \$0.5 million from the exercise of 62,909 options and issued 10,771 shares for the exercise of 91,500 options. The intrinsic value of the options exercised was \$0.2 million.

The range of exercise prices for options outstanding and exercisable on December 31, 2020, was \$5.06 to \$8.21. The following table summarizes information about stock options outstanding under all stock option plans:

		0	Options Outstanding					ole
_	Range of Exercise Prices	Number Outstanding	Weighted Average Contractual Life (Years)	Weighted- Average Exercise Price		Number Exercisable		Veighted Average Exercise Price
	\$ 5.06	7,000	2.71	\$	5.06	7,000	\$	5.06
	\$ 6.98 — \$ 7.55	4,750	2.16	\$	7.22	4,120	\$	7.26
	\$ 8.09 — \$ 8.21	4,500	0.92	\$	8.12	4,500	\$	8.12
	\$ 5.06 — \$ 8.21	16,250	2.05	\$	6.54	15,620	\$	6.52

The weighted average contractual life and intrinsic value on December 31, 2020, was the following:

	Weighted Average Contractual		Intrinsic Value	
	Life (years)	Life (years)		
Options Outstanding	2.05	\$	11	
Options Exercisable	1.97	\$	11	

The intrinsic value is based on the share price of \$6.57 at December 31, 2020.

For the outstanding stock options, the Company used the Black-Scholes option valuation model for estimating the fair value. The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options, which have no vesting restrictions and are fully transferable. Option valuation models require the input of highly subjective assumptions including the expected stock price volatility and expected option life as well a risk-free rate and the dividend yield. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, the existing models may not necessarily provide a reliable single measure of the fair value of the employee stock options.

The dividend yield rate was calculated by dividing the Company's annual dividend by the closing price on the grant date. The risk-free interest rate was based on the U.S. Treasury yields with a remaining term that approximates the expected life of the options granted. The Company calculated the volatility based on a five-year historical period of the Company's stock price. The expected life used for options granted was based on historical data of employee exercise performance. The Company records expense based on the grading vesting method.

Performance-Based Awards

Short-Term Incentive Plan

Incentive compensation earned by executives and key managers under the Company's 2020 Short-Term Incentive Plan ("STIP") were to be settled 50% in cash and 50% in shares of the Company's stock and was earned based on revenues and adjusted EBITDA targets. No shares will be issued pursuant to the 2020 STIP because the performance thresholds were not met.

Incentive compensation earned by executives and key managers under the Company's 2019 STIP were settled 50% in cash and 50% in shares of the Company's stock and was earned based on revenues and adjusted EBITDA targets. Shares valued at \$1.2 million earned pursuant to the 2019 STIP were issued to executives and key managers during the first quarter 2020. For the 2019 STIP, the Company issued 129,285 shares net of shares withheld for taxes.

Long-Term Incentive Plan

The Company awards performance-based awards to executives and key managers to encourage sustainable growth, consistent earnings, and management retention. Based on the fair value of the shares on the grant date, the Company records stock compensation expense over the performance period based on the estimated achievement of the award.

The following table summarizes the performance award activity:

	Years Ended December 31,							
	20)20		2019				
W ID 6		Weighted Average wards Fair Value Aw.			A	eighted verage		
Unvested Performance Awards - at Target	Awards	Fa	ur Value	Awards	Fai	r Value		
Beginning of Year	171,417	\$	5.27	0	\$	0.00		
Awards granted	145,289		8.70	174,117		5.27		
Awards cancelled	0		0.00	(2,700)		5.27		
End of Year	316,706	\$	6.84	171,417	\$	5.27		

The Company granted performance awards to executives and key managers in February 2020 ("2020 LTIP") and in February 2019 ("2019 LTIP"). Under the 2020 LTIP and 2019 LTIP, shares of the Company's stock can be earned based on achievement of a three-year revenue growth target with a penalty if a certain adjusted EBITDA level is not maintained. If the Company achieves less than the target growth over the performance period, the participant will receive fewer shares than the target award, determined on a straight-line basis. If the Company, achieves greater than the target growth, the participant will receive more shares than the target award on an accelerated basis. Participants are required to be in service at the determination date of the award following the end of the performance period in order to receive the award. Shares earned under the 2020 LTIP and 2019 LTIP will be fully vested shares. The Company records stock compensation expense over the performance periods based on the Company's estimate of the aggregate number of shares that will be earned under the incentive plans. Despite the COVID-19 pandemic and ensuing economic recession in 2020, the Compensation Committee did not make any changes to the revenue or EBITDA targets or to the targets and maximum shares that can be earned under the 2020 or 2019 STIP.

The performance period for the 2020 LTIP is from January 1, 2020 through December 31, 2022. At target, the total fair market value of the award was \$1.3 million based on the share price of \$8.70 on the grant date. On the award date, the aggregate number of shares that could be earned at target was 145,289 and the maximum number of aggregate shares that could be earned was 254,256.

The performance period for the 2019 LTIP is from January 1, 2019 through December 31, 2021. At target, the total fair market value of the award was \$0.9 million based on the share price of \$5.27 on the grant date. On the award date, the aggregate number of shares that could be earned at target was 174,117 and the maximum number of aggregate shares that could be earned was 299,979. During the year ended December 31, 2019, the target and maximum shares that can be earned declined by 2,700 and 4,725, respectively due to employee terminations.

Employee Stock Purchase Plan

The following table summarizes the ESPP activity:

	Years Ended December 31,						
	20	20		20	19		
	Shares		Weighted Average Fair Value at Grant Date	Shares		Weighted Average Fair Value at Grant Date	
Outstanding, beginning of year	0	\$	0.00	0	\$	0.00	
Granted	157,706		1.68	180,859		1.08	
Vested	(157,706)		1.68	(180,859)		1.08	
Outstanding, end of year	0	\$	0.00	0	\$	0.00	

Based on the 15% discount and the fair value of the option feature of this plan, the ESPP is considered compensatory. Compensation expense is calculated using the fair value of the employees' purchase rights under the Black-Scholes model. During the years ended December 31, 2020 and 2019, the Company received proceeds of \$0.9 million and \$0.7 million from the ESPP, respectively.

The Company calculated the fair value of each employee stock purchase grant under the ESPP on the date of grant using the Black-Scholes option-pricing model using the following assumptions:

	Employee Stock Pt	ircnase Pian
	2020	2019
Dividend yield	4.1%	4.1%
Risk-free interest rate	0.1%	2.5%
Expected volatility	44%	34%
Expected life (in years)	0.5	0.5

The dividend yield rate was calculated by dividing the Company's annual dividend by the closing price on the grant date. The risk-free interest rate was based on the U.S. Treasury yields with remaining term that approximates the expected life of the options granted. The Company calculated the volatility based on a five-year historical period of the Company's stock price. The expected life used was based on the offering period.

Board of Director Awards

The Company grants equity awards to members of its Board of Directors for an annual retainer and for committee service in shares of the Company's stock. These awards vest immediately. In addition, new directors receive a one-time grant of \$55 paid in service-based restricted shares which vest in equal annual increments over three years. During the year ended December 31, 2020, the Company issued 60,998 shares of the Company's stock with a fair value of \$0.4 million which vested immediately. During the year ended December 31, 2019, the Company issued 79,918 shares of the Company's stock with a fair value of \$0.4 million which vested immediately.

The following table summarizes the director awards activity:

	Years Ended December 31,						
	20	20		20	19		
	Shares		Weighted Average Fair Value at Grant Date	Shares	F	Weighted Average Fair Value at Grant Date	
Outstanding, beginning of year	4,831	\$	6.90	7,246	\$	6.90	
Granted	60,998		6.59	79,918		5.03	
Vested	(63,413)		(6.60)	(82,333)		(5.08)	
Outstanding, end of year	2,416	\$	6.90	4,831	\$	6.90	

Employee Withholding Taxes on Stock Awards

For ease in administering the issuance of stock awards, the Company holds back shares of vested restricted stock awards and short-term incentive plan stock awards, if paid in the Company's stock, for the value of the statutory withholding taxes. For each individual receiving a stock award, the Company redeems the shares it computes as the value for the withholding tax and remits this amount to the

appropriate tax authority. For withholding taxes related to stock awards, the Company paid \$1.1 million and \$1.2 million during the years ended December 31, 2020 and December 31, 2019, respectively.

Share Repurchases

On November 6, 2019, the Board of Directors approved a share repurchase program, and on March 10, 2020 the Board of Directors reauthorized the program pursuant to which the Company was authorized to repurchase up to \$7.0 million of its common stock through the end of 2020. The Company spent \$2.0 million to repurchase 375,046 shares at an average price of \$5.36 during the three months ended March 31, 2020. The Company cancelled the repurchased shares. Due to uncertainties related to the COVID-19 pandemic and to protect the Company's cash position, on April 1, 2020 the Board of Directors approved the termination of the stock repurchase program.

On November 4, 2020, the Board of Directors approved a new share repurchase program, pursuant to which the Company was authorized to repurchase \$5.0 million of its common stock through the end of 2021. The plan became effective November 10, 2020. The Company spent \$1.8 million to repurchase 288,573 shares at an average price of \$6.30 during the three months ended December 31, 2020. The Company cancelled the repurchased shares.

Authorized Shares

On May 29, 2020, the Company filed a Certificate of Amendment to its Amended and Restated Certificate of Incorporation (i) changing the Company's name from "PC-Tel, Inc." to "PCTEL, Inc." and (ii) decreasing the number of authorized shares of common stock from 100,000,000 shares to 50,000,000 shares.

10. Product Line, Customer and Geographic Information

Product Line Information:

The following tables are the product line revenues and gross profits for the years ended December 31, 2020, and 2019:

	 Year Ended December 31, 2020						
	ntennas & lustrial IoT		Test & asurement				
	Devices		Products	Co	rporate		Total
Revenues	\$ 50,540	\$	27,565	\$	(649)	\$	77,456
Gross Profit	\$ 17,665	\$	20,244	\$	18	\$	37,927
Gross Profit %	35.0%)	73.4%	ı	NA		49.0%

		Year Ended December 31, 2019							
	Ind	Antennas & Industrial IoT Devices		Test & Measurement Products		Corporate		Total	
Revenues	\$	62,708	\$	28,115	\$	(206)	\$	90,617	
Gross Profit	\$	21,841	\$	19,640	\$	31	\$	41,512	
Gross Profit %		34.8%	ı	69.9%	ı	NA		45.8%	

Customer Concentration:

There were no customers that accounted for 10% or more of revenues during the years ended December 31, 2020, and 2019.

The following table represents the customers that accounted for 10% or more of total trade accounts receivable on December 31, 2020 and 2019.

	As of Dec	ember 31,
Trade Accounts Receivable	2020	2019
Customer A	31%	15%
Customer B	10%	8%
Customer C	0%	11%

Geographic Information:

The Company's revenue to customers by geographic location, as a percent of total revenues, is as follows:

	Years Ended December 31,						
Region	2020	2019					
Europe, Middle East, & Africa	17%	14%					
Asia Pacific	8%	10%					
Other Americas	3%	3%					
Total Foreign sales	28%	27%					
Total Domestic sales		73%					
Total	100%	100%					

The long-lived assets by geographic region are as follows:

		December 31,				
				2019		
United States	\$	22,439	\$	17,485		
All Other		479		945		
Total	\$	22,918	\$	18,430		

11. Benefit Plans

The Company's 401(k) plan covers all of the U.S. employees beginning the first of the month following the first month of their employment. Under this plan, employees may elect to contribute up to 15% of their current compensation to the 401(k) plan up to the statutorily prescribed annual limit. The Company matches 100% of the employee's elective deferrals up to 4% of their compensation. The Company may make discretionary contributions to the 401(k) plan but there were no discretionary contributions during the years ended December 31, 2020 or 2019. The Company also contributes to various defined contribution retirement plans for foreign employees. The defined contribution for foreign employees is primarily related to contributions for employees of the Company's China subsidiary.

The Company's contributions to retirement plans were as follows:

		Years ended December 31,				
	20	020		2019		
PCTEL, Inc. 401(k) profit sharing plan - US employees	\$	729	\$	645		
Defined contribution plans - foreign employees		71		444		
Total	\$	800	\$	1,089		

Contributions for foreign employees were lower for the year ended December 31, 2020 due to fewer employees in Tianjin, China and because employer contributions to Chinese government sponsored retirement programs were not required during 2020 because of the COVID-19 pandemic.

12. Quarterly Data (Unaudited)

		Quarters Ended,						
	M	March 31, 2020		June 30, 2020		September 30, 2020		ecember 31, 2020
Revenues	\$	17,506	\$	19,842	\$	18,923	\$	21,185
Gross profit		8,215		9,521		9,575		10,616
Operating income (loss)		(878)		1,098		1,135		1,985
Income (loss) before income taxes	(680)		1,200			1,051		1,875
Net income (loss)		(688)	\$	1,192	\$	1,042	\$	1,871
Net income (loss) per share:								
Basic	\$	(0.04)	\$	0.07	\$	0.06	\$	0.10
Diluted	\$	(0.04)	\$	0.07	\$	0.06	\$	0.10
Weighted Average Shares:								
Basic	18	3,207,165	18	,159,029		18,198,567		18,149,356
Diluted	18	3,207,165	18	,213,617		18,310,772		18,297,058
				Ouarter	s End	led.		

	Quarters Ended,							
	March 31, 2019		June 30, 2019		September 30, 2019		December 31, 2019	
Revenues	\$	20,590	\$	23,499	\$	23,630	\$	22,898
Gross profit	Gross profit 8,658			10,694		10,647		11,513
Operating income (loss)		(469)		629		941		1,707
Income (loss) before income taxes		(307)		949		1,334		1,814
Net income (loss)		(317)	\$	941	\$	1,328	\$	1,798
Net income (loss) per share:								
Basic	\$	(0.02)	\$	0.05	\$	0.07	\$	0.10
Diluted	\$	(0.02)	\$	0.05	\$	0.07	\$	0.10
Weighted Average Shares:								
Basic	1	7,617,099		17,827,591		17,921,552		18,033,548
Diluted	1	7,617,099		17,934,141		18,181,157		18,460,503

13. Accumulated Other Comprehensive Income

Accumulated other comprehensive income of \$18 at December 31, 2020 and accumulated other comprehensive loss of \$318 at December 31, 2019, consists of foreign currency translation adjustments.

14. Revenue from Contracts with Customers

Under Topic 606, a contract with a customer is an agreement which both parties have approved, that creates enforceable rights and obligations, has commercial substance, and has identified payment terms, and for which collectability is probable. Once the Company has entered into a contract, it is evaluated to identify performance obligations. For each performance obligation, revenue is recognized as control of promised goods or services transfers to the customer in an amount that reflects the consideration the Company expects to receive in exchange for those goods or services. The amount of revenue recognized takes into account variable consideration, such as returns and volume rebates. A majority of the Company's revenue is short cycle in nature with shipments within one year from purchase order. The Company's payment terms generally range between 30 to 90 days.

All of the Company's revenue relates to contracts with customers. The Company's accounting contracts are from purchase orders or purchase orders combined with purchase agreements. The majority of the Company's revenue is recognized on a "point-in-time" basis and a nominal amount of revenue is recognized "over time". For the sale of products, the Company satisfies its performance obligations generally at the time of shipment, or upon delivery based on the contractual terms with its customers. For products shipped on consignment, the Company recognizes revenue upon delivery from the consignment location. For its test & measurement software tools, the Company has a performance obligation to provide software maintenance and support for one year. The Company recognizes revenues for the maintenance and support over this period.

The Company considers shipping and handling performed by the Company as fulfillment activities. Amounts billed for shipping and handling are included in revenues, while costs incurred for shipping and handling are included in cost of revenues. The Company excludes taxes from the transaction price. Cost of contracts include sales commissions. The Company expenses the cost of contracts when incurred because the amortization period is one year or less.

For the test & measurement product line, performance obligations for the sale of products and software licenses are satisfied at a point in time and the performance obligations for post contract support ("PCS"), extended warranties, and data storage are satisfied over time. If there is no standalone selling price for the performance obligations satisfied over time, the Company uses a market assessment approach for the standalone selling price. This standalone selling price is consistent for all customers.

Antenna product line sales have either contract pricing or negotiated prices on individual purchase orders. Variable consideration related to specific customers or orders that impacts the stand-alone selling price including right of return, rebate incentives, or quantity-based pricing. The Company allows its major distributors and certain other customers to return unused antennas under specified terms and conditions. The Company estimates product returns based on historical sales and return trends and records a corresponding refund liability. The refund liability was \$0.1 million at December 31, 2020 and December 31, 2019, respectively, and is included within accrued liabilities on the accompanying consolidated balance sheets. Additionally, the Company recorded an asset based on historical experience for the amount of product expected to be returned to inventory as a result of the return, which is recorded in inventories in the condensed consolidated balance sheets. The product return asset was \$0.1 million at December 31, 2020 and December 31, 2019.

There were no contract assets at December 31, 2020 or December 31, 2019. The Company records contract liabilities for deferred revenue and customer prepayments. Contract liabilities are recorded in accrued liabilities and long-term liabilities in the consolidated balance sheets. The contract liability was \$0.4 million at December 31, 2020 and at December 31, 2019. The Company recognized revenue of \$0.8 million and \$0.6 million during the years ended December 31, 2020, and December 31, 2019 respectively, related to contract liabilities at the beginning of the period.

15. Paycheck Protection Program Loan

On April 16, 2020, the Company received a \$3.5 million paycheck protection program ("PPP") loan from the Small Business Administration. Based upon subsequent guidance regarding PPP loan eligibility, the Company returned the funds on April 30, 2020.

16. Subsequent Events

The Company evaluates subsequent events occurring between the most recent balance sheet date and the date that the financial statements are available to be issued in order to determine whether the subsequent events are to be recorded and/or disclosed in the Company's financial statements and footnotes. The financial statements are considered to be available to be issued at the time that they are filed with the SEC.

There were no subsequent events or transactions that required recognition or disclosure in the consolidated financial statements

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

None.

Item 9A: Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

Our management evaluated, with the participation of our Chief Executive Officer and our Chief Financial Officer, the effectiveness of our disclosure controls and procedures as defined by Rule 13a-15(e) of the Securities Exchange Act of 1934, as of the end of the period covered by this Annual Report on Form 10-K. Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that our disclosure controls and procedures are effective to ensure that information we are required to disclose in our reports that we file or submit under Securities Exchange Act of 1934 (i) is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms, and (ii) is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

(b) Management's 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 Securities Exchange Act of 1934. Our internal control over financial reporting is a process designed by, or under the supervision of, our principal executive and principal financial officers, or persons performing similar functions, and effected by our board of directors, management, and other personnel, 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 (GAAP) and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of PCTEL;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of PCTEL are being made only in accordance with authorizations of management and directors of PCTEL; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of PCTEL's assets that could have a material effect on the financial statements.

Our management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2020. In making its assessment of internal control over financial reporting, management used the criteria described in "2013 Internal Control – Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Based on our management's assessment of internal control over financial reporting, management has concluded that, as of December 31, 2020, our internal control over financial reporting was effective to provide assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Grant Thornton LLP, our independent registered public accounting firm, has audited and issued their report on our internal control over reporting, which is included herein.

(c) Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting during the most recently completed fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B: Other Information

None.

PART III

Item 10: Directors, Executive Officers and Corporate Governance

The information required by this Item 10 will be included in PCTEL's proxy statement for the 2021 Annual Meeting of Stockholders under the captions "Proposal #1 Election of Directors," "Information About Our Executive Officers," and "Corporate Governance" is incorporated by reference herein. The proxy statement will be filed with the SEC pursuant to Rule 14a-6 under the Exchange Act in accordance with applicable SEC deadlines and is incorporated in this Item 10 by reference.

Item 11: Executive Compensation

The information required by this Item 11 will be included in PCTEL's proxy statement for the 2021 Annual Meeting of Stockholders under the captions "Executive Compensation and Other Matters," and "Compensation of Directors," and is incorporated by reference herein.

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

The information required by this Item 12 will be included in PCTEL's proxy statement for the 2021 Annual Meeting of Stockholders under the captions under the caption "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation and Other Matters-Summary of Equity Plans" and is incorporated by reference herein.

Item 13: Certain Relationships and Related Transactions, and Director Independence

The information required by this Item 13 will be included in PCTEL's proxy statement for the 2021 Annual Meeting of Stockholders under the caption "Corporate Governance" and is incorporated by reference herein.

Item 14: Principal Accountant Fees and Services

The information required by this Item 14 will be included in PCTEL's proxy statement for the 2021 Annual Meeting of Stockholders under the captions "Summary of Fees" of Proposal #4 and "Pre-Approval of Independent Auditor Services and Fees" and is incorporated by reference herein.

PART IV

Item 15: Exhibits and Financial Statement Schedules

(a) (1) Financial Statements

The Consolidated Financial Statements are included in Part II, Item 8 of this Annual Report on Form 10-K on pages 24 to 58.

(a) (2) Financial Statement Schedules

The following financial statement schedule is filed as a part of this Report under Schedule II immediately preceding the signature page: Schedule II — Valuation and Qualifying Accounts for the two fiscal years ended December 31, 2020.

PCTEL, INC. SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS (in thousands)

		Salance at Charged to Seginning Costs and of Year Expenses		Additions (Deductions)		Balance at End of Year	
Year Ended December 31, 2019:							
Allowance for credit losses	\$	63	63	(22)	\$	104	
Warranty reserves	\$	339	213	(108)	\$	444	
Deferred tax asset valuation allowance \$		14,457	0	(967)	\$	13,490	
Year Ended December 31, 2020:							
Allowance for credit losses	\$	104	161	(152)	\$	113	
Warranty reserves	\$	444	(203)	44	\$	285	
Deferred tax asset valuation allowance	\$	13,490	0	(552)	\$	12,938	

All other schedules called for by Form 10-K are omitted because they are inapplicable, or the required information is shown in the financial statements, or notes thereto, included herein.

(a) (3) Exhibits (numbered in accordance with Item 601 of Regulation S-K)

The exhibits listed below are filed or incorporated by reference as part of this Annual Report on Form 10-K. We will furnish at no cost a copy of any exhibit filed with or incorporated by reference into this Annual Report on Form 10-K. Oral or written requests for copies of any exhibits should be directed to us, with attention to Company Secretary.

Exhibit No.	Description	Reference
3.1	Amended and Restated Certificate of Incorporation of PCTEL, Inc. (P)	Incorporated by reference to Exhibit Number 3.2 filed with the Registrant's Registration Statement on Form S-1 (File No. 333-84707).
3.2	Certificate of <u>Amendment to Amended and Restated Certificate of Incorporation of PCTEL, Inc.</u>	Incorporated by reference to Exhibit Number 3.1 filed with the Registrant's Current Report on Form 8-K on June 4, 2020.
3.3	Amended and Restated Bylaws of the Registrant	Incorporated by reference to Exhibit Number 3.2 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2019
4.1	Specimen common stock certificate (P)	Incorporated by reference to Exhibit Number 4.1 filed with the Registrant's Registration Statement on Form S-1 (File No. 333-84707).
4.2	Description of Securities	Filed Herewith
10.1 *	Form of Indemnification Agreement between PCTEL, Inc. and each of its directors and officers (P)	Incorporated by reference to Exhibit Number 10.1 filed with the Registrant's Registration Statement on Form S-1 (File No. 333-84707).
10.1.1 *	Form of Indemnification Agreement between PCTEL, Inc. and each of its directors and officers, as amended and restated August 5, 2020. (P)	Incorporated by reference to Exhibit Number 10.1 filed with the Registrant's Quarterly Report on Form 10-Q on September 30, 2020.
10.2 *	Form of Severance Benefits Letter	Incorporated by reference to Exhibit Number 10.1 filed with the Registrant's Current Report on Form 8-K on November 13, 2018.
10.3 *	Employee Stock Purchase Plan, as amended and restated June 10, 2014	Incorporated by reference from Appendix A to the Registrant's Definitive Proxy Statement on Schedule 14A filed April 30, 2014.
10.4 *	PCTEL, Inc., Stock Plan, as amended and restated June 30, 2015	Incorporated by reference From Appendix A to the Registrant's Definitive Proxy Statement on Schedule 14A filed on April 30, 2015.
10.5 *	Employment Agreement dated December 5, 2016 between PCTEL, Inc. and David A. Neumann	Incorporated by reference to Exhibit Number 10.15 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2016.
10.6 *	Amended and Restated Management Retention Agreement dated April 9, 2013 between PCTEL, Inc. and David A. Neumann	Incorporated by reference to Exhibit Number 10.16 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2016.
10.6.1 *	First Amendment to Amended and Restated Management Retention Agreement dated December 13, 2016 between PCTEL, Inc. and David A. Neumann	Incorporated by reference to Exhibit Number 10.16.1 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2016.
10.6.2 *	Form of Management Retention Agreement dated May 6, 2020 between PCTEL, Inc. and David A. Neumann superseding the Amended and Restated Retention Agreement Dated April 9, 2013, as amended.	Incorporated by reference to Exhibit Number 10.1 filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020.
10.7 *	Form of Management Retention Agreement	Incorporated by reference to Exhibit Number 10.9 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2018

Exhibit No.	_	Description	Reference
10.7.1	*	Form of Management Retention Agreement dated May 6, 2020 for Section 16 Officers.	Incorporated by reference to Exhibit Number 10.2 filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020
10.8	*	FY 2019 Amended and Restated Sales Compensation Plan dated March 15, 2019 between PCTEL, Inc. and Arnt Arvik	Incorporated by reference to Exhibit Number 10.12 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2018
10.9	*	PCTEL, Inc. Long-Term Incentive Award Agreement dated February 6, 2019	Incorporated by reference to Exhibit Number 10.13 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2018
10.10		<u>Lease Agreement between FP Gateway 270, LLC (Landlord) and PCTEL, Inc. (Tenant)</u>	Incorporated by reference to Exhibit Number 10.14 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2018
10.11	*	PCTEL, Inc. 2019 Stock Incentive Plan	Incorporated by reference from Appendix A to the registrants Definitive Proxy Statement on Schedule 14A Filed April 16, 2019.
10.12	*	PCTEL, Inc. 2019 Employee Stock Purchase Plan	Incorporated by reference from Appendix B to the registrants Definitive Proxy Statement on Schedule 14A Filed April 16, 2019.
10.13	*	PCTEL, Inc. Long-Term Incentive Award Agreement dated February 5, 2020	Incorporated by reference to Exhibit Number 10.14 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2019
10.14	*	PCTEL, Inc. Long-Term Incentive Award Agreement (RSUs) dated February 5, 2020	Incorporated by reference to Exhibit Number 10.15 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2019
10.15	*	Sales Compensation Plan dated January 22, 2021 between PCTEL, Inc. and Arnt Arvik	Filed Herewith
21		<u>List of significant subsidiaries</u>	Filed Herewith
23		Consent of Grant Thornton LLP	Filed Herewith
24		Power of Attorney	Filed Herewith
31.1		Certification of Principal Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15(d)-14(a), as adopted pursuant to Section 302 of Sarbanes-Oxley Act of 2002	Filed Herewith
31.2		Certification of Principal Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15(d)-14(a), as adopted pursuant to Section 302 of Sarbanes-Oxley Act of 2002	Filed Herewith
32		Certifications of Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of Sarbanes-Oxley Act of 2002.	Filed Herewith
101.INS		Inline XBRL Instance Document	Filed Herewith
101.SCH		Inline XBRL Taxonomy Extension Schema	Filed Herewith
101.CAL		Inline XBRL Taxonomy Extension Calculation Linkbase	Filed Herewith
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Exhibit No.	Description	Reference
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase	Filed Herewith
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase	Filed Herewith
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase	Filed Herewith
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101).	Filed Herewith

Management contract or compensatory plan or arrangement required to be filed as an Exhibit hereto. Paper Filing

Item 16: Form 10-K Summary

Not applicable.

⁽P)

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized:

PCTEL, Inc. A Delaware corporation

/s/ DAVID A. NEUMANN

David A. Neumann

Chief Executive Officer Dated: March 12, 2021

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.

Signature	Title	Date
/s/ DAVID A. NEUMANN		March 12, 2021
(David A. Neumann)	Chief Executive Officer	
/s/ KEVIN MCGOWAN		
(Kevin McGowan)	Chief Financial Officer	March 12, 2021
	(Principal Financial and Accounting Officer)	
/s/ CINDY K. ANDREOTTI		
(Cindy K. Andreotti)	Director	March 12, 2021
/s/ GINA HASPILAIRE		
(Gina Haspilaire)	Director	March 12, 2021
/s/ CYNTHIA KEITH		
(Cynthia Keith)	Director	March 12, 2021
/s/ STEVEN D. LEVY		
(Steven D. Levy)	Director	March 12, 2021
/s/ GIACOMO MARINI		
(Giacomo Marini)	Director	March 12, 2021
/s/ M. JAY SINDER		
(M. Jay Sinder)	Director	March 12, 2021

DESCRIPTION OF SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

PCTEL, Inc. ("PCTEL," the "Company," "we," "us," and "our") has one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"): our common stock, par value \$0.001 per share (the "Common Stock").

DESCRIPTION OF COMMON STOCK

The following description of our Common Stock is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation") and our Bylaws, as amended (the "Bylaws"), each of which are incorporated by reference as an exhibit to our most recent Annual Report on Form 10-K, of which this exhibit is a part. We encourage you to read our Certificate of Incorporation, our Bylaws and the applicable provisions of the General Corporation Law of the State of Delaware (the "DGCL") for additional information.

Authorized Capital

Our Certificate of Incorporation currently authorizes the issuance of one-hundred million (100,000,000) shares of Common Stock, and five million (5,000,000) shares of preferred stock, with a par value of \$0.001 (the "Preferred Stock"). Subject to our stockholders' approval, the number of authorized shares of Common Stock will be reduced to 50,000,000 shares. Our Common Stock is listed and principally traded on The Nasdaq Global Select Market under the symbol "PCTI."

There are currently no shares of Preferred Stock outstanding. However, our Board of Directors is authorized to approve the issuance of one or more series of Preferred Stock without further authorization of our stockholders and to fix the number of shares, the designations, the relative rights and the limitations of any series of Preferred Stock. As a result, our Board of Directors, without stockholder approval, could authorize the issuance of Preferred Stock with voting, conversion and other rights that could proportionately reduce, minimize or otherwise adversely affect the voting power and other rights of holders of Common Stock or other series of Preferred Stock.

Dividend Rights

The holders of Common Stock are entitled to receive their proportionate share of the dividends, if any, as may be declared from time to time by the Board of Directors out of funds legally available for that purpose. Dividends may be paid in cash, in property, or in shares of the Company's capital stock. Holders of Common Stock may not receive dividends until we have satisfied our obligations to the holders of outstanding Preferred Stock, if any.

Voting Rights

Holders of Common Stock have the exclusive power to vote on all matters presented to our stockholders, unless the DGCL or the certificate of designation for an outstanding series of Preferred Stock gives the holders of that series of Preferred Stock the right to vote on certain matters. Holders of Common Stock are entitled to one vote for each share on all matters voted on by stockholders, including the election of directors.

Our Board of Directors is divided into three classes. Each year, one class of directors stands for election for a three-year term. When a quorum is present or represented at any meeting, each director is elected by a plurality of the votes of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors. The vote of the holders of a majority of the shares having voting power present in person or represented by proxy decides any other question brought before such meeting, unless the question is one upon which, by express provisions of the statutes, Certificate of Incorporation, or Bylaws, a different vote is required. See "Anti-takeover Provisions Contained in Our Certificate of Incorporation and Bylaws".

If, at the time of filling any vacancy or any newly created directorship, the directors then in office constitute less than a majority of the whole Board (as constituted immediately prior to any such increase), then the Delaware Court of Chancery may, upon application of any stockholder or stockholders holding at least 10% of the total number of the shares at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office as aforesaid, which election shall be governed by the provisions of Section 211 of the DGCL as far as applicable.

Liquidation Rights

In the event of a liquidation, dissolution or winding up of PCTEL, the holders of Common Stock are entitled to their proportionate share of all assets remaining after payment of liabilities, after taking into consideration the prior distribution rights of Preferred Stock, if any, then outstanding.

Fully Paid and Nonassessable

All outstanding shares of our Common Stock are fully paid and nonassessable. This means the full purchase price for the outstanding shares of Common Stock has been paid and the holders of such shares will not be assessed any additional amounts for such shares. Any additional Common Stock that we may issue in the future will also be fully paid and nonassessable.

Other Rights and Preferences

The holders of Common Stock do not have any conversion rights or any preemptive rights to subscribe for stock or any other securities of the Company. There are no redemption or sinking fund provisions applicable to our Common Stock.

Anti-takeover Provisions Contained in Our Certificate of Incorporation and Bylaws

Certain provisions of our Certificate of Incorporation and Bylaws may make it less likely that our management would be changed or someone would acquire control of the Company without the Board's consent. These provisions may delay, defer or prevent a change in control or takeover attempts that stockholder may believe are in their best interests, including tender offers or attempts that might allow stockholders to receive premiums over the market price of their Common Stock.

- Effect of Preferred Stock. Our Board of Directors may at any time, under our Certificate of Incorporation and without stockholder approval, issue one or more new series of Preferred Stock. In some cases, the issuance of Preferred Stock without stockholder approval could discourage or make more difficult attempts to take control of the Company through a merger, tender offer, proxy contest or otherwise. Preferred Stock with special voting rights or other features issued to persons favoring our management could stop a takeover by preventing the person trying to take control of the Company from acquiring enough voting shares necessary to take control.
- Certain Effects of Authorized but Unissued Stock. Authorized but unissued shares of Common Stock and Preferred Stock are available for future issuance without stockholder approval. These additional shares may be utilized for a variety of corporate purposes, including future public or private offerings to raise additional capital and for corporate acquisitions. The Company could also use additional shares to dilute the stock ownership of persons seeking to obtain control of the Company.
- Supermajority Approval of Amendments to Certificate of Incorporation and Bylaws. Stockholders must approve certain amendments to our organizational documents by a supermajority vote, which can delay, defer or prevent a change in control. The affirmative vote of 66 2/3% of the voting power of the then outstanding shares voting as a single class, shall be required for the adoption, amendment, or repeal of the following sections of the Bylaws by the stockholders of the Company: Section 2.2 (Annual Meeting) and Section 2.3 (Special Meeting) and the following sections of the Certificate of Incorporation: Article Seventh (Staggered Board of Directors) and Article Ninth (Amendment of Article Seventh).

- **Director Nomination, Election Procedures, and Classified Board.** In order to nominate candidates for the Board of Directors, a stockholder must follow the advance notice procedures described in our Bylaws. In general, a stockholder must submit a written notice containing certain information not less than 120 days prior to the date of our proxy statement for the previous year's annual meeting of stockholders. Directors are elected by a plurality of the votes, meaning that the candidates receiving the greatest number of votes are elected, regardless of whether or not they receive a majority of the votes cast. As a result, "vote no" campaigns to unseat incumbent directors may be ineffective in uncontested elections. Further, the Company has three classes of directors elected to serve staggered three-year terms, which means stockholders can only elect, or remove, a limited number of directors in a given year.
- Stockholder Proposal Procedures. Stockholders can propose director nominations or other business to the Board of Directors to be considered at an annual meeting of stockholders, only if the stockholder follows the advance notice procedures described in our Bylaws. In general, a stockholder must submit a written notice containing certain information not less than 120 days prior to the date of our proxy statement for the previous year's annual meeting of stockholders.
- Right to Call Special Meeting and Action by Written Consent. The Certificate of Incorporation and Bylaws require that any action required or
 permitted to be taken by our stockholders must be effected at a duly called annual or special meeting of the stockholders and may not be
 effected by a consent in writing. In addition, special meetings of our stockholders may be called only by the Board of Directors or some of our
 officers.

PCTEL, INC.

SALES COMPENSATION PLAN

Prepared specifically for:

Arnt Arvik

Plan Year 2021

Introduction

I.

This PCTEL Sales Compensation Plan (the "Plan") has been designed by the Company (as hereinafter defined) to:

- Align sales compensation with corporate profitability;
- Motivate, incent and reward sales behavior in order to achieve PCTEL's corporate and financial objectives; and
- Provide a compensation plan that is equitable and consistent across regions and product lines.

This Plan supersedes all prior sales compensation plans and any discussions or verbal agreements between Participant and the Company.

II. Definitions

Adjusted EBITDA – Adjusted EBITDA is GAAP operating profit excluding stock compensation expenses, amortization of intangible assets, depreciation, restructuring charges, impairment charges, gain/loss on sale of product lines, and expenses included in GAAP operating profit to the extent their recovery is recorded below operating profit.

Base Salary – Base Salary is the amount payable to Participant as non-variable compensation for services rendered to the Company. It is determined by Company management on an annual basis.

CEO – Chief Executive Officer

CFO - Chief Financial Officer

Commission – Commission is a portion of the variable compensation payable to Participant and is related to sales to customers. It is calculated in accordance with Section V below.

Commission Payout Factor – Commission Payout Factor has the meaning set forth in Section V(a)(1).

Commissionable Revenue – Revenue earned by the Company (determined in accordance with GAAP) from sales of products, services, NRE, maintenance charges, royalties and training charges, excluding freight, loans, interest charges, and other similar charges.

Company - PCTEL, Inc. and its subsidiaries

EBITDA Goal – EBITDA Goal has the meaning set forth in Section V(b).

EBITDA Payout Factor – EBITDA Payout Factor has the meaning set forth in Section V(b).

GAAP – Generally Accepted Accounting Principles in the United States of America

Individual Quota — Company management assigns an Individual Quota that represents the total anticipated Commissionable Revenue that management expects the Sales Team to generate for the Plan Year. Your Individual Quota is set forth on Attachment A.

Participant – The sales professional for whom this Plan is prepared and whose name is found on the cover page of this Plan.

Plan – Plan has the meaning assigned in Section I.

Plan Administrators – The Plan Administrators are the CEO, CFO and Vice President-Corporate Resources.

Plan Year – The Plan Year is January 1, 2021 through December 31, 2021.

Quota Assignment Statement – The Quota Assignment Statement is the statement in the form of Attachment A signed by the Company and Participant defining the amount of the Individual Quota, Target Commission, Target Adjusted EBITDA and target total variable compensation.

Sales Team – The Sales Team refers to all sales personnel who report directly or indirectly to Participant.

Target Commission – The Target Commission, as identified in Attachment A, is the percentage of Base Salary that Participant is anticipated to earn as Commission if Participant achieves his Individual Quota.

III. General

- (a) <u>Plan Administration</u>. The Plan Administrators will manage the Plan. Any provision of this Plan may be amended, revised or modified upon the written agreement of the Participant and the Plan Administrators. In addition, during the Plan Year the Plan Administrators have full discretion, without the consent of the Participant, to (i) construe and interpret the terms of the Plan, (ii) determine eligibility of company employees to participate in the Plan, and (iii) determine whether Commission is payable under the Plan; provided, however, that the Plan Administrators will not unilaterally (1) increase the Individual Quota as set forth on the executed version of Attachment A, or (2) reduce the Commission Payout Factor, except to address situations that were unforeseen at the time the Plan was established, for example as set forth in Section IV(b), or as necessary to address the economic situation associated with COVID-19. The determination of the Plan Administrators regarding any matter specified in clause (i) through (iii) above is final and binding.
- **(b)** <u>Termination of Employment</u>. The final amount of Commission and Adjusted EBITDA payment due to Participant upon termination of employment is the Commission earned, as provided in this Plan, up to and including the termination date. Subject to applicable law, the final payment of Commission will be made at the times set forth in Section VI.
- **(c)** <u>Participation</u>. Participant is not eligible for the short-term incentive program offered by the Company, but is eligible for the long-term incentive program.

IV. Quota

- (a) <u>Individual Quota</u>. At the beginning of each fiscal year, the Plan Administrators will specify on a Quota Assignment Statement for each member of the Sales Team, including Participant, the applicable Individual Quota and Target Commission. The Plan Administrators have assigned Participant, as Chief Sales Officer, an Individual Quota equal to the total target revenue of the Company, as approved by the Board of Directors in the Company's 2021 financial plan.
- **(b)** Modifications due to Product Discontinuation. During the Plan Year, Company may discontinue products previously sold by the Sales Team, which may impact Participant's ability to reach his Individual Quota. For example, this can occur when a product is discontinued as a result of insufficient sales, lack of component parts, or the sale of the business segment offering the product. If, based upon sales by the Sales Team of such discontinued product in the current and/or prior fiscal year, the discontinuation of the product could have a material effect on Participant's ability to meet

the Individual Quota, the Plan Administrators will determine in good faith whether Participant's Individual Quota should be adjusted accordingly.

V. Variable Compensation; Commission

Variable Compensation: Participant's variable compensation for 2021 will be comprised of two components: (i) Commission, and (ii) 2021 Adjusted EBITDA.

- (a) <u>Commission Earned</u>: Commission is calculated based upon the amount of Commissionable Revenue generated by the Sales Team during the 2021 Plan Year.
 - (1) <u>Commission Calculation</u> Commissionable Revenue will be calculated on a year-to-date basis from invoices issued to the Sales Team's customers and will determine the percentage of Individual Quota attained. The "Commission Payout Factor" is determined by locating the percentage of Individual Quota attained year-to-date in the table below and identifying the corresponding Commission Payout Factor. If the Individual Quota attained falls between the listed percentages in the Commission Table, the Commission Payout Factor will be extrapolated (e.g., 77% Individual Quota attainment would be a 61.67% Commission Payout Factor). The Commission earned is calculated as follows:

COMMISSION PAYOUT FACTOR x TARGET COMMISSION x BASE SALARY.

Commission Table:

% Individual Quota	Commission
Attained	Payout Factor
0%	0%
10%	6%
20%	12%
30%	18%
40%	24%
50%	30%
60%	36%
70%	42%
75%	60%
80%	64%
90%	81%
100%	100%
110%	121%
120%	144%
130%	169%
140%	196%
150%	205%
160%	214%
170%	223%
180%	232%
190%	241%
≥ 200%	250%

- (2) <u>Cap on Commission</u> There is a "cap" or upper limit on the amount of Commission the Company will pay Participant for the 2021 Plan Year. If Participant were to achieve Commissionable Revenue in excess of 200% of Individual Quota, which equates to a 250% Commission Payout Factor, the excess Commissionable Revenue will not result in additional Commission for Participant.
- (3) <u>Returns and Credits</u> In the event that a product for which the Sales Team received credit as Commissionable Revenue is returned (or the Company credited the customer's account as though the product was returned), the corresponding amount of Commissionable Revenue related to the returned or credited product shall be subtracted from the Commissionable Revenue otherwise credited to the Sales Team. The amount of Commissionable Revenue will be subtracted in the quarter the product return or product credit is processed. Further, if one or more assigned accounts are greater than 90 days past the due date established by the applicable payment terms, the corresponding amount of Commissionable Revenue previously credited to the Sales Team shall be subtracted and the next quarterly Commission payment shall be adjusted accordingly. Such Commissionable Revenue will be added back in the quarter in which the payment is received from the customer and will be included in the next succeeding Commission payment. No Commission will be payable for any amounts written down or written off in accordance with GAAP.
- (4) <u>Commission Payments</u> The amount of Commission payable to Participant will be calculated after the Company's books are closed for the first fiscal quarter and after each calendar month thereafter.
- (b) <u>2021 Adjusted EBITDA Payment</u> —The Company has assigned an Adjusted EBITDA goal equal to the Company's target total Adjusted EBITDA, as approved by the Board of Directors in the Company's 2021 financial plan ("**EBITDA Goal**").
 - (1) <u>Adjusted EBITDA Calculation</u>. The Company's Finance Department will calculate the year-to-date Adjusted EBITDA in accordance with its established non-GAAP procedures. The "EBITDA Payout Factor" is determined by locating the percentage of the EBITDA Goal attained in the table below and identifying the corresponding EBITDA Payout Factor. If the percentage of EBITDA Goal attained falls between the listed percentages in the Adjusted EBITDA Table, the Finance Department will extrapolate to identify the EBITDA Payout Factor (e.g., 77% attainment would be a 61.67% EBITDA Payout Factor). The Adjusted EBITDA component of Variable Compensation is calculated as follows:

EBITDA PAYOUT FACTOR x TARGET ADJUSTED EBITDA (on Attachment A) x BASE SALARY.

Adjusted EBITDA Table:

% EBITDA Goal Attained	EBITDA Payout Factor
0%	0%
10%	6%
20%	12%
30%	18%
40%	24%
50%	30%
60%	
70%	
75%	60%
80%	64%
90%	81%
100%	100%
110%	121%
120%	144%
130%	169%
140%	196%
150%	205%
160%	214%
170%	223%
180%	232%
190%	241%
≥ 200%	250%

- (2) <u>Limits on Adjusted EBITDA Payment</u> There is a "cap" or upper limit on the amount of the Adjusted EBITDA payment the Company will pay Participant for the 2021 Plan Year. If Participant were to achieve Adjusted EBITDA in excess of 200% of the EBITDA Goal, which equates to a 250% EBITDA Payout Factor, the excess Adjusted EBITDA will not result in a higher EBITDA Payout Factor than 250%. In addition, regardless of actual results, if the percentage of Individual Quota attained is less than 100%, then the percentage of EBITDA Goal attained will also be deemed to be capped at 100%.
- (3) <u>Adjusted EBITDA Payments</u> The amount payable to Participant as a result of attaining the EBITDA Goal will be calculated after the Company's books are closed for each fiscal quarter.

VI. Payment Timing

All payments of Variable Compensation to Participant will be paid forty-five (45) days after the close of the applicable period.

ATTACHMENT A

PCTEL, INC.

QUOTA ASSIGNMENT STATEMENT

Name: Arnt Arvik

Sales Accounts: All accounts of the Sales Team

Individual Quota assigned: as stated in Section IV(a)

Target Commission is: 47% of your Base Salary

Target Adjusted EBITDA is: 20% of your Base Salary

Target Total Variable Compensation is: 67% of Base Salary

I acknowledge, as of this 22nd day of January, 2021, that I have read, understand and agree to the terms and conditions of this specifically prepared PCTEL, INC. Sales Compensation Plan for Plan Year 2021.

/s/ Arnt Arvik

Employee/Participant

/s/ David Neumann

Chief Executive Officer

/s/ Les Sgnilek

Vice President-Corporate Resources & Chief Risk Officer

/s/ Kevin McGowan

Chief Financial Officer

 Subsidiary
 State or Other Jurisdiction of Incorporation or Organization

 PCTEL (Tianjin) Wireless Telecommunications Products Co., Ltd.
 China

United Kingdom

PCTEL Limited (United Kingdom)

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our reports dated March 12, 2021, with respect to the consolidated financial statements and internal control over financial reporting included in the Annual Report of PCTEL, Inc. on Form 10-K for the year ended December 31, 2020. We consent to the incorporation by reference of said reports in the Registration Statements of PCTEL, Inc. on Forms S-8 (File No. 333-233242; File No. 333-205754; File No. 333-198134; File No. 333-168222; File No. 333-135586; File No. 333-131020; File No. 333-122117; File No. 333-112621; File No. 333-106891; File No. 333-103233; File No. 333-82120; File No. 333-75204; File No. 333-70886; File No. 333-61926; and File No. 333-34910).

/s/ Grant Thornton LLP

Chicago, Illinois March 12, 2021

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints David A. Neumann and Kevin McGowan, and each of them, his true and lawful attorneys-in-fact and agents, each with full power of substitution and re-substitution, to sign any and all amendments (including post-effective amendments) to this Annual Report on Form 10-K and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitute or substitutes, or any of them, shall do or cause to be done by virtue hereof. This Power of Attorney shall remain in effect until revoked in writing by the undersigned.

Date: March 12, 2021

(M. Jay Sinder)

/s/ CINDY K. ANDREOTTI
(Cindy K. Andreotti)
/s/ GINA HASPILAIRE
(Gina Haspilaire)
/s/ CYNTHIA KEITH
(Cynthia Keith)
/s/ STEVEN D. LEVY
(Steven D. Levy)
/s/ GIACOMO MARINI
(Giacomo Marini)
/s/ M. JAY SINDER

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO EXCHANGE ACT RULES 13a-14(a) and 15(d)-14(a), AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

- I, David A. Neumann, certify that:
- 1. I have reviewed this annual report on Form 10-K of PCTEL, 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)), for the registrant and have:
- a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
- a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 12, 2021

/s/ DAVID A. NEUMANN

David A. Neumann Chief Executive Officer CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO EXCHANGE ACT RULES 13a-14(a) and 15(d)-14(a), AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

- I, Kevin McGowan, certify that:
- 1. I have reviewed this annual report on Form 10-K of PCTEL, 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)), for the registrant and have:
- a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
- a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 12, 2021

/s/ KEVIN MCGOWAN

Kevin McGowan Chief Financial Officer CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, David A. Neumann, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report on Form 10-K of PCTEL, Inc. for the fiscal year ended December 31, 2020 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Annual Report on Form 10-K fairly presents in all material respects the financial condition and results of operations of PCTEL, Inc. A signed original of this written statement required by Section 906 has been provided to PCTEL, Inc. and will be retained by PCTEL, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

By: /s/ David A Neumann

DATE: March 12, 2021 NAME: DAVID A. NEUMANN
Title: Chief Executive Officer

I, Kevin McGowan, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report on Form 10-K of PCTEL, Inc. for the fiscal year ended December 31, 2020 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Annual Report on Form 10-K fairly presents in all material respects the financial condition and results of operations of PCTEL, Inc. A signed original of this written statement required by Section 906 has been provided to PCTEL, Inc. and will be retained by PCTEL, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

By: /s/ Kevin McGowan

DATE: March 12, 2021 NAME: KEVIN MCGOWAN

Title: Chief Financial Officer