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

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2020
OR

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

For the transition period from ______________ to ______________

Commission File Number: 1-36254

Avid Technology, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**04-2977748**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

75 Network Drive
Burlington Massachusetts 01803
(Address of Principal Executive Offices, Including Zip Code)

(978) 640-6789
(Registrant's Telephone Number, Including Area Code)

Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $.01 par value	AVID	Nasdaq Global Select Market

Securities Registered Pursuant to Section 12(g) of the Act: None

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

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

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

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

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

Large Accelerated Filer	o	Accelerated Filer	x
Non-accelerated Filer	o	Smaller Reporting Company	☐
		Emerging Growth Company	☐

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

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

The aggregate market value of the voting stock held by non-affiliates of the registrant was approximately 301,016,458 based on the closing price of the Common Stock on the Nasdaq Global Select Market on June 30, 2020. The number of shares outstanding of the registrant's Common Stock as of March 5, 2021 was 44,490,187.

DOCUMENTS INCORPORATED BY REFERENCE

Document Description	10-K Part
Portions of the Registrant's Proxy Statement for the 2021 Annual Meeting of Stockholders	III

AVID TECHNOLOGY, INC.
FORM 10-K
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2020

TABLE OF CONTENTS

		Page
	Cautionary Note on Forward-Looking Statements	iii
PART I.		
ITEM 1.	Business	2
ITEM 1A.	Risk Factors	12
ITEM 1B.	Unresolved Staff Comments	24
ITEM 2.	Properties	24
ITEM 3.	Legal Proceedings	24
ITEM 4.	Mine Safety Disclosures	24
PART II.		
ITEM 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	25
ITEM 6.	Selected Financial Data	27
ITEM 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	29
ITEM 7A.	Quantitative and Qualitative Disclosures about Market Risk	47
ITEM 8.	Financial Statements and Supplementary Financial Information	49
	Reports of Independent Registered Public Accounting Firms	50
ITEM 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	89
ITEM 9A.	Controls and Procedures	89
ITEM 9B.	Other Information	92
PART III.		
ITEM 10.	Directors, Executive Officers and Corporate Governance	93
ITEM 11.	Executive Compensation	93
ITEM 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	93
ITEM 13.	Certain Relationships and Related Transactions, and Director Independence	93
ITEM 14.	Principal Accountant Fees and Services	93
PART IV.		
ITEM 15.	Exhibits and Financial Statement Schedules	94
INDEX TO EXHIBITS		95
SIGNATURES		99

CAUTIONARY NOTE ON FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, or Form 10-K, filed by Avid Technology, Inc. together with its consolidated subsidiaries, “Avid” or the “Company”, or “we”, “us,” or “our” unless the context indicates otherwise, includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. For this purpose, any statements contained in this Form 10-K that relate to future results or events are forward-looking statements. Forward-looking statements may be identified by use of forward-looking words, such as “anticipate,” “believe,” “confidence,” “could,” “estimate,” “expect,” “feel,” “intend,” “may,” “plan,” “should,” “seek,” “will,” and “would,” or similar expressions.

Forward-looking statements may involve subjects relating to, among others, the following:

- the effects that the COVID-19 pandemic and its related consequences may have on the national and global economy and on our business and operations, revenues, cash flows and profitability, and capital resources;
- our ability to successfully implement our strategy, including our cost saving measures and other actions implemented in response to the COVID-19 pandemic;
- the anticipated trends and developments in our markets and the success of our products in these markets;
- our ability to develop, market, and sell new products and services;
- our business strategies and market positioning;
- our ability to achieve our goal of expanding our market positions;
- our ability to accelerate growth of our Cloud-enabled platform;
- anticipated trends relating to our sales, financial condition or results of operations, including our shift to a recurring revenue model and complex enterprise sales with long sales cycles;
- the expected timing of recognition of revenue backlog as revenue, and the timing of recognition of revenues from subscription offerings;
- our ability to successfully consummate acquisitions, or investment transactions and successfully integrate acquired businesses;
- the anticipated performance of our products;
- our ability to maintain adequate supplies of products and components, including through sole-source supply arrangements;
- plans regarding repatriation of foreign earnings;
- the outcome, impact, costs, and expenses of pending litigation or any new litigation or government inquiries to which we may become subject;
- the effect of the continuing worldwide macroeconomic uncertainty on our business and results of operations, including Brexit;
- our compliance with covenants contained in the agreements governing our indebtedness;
- our ability to service our debt and meet the obligations thereunder;
- the effect of seasonal changes in demand for our products and services;
- fluctuations in foreign exchange and interest rates;
- the risk of restatement of our financial statements;
- estimated asset and liability values and amortization of our intangible assets;
- our ability to protect and enforce our intellectual property rights;
- the expected availability of cash to fund our business and our ability to maintain adequate liquidity and capital resources, generally and in the wake of the COVID-19 pandemic; and

- worldwide political uncertainty, in particular the risk that the United States may withdraw from or materially modify international trade agreements as discussed further in “Risk Factors” in Item 1A of this Form 10-K.

Actual results and events in future periods may differ materially from those expressed or implied by the forward-looking statements in this Form 10-K. There are a number of factors that could cause actual events or results to differ materially from those indicated or implied by forward-looking statements, many of which are beyond our control, including the risk factors discussed in Item 1A of this Form 10-K. The forward-looking statements contained in this Form 10-K represent our estimates only as of the date of this filing and should not be relied upon as representing our estimates as of any subsequent date. While we may elect to update these forward-looking statements in the future, we specifically disclaim any obligation to do so, whether to reflect actual results, changes in assumptions, changes in other factors affecting such forward-looking statements, or otherwise.

The information included under the heading “Stock Performance Graph” in Item 5 of this Form 10-K is “furnished” and not “filed” and shall not be deemed to be “soliciting material” or subject to Regulation 14A, shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, or the Exchange Act, or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Exchange Act or the Securities Act of 1933, or the Securities Act, except to the extent that we specifically incorporate it by reference.

We own or have rights to trademarks and service marks that we use in connection with the operation of our business. “Avid” is a trademark of Avid Technology, Inc. Other trademarks, logos, and slogans registered or used by us and our subsidiaries in the United States and other countries include, but are not limited to, the following: Avid, Avid NEXIS, AirSpeed, FastServe, MediaCentral, Media Composer, Pro Tools, and Sibelius. Other trademarks appearing in this Form 10-K are the property of their respective owners.

PART I

ITEM 1. BUSINESS

OVERVIEW

We develop, market, sell, and support software and integrated solutions for video and audio content creation, management, and distribution. We are a leading technology provider that powers the media and entertainment industry. We do this by providing an open and efficient platform for digital media, along with a comprehensive set of creative software tools and workflow solutions. Our solutions are used in production and post-production facilities; film studios; network, affiliate, independent and cable television stations; recording studios; live-sound performance venues; advertising agencies; government and educational institutions; corporate communications departments; and by independent video and audio creative professionals, as well as aspiring professionals. Projects produced using our tools, platform, and ecosystem include feature films, television programming, live events, news broadcasts, sports productions, commercials, music, video, and other digital media content. With over one million creative users and thousands of enterprise clients relying on our technology platforms and solutions around the world, Avid enables the industry to thrive in today's connected media and entertainment world.

Our mission is to empower media creators with innovative technology and collaborative tools to entertain, inform, educate, and enlighten the world. Our clients rely on Avid to create prestigious and award-winning feature films, music recordings, television shows, live concerts, sporting events, and news broadcasts. Avid has been honored for technological innovation with 18 Emmy Awards, one Grammy Award, two Oscars, and the first ever America Cinema Editors Technical Excellence Award. In 2018, Avid was named the recipient of the prestigious Philo T. Farnsworth Award by the Television Academy to honor Avid's 30 years of continuous, transformative technology innovations, including products that have improved and accelerated the editing and post production process for television.

For a discussion of the impact of the COVID-19 pandemic on our business, see "Management's Discussion and Analysis of Financial Condition and Results of Operations - Executive Overview - Impact of COVID-19 on Our Business" in Item 7 of this Form 10-K.

CORPORATE STRATEGY

Acceleration of digitization is having a tremendous impact on the media industry and altering the industry value chain. Today's consumers are empowered to create and consume content on-demand, anywhere, anytime. Organizations in the media industry are under pressure to connect and automate the entire creation-to-consumption workflow, and are facing a number of challenges, including:

- *Increasing rate of content creation and digitization of media assets* - Many organizations are feeling intense pressure to create more and more content, increasingly tailored for audience niches, while also facing greater competition from nimble players. At the same time, access to creative software tools is wider today than ever before, giving more people the ability to tell their stories.

- *Exponential growth of distribution platforms* - The number of distribution platforms continues to expand, and the economic models of new distribution platforms are still evolving. Many organizations need to embrace new opportunities while also maximizing heritage business.

- *Continued increase in content consumption* - There has been a tremendous increase in viewership in the last decade, but it is spread across many outlets and channels. This increase in viewership is dwarfed by an increase in competitive content. In addition, with growing audience fragmentation, compelling content, brand equity, and relevance are even more critical today.

- *Disparate mix of tools, skills, and workflows* - Lack of commonality and a fragmented supplier landscape creates incompatibilities, inhibiting agility, collaboration, sharing, and efficiency.

- *Media technology budgets* - Today’s economic realities are placing pressure on media technology budgets, while content output must increase exponentially to deliver on the market requirements. Content creators and distributors have to work with essentially flat budgets, which demands more efficient workflows and solutions.

We believe we are well positioned in the media technology industry because we have a differentiated platform strategy (Avid MediaCentral platform described below) and a well-established market position. Our products and solutions allow our customers to (i) create high-quality, engaging, and immersive content, (ii) distribute to more outlets and devices, (iii) maximize and protect the value of media assets, and (iv) create operational and capital efficiency. As a result of our market position across the media industry, we believe we can take advantage of the following opportunities and trends:

- *Large and growing market poised for transition* - Our customers are facing significant disruption and need to make major changes and investments in their business and operational approaches. Our product offerings help them address those challenges.

- *Deeply entrenched with a market leadership position* - We can strategically leverage a significant global customer base that is loyal to our brand across TV, film, music, and media.

- *Positioned to help the industry navigate disruption* - Our unique approach encompasses a common technology platform, leading software applications and integrated solutions with a large and open ecosystem, which we believe differentiates us from our competitors.

- *Ready to intercept the next emerging opportunity* - By leveraging our partnership with Microsoft and our MediaCentral platform, we believe we can lead the media and entertainment industry into the cloud with market-leading Software as a Service, or SaaS, offerings.

Our strategy for connecting creative professionals and media enterprises with audiences in a powerful, efficient, collaborative, and profitable way leverages our Avid MediaCentral platform. This platform is an open, extensible and customizable foundation that streamlines and simplifies content workflows by integrating all Avid or third-party products and services that run on top of it. The platform provides secure and protected access and enables fast and easy creation, delivery, and monetization of content.

We work to ensure that we are meeting customer needs, staying ahead of industry trends, and investing in the right areas through a close and interactive relationship with our customer base. The Avid Customer Association was established to be an innovative and influential media technology community. It represents thousands of organizations and over 30,000 professionals from all levels of the industry including inspirational and award-winning thought leaders, innovators, and storytellers. The Avid Customer Association fosters collaboration between Avid, its customers, and other industry colleagues to help shape our product offerings and provide a means to shape our industry together.

A key element of our strategy is our transition to a recurring revenue-based model through a combination of subscription offerings and long-term agreements. We started offering subscription licensing options for some of our products and solutions in 2014 and by the end of 2020 had approximately 296,000 paid subscriptions. These licensing options offer choices in pricing and deployment to suit our customers’ needs. Our subscription offerings to date have primarily been sold to creative professionals, though we expect to increase subscription sales to media enterprises going forward as we expand offerings and move through customer upgrade cycles, which we expect will further increase recurring revenue on a longer-term basis. Our long-term agreements are comprised of multi-year agreements with large media enterprise customers to provide specified products and services, including SaaS offerings, and channel partners and resellers to purchase minimum amounts of products and service over a specified period of time.

Another key aspect of our strategy has been to implement programs to increase operational efficiencies and reduce costs. We are making significant changes in business operations to better support the company’s strategy and overall performance. We are optimizing our go-to-market strategy, simplifying it to address specific customer markets and help maximize our commercial success. We expect this will improve our effectiveness, increase efficiency, and drive growth in our pipeline and ultimately revenue.

CUSTOMER MARKETS

We provide our solutions to the following markets:

- *Media Enterprises.* This market consists of broadcast, government, sports, and other organizations that acquire, create, process, and/or distribute audio and video content to a large audience for communication, entertainment, analysis, and/or forensic purposes. Customers in this market rely on workflows that span content acquisition, creation, editing, distribution, sales, and redistribution and utilize all content distribution platforms, including web, mobile, internet protocol television, cable, satellite, on-air, and various other proprietary platforms. Our expertise also allows us to provide customers in this market with a range of professional and consulting services. We sell into this market through our direct sales force and resellers.

- *Creative Professionals*. This market is made up of individual artists and small entities that create audio and video media as a paid service but do not currently distribute media to end consumers on a large scale. This market spans a wide-ranging target audience that includes: independent video editors; facilities and filmmakers that produce video media as a business but are not broadcasters; professional sound designers, editors, and mixers and facilities that specialize in the creation of audio for picture; songwriters, musicians, producers, film composers, and engineers who compose and record music professionally; technicians, engineers, rental companies, and facilities that present, record, and broadcast audio and video for live performances; and students and teachers in career technical education programs in high schools, colleges, universities, and post-secondary vocational schools that prepare students for professional media production careers in the digital workplace. Our expertise also allows us to provide customers in this market with a broad range of professional services. We sell into this market through storefront and on-line retailers, as well as through our direct sales force, resellers, and our webstore.

PRODUCTS AND SERVICES

Overview

Avid’s growing product portfolio is rooted in providing open and extensible products that ensure our long-term position with customers. Our software and integrated solutions, as well as our services offerings, address the diverse needs, skills, and sophistication levels of our customers. All of our key products and solutions have been integrated into our MediaCentral Platform, which provides the industry’s most open, integrated, and efficient platform designed for media. In addition, we provide flexible deployment models, licensing options, and commercial structures so our customers can choose how, when, and where to deploy and use our tools.

The standalone software portion of our product portfolio consists of our Creative Software Suite and the Enterprise Software Suite, representing a large high-margin software and maintenance business.

Creative Software Solutions

The Creative Software Suite includes our Media Composer, Pro Tools, and Sibelius tools, as well the Artist Community platform, Avid Link, and the Avid Marketplace, all of which are key components of our cloud-enabled software subscription strategy.

<u>*Media Composer*</u>

Our award-winning Media Composer product line is used to edit video content, including television programming, commercials, and films. Our cloud-enabled solutions that include Media Composer enable broadcast news, sports, reality television, and film professionals to acquire, access, edit, and finish stories anytime and from everywhere. Leveraging an integrated, yet open, end-to-end architecture, this solution gives contributors the ability to craft stories where and while they are happening and speed them to delivery, while maintaining connectivity with the central production operation. Media Composer also offers resolution flexibility and independence, accelerating high-res, HDR, and 4K workflows. We offer Media Composer through both subscription and perpetual license offerings.

Pro Tools

Our Pro Tools digital audio workstation software facilitates the audio production process, including music and sound creation, recording, editing, signal processing, integrated surround mixing, and mastering and reference video playback. The Pro Tools platform supports a wide variety of internally developed and third-party software plug-ins and integrated hardware. Pro Tools solutions are offered at a range of price points and are used by professionals in music, film, television, radio, gaming, Internet, and other media production environments. We have recently updated our Pro Tools Hardware portfolio with new offerings including, Avid MTRX Studio and Avid Pro Tools Carbon. Pro Tools Carbon is our next generation music creation hardware platform. We offer Pro Tools software through both subscription and perpetual license offerings.

Sibelius

Our Sibelius product allows users to create, edit, and publish musical scores. It is used by composers, arrangers, and other music professionals. Student versions are also available to assist in the teaching of music composition and score writing. Sibelius music notation software offers sophisticated, yet easy-to-use tools that are proven and trusted by composers, arrangers, publishers, educators, and students alike. We also offer Sibelius | Cloud Sharing, which allows users to view and play scores anywhere from the cloud using current web browsers and mobile devices. We offer Sibelius through both subscription and perpetual license offerings.

Avid Link

Avid Link is a free mobile application for anyone wanting to connect with other artists, producers, mixers, composers, editors, videographers, movie makers, and graphic designers, and to the Avid Marketplace. Available for Mac, Windows, iOS, and Android users, Avid Link is intended to make it easy for users to find, connect, message, and collaborate with audio and video creators, promote their work and skills to a vast network of media professionals, manage and keep their software up to date, and purchase new tools. We believe Avid Link will increase interest and demand for Avid's suite of product offerings.

Enterprise Software Solutions

Avid's Enterprise Software Suite is built on the MediaCentral platform along with a suite of applications, modules, and services and is also the foundation of our cloud and SaaS offerings.

MediaCentral

MediaCentral | Cloud UX is Avid's next-generation media production suite that further extends the Avid MediaCentral platform into the cloud. The MediaCentral platform scales from the simplest to the most sophisticated solutions. Built on a customizable cloud native microservices architecture, MediaCentral platform features a cloud-based user experience that runs on any device, as well as workflow modules for editorial, production, news, graphics, and asset management. It also features applications to enhance and scale any of those modules, and a wide array of media services and partner connectors. Every user is connected in a completely integrated workflow environment with a user-friendly interface, and gains a unified view into all their media with flexible deployment options for on premises, hybrid, or cloud (public/private) environments.

As part of the Avid MediaCentral platform, we also offer an Editorial Management module for smaller creative teams that provides the same robust media management capabilities used by the largest media enterprises in the industry. Integrated within Media Composer via a panel, Editorial Management connects directly to Avid NEXIS storage to provide easy access to media with hyper-search functionality. Editorial Management also extends collaboration capabilities for the assistant editor in an easy to use web interface by allowing Media Composer bin creation, logging, and search capabilities, greatly expanding the efficiency of creative teams.

SaaS Solutions

We have a strategic partnership with Microsoft to deliver Azure certified solutions to support end-to-end hybrid and cloud deployments of news workflows. Our partnership includes developing virtualized versions of many of our product offerings, allowing them to run in a private cloud, public cloud, or in hybrid deployments. This enables customers to migrate to more traditional IT infrastructures leveraging IP technology to integrate disparate systems within a post production and broadcast environment. We believe our new SaaS and cloud offerings will allow our customers to (i) scale production while lowering costs, (ii) enable anytime access, boosting efficiency and collaboration, and (iii) deliver content quickly and securely to any device, from anywhere. Our first enterprise SaaS offering, Edit on Demand, has been deployed in post production and news environments.

Integrated Solutions

The Integrated Solutions part of our portfolio mainly consists of four common, best-in-class hardware platforms that are combined with tightly integrated software elements to create powerful and differentiated solutions, all of which are designed to complement and enhance our overall software strategy.

Avid NEXIS

Our Avid NEXIS family of shared storage systems are real-time, open solutions that bring the power of shared storage to local, regional, national and multinational broadcasters, and post-production facilities at competitive prices. Customers can improve allocation of creative resources and support changing project needs with an open, shared storage platform that includes file system technology on lower cost hardware, support for third-party applications, and streamlined administration to create more content at an affordable price. Avid NEXIS is the industry’s first and only software-defined storage platform specifically designed for storing and managing media. Avid NEXIS enables fully virtualized storage so media organizations can adjust storage capacity mid-project, without disrupting workflows. Powered by our MediaCentral Platform, Avid NEXIS delivers media storage flexibility, scalability, and control for both Avid-based and third-party workflows. It has been designed to serve small production teams as powerfully as large media enterprises and is built with flexibility to grow with customers through their business stages. In additional to on premise Avid NEXIS workflows, Avid NEXIS Cloud provides on-line, nearline and archive storage tiers and is a key component of our SaaS offerings.

S6

Our S6 product line offers customers a range of complementary control surfaces and consoles, leveraging the open industry standard protocol EUCON (Extended User Control) to provide open solutions that meet the needs of customers ranging from the independent professional to the high-end broadcaster. Our Pro Tools | S6 control surface for sound recording, mixing, and editing was designed as a modular solution that scales to meet both current and future customer requirements. S6 is designed for audio professionals in demanding production environments, delivering the performance needed to complete projects faster while producing high quality mixes. Compact and portable, all control surfaces in the Artist line feature EUCON, allowing hands-on control of the user’s applications. Finally, the free Pro Tools | Control iOS application enables customers to record and mix faster and easier than working with a mouse and keyboard alone.

S1 and S4

In July 2019, we unveiled two new audio control surfaces, the Avid S4 and Avid S1, for professionals at smaller facilities and project studios. Avid S4 brings the power and workflows of Avid’s industry-leading Pro Tools S6 control surface to budget-conscious audio professionals and small- to mid-size music and audio post facilities in an ergonomic and more compact package. The Avid S1 delivers the speed, rich visual feedback, and software integration of Avid’s high-end consoles in a portable, slimline surface that’s an easy fit for any space or budget.

Live Sound

Our VENUE product family and our VENUE | S6L live sound system includes console systems for mixing audio for live sound reinforcement for concerts, theater performances, and other public address events. We offer a range of VENUE systems designed for large performance settings, such as stadium concerts, as well as medium-sized theaters and houses of worship. VENUE systems allow the direct integration of Pro Tools solutions to mix and record live productions of any size.

Maestro

Our Maestro product line offers customers comprehensive solutions for integrating virtual sets, augmented reality, and video wall control into existing workflows, ideal for any type of production needs in news, sports, entertainment, and in-studio productions, creating greater accessibility, efficiency at scale to enable the delivery of content with graphics faster. Maestro features a core platform that includes a powerful render engine and featured design tool called Maestro | Designer that drives a line-up of applications that are designed to address the specific challenges broadcasters face when automating the integration of statistics and graphics for the creation of an engaging broadcast. By adding graphics capabilities across the entire product line, we enable journalists and producers to add graphics remotely to news stories or enhance any story with innovative stats to drive augmented reality graphics for presenting data in new and compelling ways.

FastServe

Our FastServe video server product line assists broadcasters in making the move to UHD and IP based workflows with a new, modular architecture. The Avid FastServe family integrates with the MediaCentral platform, empowering creative teams to deliver content fast for news, sports, entertainment, and other media productions. Its 10GbE interface offers direct connection to Avid NEXIS storage, enabling real-time ingest, editing, and playout, even while media is being captured. Its modular, future-proof architecture improves efficiency and provides a smooth transition from HD to UHD, and from SDI workflows to video over IP. We also continue to sell and support our on-air server solutions, including AirSpeed 5000 and AirSpeed 5500, which enable broadcasters to automate the ingest and playout of television and news programming. The AirSpeed 5000 and 5500 video servers work with a wide range of applications to improve workflow and provide cost-efficient ingest and play to air capabilities for broadcasters of any size.

I/O and Processing

We offer a number of hardware products that complement our Media Composer and Pro Tools creative solutions, which include I/O devices, interfaces, and audio and video processing equipment.

Customer Support

We offer a variety of service contracts and support plans for our software and integrated solutions, allowing each customer to select the level of technical and operational support that they need to maintain their operational effectiveness. Support contracts typically include the right to the latest software updates, call support, and, in some cases, hardware maintenance. Support contracts for individual products are sold bundled with initial product offerings or as renewals once initial contracts have lapsed. Support contracts are also sold on an enterprise basis where a customer purchases support for all Avid products owned. Our Customer Care team provides customers with a partner committed to giving them help and support when they need it. Our global Customer Care team of industry professionals offers a blend of technology expertise and real-world experience throughout the audio, visual, and entertainment industries. The team’s mission is to provide timely, informed responses to our customers’ issues and proactive maintenance for our solutions to help our customers maintain high standards of operational effectiveness.

Professional Services

Our Professional Services team delivers workflow design and consulting, program, and project management, system installation and commissioning, custom development, and role-based product level training. The Professional Services team facilitates the engagement with our customers to maximize their investment in technology, increase their operational efficiency, and enable them to reduce deployment risk and implement our solutions.

Learning Services

Our Learning Services team delivers public and private training classes as well as self-paced eLearning content to our customers and alliance partners to ensure that they have the necessary skills and technical competencies to deploy, use, administer, and create Avid solutions. The Learning Services team develops and licenses curriculum content for use by third-party Avid Learning partners to deliver training to customers, users, and alliance partners. The Learning Services team includes the Avid Certification program which validates the skills and competency of Avid users, administrators, instructors, support representatives, and developers.

COMPETITION

The markets in which we serve our customers are highly competitive and subject to rapid change and declining average selling prices. The competitive landscape is fragmented with a large number of companies providing various types of products and services in different markets and geographic areas. We provide integrated solutions that compete based on total workflow value, features, quality, service, and flexibility of pricing and deployment options. Companies with which we compete in some contexts may also act as our partners in other contexts, such as large enterprise customer environments.

Certain companies that compete with us across some of our products and solutions are listed below by the market relevant to Avid in which they compete predominantly:

- Broadcast and Media: ChyronHego Corporation, Dalet S.A., Dell Technologies Inc. (EMC Isilon), EVS Corporation, Grass Valley, Harmonic Inc., Quantum Corporation, Ross Video Limited, and Vizrt Ltd., among others.
- Audio and Video Post and Professional: Ableton AG, Adobe Systems Incorporated, Apple Inc., AudioTonix Limited, Blackmagic Design Pty Ltd, PreSonus Audio Electronics, Inc., and Yamaha Corporation, among others.

Some of our principal competitors are substantially larger than we are and have greater financial, technical, marketing, and other resources than us. For a discussion of these and other risks associated with our competitors, see “Risk Factors” in Item 1A of this Form 10-K.

OPERATIONS

Sales and Services Channels

We market and sell our products and solutions through a combination of direct, indirect, and digital sales channels. Our direct sales channel consists of internal sales representatives serving select customers and markets. Our indirect sales channels include global networks of independent distributors, value-added resellers, system integrators, and retailers. Our digital sales channel is represented by the online Avid Marketplace, and also through the Xchange Market Platform, or XMP, with some of our key partners and distributors.

We have significant international operations with offices in 16 countries and the ability to reach approximately 171 countries through a combination of our direct sales force and resellers. Sales to customers outside the United States accounted for 60%, 63% and 64% of our total net revenues in 2020, 2019 and 2018, respectively. Additional information about the geographic breakdown of our revenues and long-lived assets can be found in Note P to our Consolidated Financial Statements in Item 8 of this Form 10-K. For additional information about risks associated with our international operations, see “Risk Factors” in Item 1A of this Form 10-K.

We generally ship our products shortly after the receipt of an order. However, a high percentage of our revenues has historically been generated in the third month of each fiscal quarter and concentrated in the latter part of that month. Orders that may exist at the end of a quarter and have not been shipped are not recognized as revenues in that quarter and are included in revenue backlog.

We provide customer care services directly through regional in-house and contracted support centers and major-market field service representatives. We also provide customer care services indirectly through dealers, value-added resellers, and authorized third-party service providers. Depending on the solution, customers may choose from a variety of support offerings, including telephone and online technical support, on-site assistance, hardware replacement and extended warranty, and software upgrades. In addition to customer care services, we offer a broad array of professional services, including installation, integration, planning and consulting services, and customer training.

Manufacturing and Suppliers

Our manufacturing operations consist primarily of a network of contract manufacturers around the globe to manufacture many of our products, components and subassemblies, and original equipment manufacturers, or OEMs, from whom we purchase finished assemblies. Our products undergo testing and quality assurance at the final assembly stage. We depend on sole-source suppliers for many key hardware product components and finished goods, including some critical items. Although we have procedures in place to mitigate the risks associated with our sole-sourced suppliers, we cannot be certain that we will be able to obtain sole-sourced components or finished goods from alternative suppliers or that we will be able to do so on commercially reasonable terms without a material impact on our results of operations or financial position. For the risks associated with our use of contractors and sole-source vendors, see “Risk Factors” in Item 1A of this Form 10-K.

Our contract manufacturers and OEMs manufacture our products at a relatively limited number of facilities located throughout the world and, in most cases, the manufacturing of each of our products is concentrated in one or a few locations. An interruption in manufacturing capabilities at any of these facilities, as a result of equipment failure or other reasons, could reduce, delay, or prevent the production of our products. Because some of our manufacturing or our contract manufacturers’ operations are located outside of the United States, principally in Mexico, those manufacturing operations are also subject to additional challenges and risks associated with international operations. For these and other risks associated with our manufacturing operations, see “Risk Factors” in Item 1A of this Form 10-K.

Research and Development

We are committed to delivering best-in-class digital media content-creation solutions that are designed for the unique needs, skills and sophistication levels of our target customer markets as well as a generic media platform for the media industry. Having helped establish the digital media technology industry, we are building on a 30-year heritage of innovation and leadership in developing content-creation solutions and platforms. We have research and development, or R&D, operations in seven facilities located in five countries. Our R&D efforts are focused on the development of digital media content-creation, distribution, and monetization tools as well as the media platform. These tools operate primarily on the Mac and on Windows platforms, whereas the media platform primarily operates on Linux platforms. Our R&D efforts also include highly optimized media storage solutions, standards-based media transfer and media asset management tools, and ingest and playout solutions to cover the entire workflow. Our R&D expenditures for 2020, 2019 and 2018 were $57.0 million, $62.3 million and $62.4 million, respectively, which represented 16%, 15% and 15% of our total net revenues, respectively. For the risks associated with our use of partners for R&D projects, see “Risk Factors” in Item 1A of this Form 10-K.

Our philosophy is to prioritize research and development investments to take advantage of market opportunities based on the following short-term, medium-term, and long-term horizons:

- <u>Here & Now</u> - Improve performance, solidify core portfolio, improve margins, and ignite growth.
- <u>Emerging</u> - Expand opportunities by pursuing growth areas, extending our product portfolio, and expanding market opportunities.
- <u>Transformational</u> - Build for the future, creating unique defensible differentiation in our products and solutions with disruptive and visionary innovation.

Our company-operated R&D operations are located in: Burlington, Massachusetts; Berkeley, California; Munich, Germany; Kaiserslautern, Germany; Kfar Saba, Israel; Szczecin, Poland; and Montreal, Canada. We also partner with a vendor in Kiev, Ukraine for outsourced R&D services.

Intellectual Property

We regard our software and hardware as proprietary and protect our proprietary interests under the laws of patents, copyrights, trademarks, and trade secrets, as well as through contractual provisions.

We have obtained patents and have registered copyrights, trademarks and service marks in the United States and in many foreign countries. At February 1, 2021, we held 114 U.S. patents, with expiration dates through 2039, and had 11 patent applications pending with the U.S. Patent and Trademark Office. We have also registered or applied to register various trademarks and service marks in the United States and a number of foreign countries, including Avid, Avid Nexis, AirSpeed, FastServe, MediaCentral, Media Composer, Pro Tools, and Sibelius. As a technology company, we regard our patents, copyrights, trademarks, service marks, and trade secrets as being among our most valuable assets, together with the innovative skills, technical competence, and marketing abilities of our personnel.

Our software is licensed to end users pursuant to shrink-wrap, embedded, click-through, or signed license agreements. Our products generally contain features to guard against unauthorized use. Policing unauthorized use of computer software is difficult, and software piracy is a persistent problem for us, as it is for the software industry in general. Although we attempt to protect our intellectual property rights through patents, trademarks, copyrights, licensing arrangements, maintaining certain technology as trade secrets, and other measures, there can be no assurance that any patent, trademark, copyright, or other intellectual property rights owned by us will not be invalidated, circumvented or challenged, that such intellectual property rights will provide competitive advantages to us, or that any of our pending or future patent applications will be issued with the claims, or the scope of the claims, sought by us, if at all. Others may develop technologies that are similar or superior to our technology, duplicate our technology, or design around the patents that we own. In addition, effective patent, copyright, and trade secret protection may be unavailable or limited in countries in which we do business or may do business in the future. For these and other risks associated with the protection of our intellectual property, see “Risk Factors” in Item 1A of this Form 10-K.

HISTORY

Avid was incorporated in Delaware in 1987. We are headquartered in Burlington, Massachusetts, with operations in North America, South America, Europe, the Middle East, Asia and Australia.

HUMAN CAPITAL

We view our employees and our culture as key to our success. As of December 31, 2020, we had approximately 1,362 full-time employees and 263 external contractors located globally in 36 countries. Of these, 36% were located in the United States, Canada, and Latin America, 45% in Europe, Middle East, and Africa, and 19% in Asia-Pacific.

The COVID-19 pandemic continues to impact lives and businesses around the world. We have taken proactive steps to help protect the health and safety of our employees and maintain business continuity. A vast majority of our office workers continue to telecommute. Within our office areas we have established a number of safety protocols, including face covering and physical distance requirements, enhanced cleaning, encouraging daily self-health checks, and access to virtual primary care physicians. All of the actions above are overseen by Avid’s Crisis Management Team, a multi-functional, multi-discipline team tasked with integrating all aspects of Avid’s COVID-19 response. In addition, we have created a TeamAvid Community, where employees can virtually share communications, collaborate, and engage with each other from their remote locations. This was implemented as a way to keep employees connected throughout the pandemic.

We believe in fostering great leaders. Through our Avid University platform, we have built the opportunity for employees to power their performance with continuous learning and development courses to provide skills and coaching to employees on a variety of topics, such as leading and inspiring teams. We believe this focus helps our employees grow as leaders and well-rounded individuals, and better positions Avid to operate our global business of empowering media creators with innovative technology and collaborative tools to entertain, inform, educate, and enlighten the world. We also offer tuition reimbursement for eligible classes at external education organizations that may not be covered under Avid University.

We also believe a critical component of our success is our company culture. We are focused on creating a company culture of integrity and respect, with the goal of working together to drive our business to be creative, innovative and competitive. To achieve these objectives, we have adopted and regularly communicate to our employees core values of People, Passion, and Performance. We believe in the power of an increasingly diverse, inclusive, and collaborative team and we embrace and leverage the global community of TeamAvid.

To further that focus, Avid has implemented the Global Leadership Team, or GLT. The GLT is comprised of a group of global leaders throughout the organization who are either key stakeholders in our business or an important beacon of our culture. The team meets monthly with the Executive and Senior Management Teams to align on corporate strategy, culture and development.

AVAILABLE INFORMATION

We make available free of charge on our website, www.avid.com, copies of our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q, our Current Reports on Form 8-K, and all amendments to those reports as soon as practicable after filing with the Securities and Exchange Commission, or SEC. Additionally, we will provide paper copies of all of these filings free of charge upon request. Alternatively, these reports can be accessed at the SEC's Internet website at www.sec.gov. The information contained on our web site shall not be deemed incorporated by reference in any filing under the Exchange Act.

ITEM 1A. RISK FACTORS

You should carefully consider the risks and uncertainties described below, in addition to the other information included or incorporated by reference in this Form 10-K, before making an investment decision regarding our common stock. If any of the following risks were to actually occur, our business, financial condition or operating results would likely suffer, possibly materially, the trading price of our common stock could decline, and you could lose part or all of your investment. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that adversely affect our business.

Risks Related to Our Business and Industry

The novel coronavirus, or COVID-19, and actions taken in response to it have adversely affected our business and are likely to continue to adversely affect our business, financial condition and results of operations.

The COVID-19 pandemic is causing worldwide concern and economic disruption, and has led to federal, state and local governments enacting various restrictions in an attempt to limit the spread of the virus. This has included the declaration of states of emergency across the globe, and widespread school and business closings affecting a large number of countries. It has also prompted limitations on social or public gatherings and other social distancing measures, such as office closures, shelter in place orders, working remotely, travel restrictions and quarantines, some of which continue in effect in many cities and countries.

In these challenging and dynamic circumstances, Avid is working to protect its employees and the public, maintain business continuity and sustain its operations. We have taken, and may take in the future, actions as required by government authorities or that we determine are in the best interests of our employees, customers, manufacturers, and suppliers that diminish our ability to promote our products and services, and deliver required on-site professional services, including on-site support to our customers and users, and that could negatively impact our business and results of operations.

The COVID-19 pandemic has significantly increased economic and demand uncertainty. The outbreak and continued spread of COVID-19, along with restrictions enacted to limit its spread, have caused economic disruptions and slowdowns in many countries. This economic downturn has caused a decline in the media, entertainment, and sports industries which has, in turn, reduced demand for our products and services. These factors are expected to continue to reduce demand for our products and services, possibly significantly, including causing delays in purchasing and projects by our enterprise customers and channel partners. Additionally, the provision of on-site professional service may be impossible for a prolonged period of time, further impacting our business.

The COVID-19 pandemic has also had an adverse impact on our operations and supply chain, and adverse impacts could continue during the pandemic. We could experience interruptions as a result of employees or other key personnel of manufacturers, ours or those of third parties, becoming infected. Such workplace interruptions have also been caused by preventive and precautionary measures that governments and we and other businesses, including our third-party manufacturers, are taking, such as border closures, prolonged quarantines, and other travel restrictions. For example, we do not know if all of our manufacturers will be able to continue producing materials for us or may be shut down. Any of the above circumstances will negatively impact the ability of third parties on which we rely to manufacture our products or their components and our ability to perform critical functions, which could significantly hamper our ability to supply our products to our customers. If we encounter delays or difficulties in the manufacturing process that disrupt our ability to supply our products, we may not be able to satisfy customer demand or we may experience a product stock-out, which would likely have a material adverse effect on our business.

If the pandemic continues and economic conditions worsen, we expect to experience additional adverse impacts on our operations and revenues and our collections of accounts receivable, which adverse impacts may be material. To address our liquidity, we obtained funding under the Paycheck Protection Program, or PPP, and will continue to explore other options, including other programs that may be implemented by the U.S. government in response to the COVID-19 pandemic. However, there can be no assurance that we will obtain any funds from these or future programs. We have also implemented cost reduction measures, including halting all but essential travel spending, reducing discretionary spending, deferring certain investments, and reducing our payroll expenses. Such cost reductions may not be sufficient and additionally may harm our ability to offer, promote, and deliver products and services at the level expected by our customers and partners.

Further, the continued spread of COVID-19 has led to disruption and volatility in the global capital markets, which may increase the cost of capital and adversely impact access to capital. If we experience further deterioration in demand and our cash flows from operations decrease, we may require additional funding and may not be able to obtain such funding on favorable terms, or at all.

The degree to which COVID-19 impacts our results going forward will depend on future developments, which remain uncertain and cannot be predicted, including, but not limited to, the duration and spread of COVID-19, its severity, the actions to contain the virus or treat its impact, and how quickly and to what extent normal economic and operating conditions can resume. Any of the foregoing factors, or other cascading effects of the COVID-19 pandemic that are not currently foreseeable, could materially increase our costs, negatively impact our business and damage our results of operations and our liquidity position, possibly to a significant degree.

A natural disaster or catastrophic event may significantly limit our ability to conduct business as normal and harm our business.

Our operations, and the operations of our customers, are vulnerable to interruptions by natural disasters and catastrophic events, including pandemics such as the COVID-19 pandemic discussed in the preceding risk factor. We operate a complex, geographically dispersed business, which includes significant personnel, customers and facilities in California near major earthquake fault lines. We may not be able to protect our company from, and we are predominantly uninsured for, business continuity losses and disruptions caused by such catastrophic events. Disruption or failure of our or our customers' networks or systems, or injury or damage to either parties' personnel or physical infrastructure, caused by a natural disaster, public health crisis, terrorism, cyber-attack, act of war, or other catastrophic event may significantly limit our or our customers' ability to conduct business as normal, including our ability to communicate and transact with customers, suppliers, distributors, and resellers, which may negatively affect our revenues and operating results. Additionally, a natural disaster or catastrophic event could cause us or our customers to suspend all or a portion of operations for a significant period of time, result in a permanent loss of resources, and require the relocation of personnel and material to alternate facilities that may not be available or adequate. Such an event could also cause an indirect economic impact on our customers, which could affect our customers' purchasing decisions and reduce demand for our products and services. There could also be disruptions to our supply chain as a result of such events. We may also experience disruption to our internal operations if we are forced to restrict employee travel, cancel events with customers or partners, or even close office facilities as a result of such events. Any significant disruption resulting from such events on a large scale or over a prolonged period of time could cause significant delays and disruption to our business until the Company would be able to resume normal business operations or shift to other third-party vendors, negatively affecting our revenue and other financial results. A prolonged disruption of our business could also damage our reputation, particularly among our global news organization customers who are likely to require our solutions and support during such time. Any of these factors could cause a material adverse impact on our financial condition and operating results.

Our success depends in significant part on our ability to offer innovative products and solutions in response to dynamic and rapidly evolving market demand.

To succeed in our market, we must offer innovative products and solutions. Innovation requires that we accurately predict future market trends and customer expectations, and that we quickly adapt our development efforts in response. We must also protect our product roadmap and new product initiatives from leaks that might reduce or eliminate any innovative edge that we seek. Predicting market trends is difficult because our market is dynamic and rapidly evolving. Additionally, given the complex, sophisticated nature of our solutions and our typically lengthy product development cycles, we may not be able to rapidly change our product direction or strategic course. If we are unable to accurately predict market trends or adapt to evolving market conditions, we may be unable to capture customer demand and our market reputation and financial performance will be negatively affected. Even to the extent we make accurate predictions and possess the requisite flexibility to adapt, we may be able to pursue only some of the possible innovations due to limited resources. Our success, therefore, further depends on our ability to identify and focus on the most promising innovations.

Our success also depends on our ability to manage a number of risks associated with new products that we introduce, including timely and successful product launch, market acceptance, and the availability of products in appropriate locations, quantities, and costs to meet demand. There can be no assurance that our efforts will be successful in the near future, or at all, or that our competitors will not take significant market share in similar efforts. If we fail to develop new products and to manage new product introductions and transitions properly, our financial condition and operating results could be harmed.

Our increased emphasis on a cloud strategy may give rise to risks that could harm our business.

Our cloud strategy requires continued investment in product development and cloud operations, where we have a limited operating history. Our cloud strategy has also led to changes in the way we price and deliver our products. Many of our competitors may have advantages over us due to their larger presence, larger developer network, deeper experience in the cloud-based computing market, and greater sales and marketing resources. It is uncertain whether our cloud strategy will prove successful, or whether we will be able to develop the necessary infrastructure and business models more quickly than our competitors. Our cloud strategy may give rise to a number of risks, including the following:

- if new or current customers desire only perpetual licenses, we may not be successful in selling subscriptions;
- although we intend to support our perpetual license business, the increased emphasis on a cloud strategy may raise concerns among our installed customer base;
- we may be unsuccessful in achieving our target pricing;
- our revenues might decline over the short or long term as a result of this strategy;
- our relationships with existing partners that resell perpetual licenses may be damaged; and
- we may incur costs at a higher than forecasted rate as we enhance and expand our cloud operations.

Certain of our enterprise offerings have long and complex sales cycles, which could result in a loss of customers and lower revenues.

With our transition to leveraging the Avid MediaCentral platform in our sales process, we have experienced longer and more complex sales cycles for some of our enterprise offerings. The length and complexity in these sales cycles are due to a number of factors, including, among other things, the need for our sales representatives to educate customers about the uses and benefits of our products and services, the desire of large and medium size organizations to undertake significant evaluation processes to determine their technology requirements prior to making information technology expenditures, and the need to negotiate large, complex, enterprise-wide contracts. These longer and more complex sales cycles could result in a loss of customers and lower revenues.

We spend substantial time and money on our sales efforts without any assurance that potential customers will ultimately purchase our solutions. As we target our sales efforts at larger enterprise customers, these trends are expected to continue. Our long and complex sales cycle for these products makes it difficult to predict when a given sales cycle will close.

There are a number of financial and accounting risks in our subscription model.

A growing portion of our revenue is subscription-based pursuant to service and subscription agreements that are generally month-to-month or one year in length, and we intend to continue to expand our subscription-based offerings. Although the subscription model is designed to increase the number of customers who purchase our products and services on a recurring basis and create a more predictable revenue stream, there are certain risks inherent in a subscription-based model. These risks include the risk that customers will not renew their subscriptions, risks related to the timing of revenue recognition, and the risk of potential reductions in cash flows. Although many of our service and subscription agreements contain automatic renewal terms, generally, our customers have no obligation to renew their subscriptions for our services after the expiration of their initial subscription period. If customers do renew their subscriptions, these subscriptions may not be renewed on the same terms. Moreover, under certain circumstances, some of our customers have the right to cancel their service agreements prior to the expiration of the terms of their agreements. If our customers do not renew their subscriptions for our services or if they renew on terms less favorable to us, our revenues may decline. Our future growth is also affected by our ability to sell additional features and services to our current customers, which depends on a number of factors, including customers' satisfaction with our products and services, the prices of our offerings, and general economic conditions. If our efforts to cross-sell and upsell to our customers are unsuccessful, the rate at which our business grows may decline.

A portion of the subscription-based revenue we report each quarter results from the recognition of deferred revenue relating to subscription agreements entered into during previous quarters. A decline in new or renewed subscriptions in any period may not be immediately reflected in our reported financial results for that period but may result in a decline in our revenue in future quarters. If we were to experience significant downturns in subscription sales and renewal rates, our reported financial results might not reflect such downturns until future periods. Our subscription model could also make it difficult for us to rapidly increase our revenues from subscription-based services through additional sales in any period, as revenue from new customers will be recognized over the applicable subscription term. Further, any increases in sales under our subscription sales model could result in decreased revenues over the short term if these sales are offset by a decline in sales from perpetual license customers. If any of our assumptions about revenue from our new businesses or our addition of a subscription-based model prove incorrect, our actual results may differ materially from those anticipated, estimated, or projected. We may be unable accurately to predict subscription renewal rates and the impact these rates may have on our future revenue and operating results.

We operate in highly fragmented and competitive markets, and our competitors may be able to draw upon a greater depth and breadth of resources than those available to us.

We operate in highly fragmented and competitive markets characterized by pressure to innovate, expand feature sets and functionality, accelerate new product releases, and reduce prices. Markets for certain of our products have limited barriers to entry. Also, the fragmentation in our markets creates an additional risk of consolidation among our competitors, which would result in fewer, more effective competitors. Customers consider many factors when evaluating our products relative to those of our competitors, including innovation, ease of use, price, feature sets, functionality, reliability, performance, reputation, and training and support, and we may not compare favorably against our competitors in all respects. Some of our current and potential competitors have longer operating histories, greater brand recognition, and substantially greater financial, technical, marketing, distribution, and support resources than we do. As a result, our competitors may be able to deliver greater innovation, respond more quickly to new or emerging technologies and changes in market demand, devote more resources to the development, marketing and sale of their products, successfully expand into emerging and other international markets, or price their products more aggressively than we can. If our competitors are more successful than we are in developing products, or in attracting and retaining customers, our financial condition and operating results could be adversely affected.

We obtain certain hardware product components and finished goods under sole-source supply arrangements, and disruptions to these arrangements could jeopardize the manufacturing or distribution of certain of our hardware products.

Although we generally prefer to establish multi-source supply arrangements for our hardware product components and finished goods, multi-source arrangements are not always possible or cost-effective. We consequently depend on sole-source suppliers for many hardware product components and finished goods, including some critical items. We do not generally carry significant inventories of, and may not in all cases have guaranteed supply arrangements for, these sole-sourced items. Our sole-source suppliers may cease, suspend, or otherwise limit production or shipment of our product components, due to, among other things, macroeconomic events, political crises, or natural or environmental disasters or other occurrences, or they may terminate our agreements or adversely modify supply terms or pricing. If any of these events occur, our ability to manufacture, distribute, and service our products would be impaired, and our business could be significantly harmed. We may not be able to obtain sole-sourced components or finished goods, or acceptable substitutes, from alternative suppliers or on commercially reasonable terms. If we are forced to change sole-source suppliers due to a contract termination or other production cessation, it may take a significant amount of time and expenses to obtain substitute suppliers, during which time our inventory may be significantly reduced, which may adversely impact our business, financial condition and results of operations. We may also be required to expend significant development resources to redesign our products to work around the exclusion of any sole-sourced component or accommodate the inclusion of any substitute component. Although we have procedures in place to mitigate the risks associated with our sole-sourced suppliers, we cannot be certain that we will be able to obtain sole-sourced components or finished goods from alternative suppliers or that we will be able to do so on commercially reasonable terms without a material impact on our results of operations or financial position.

We depend on the availability and proper functioning of certain third-party technology that we incorporate into or bundle with our products. Third-party technology may include defects or errors that could adversely affect the performance of our products. If third-party technology becomes unavailable at acceptable prices, we may need to expend considerable resources integrating alternative third-party technology or developing our own substitute technology.

The profit margin for some of our products depends in part on the royalty, license, and purchase fees we pay in connection with third-party technology which we license for incorporation into our bundling with our products. To the extent we add additional third-party technology to our products and we are unable to offset associated costs, our profit margins may decline, and our operating results may suffer. In addition to cost implications, third-party technology may include defects or errors that could adversely affect the performance of our products, which may harm our market reputation or adversely affect our product sales. Third-party technology may also include certain open source software code that if used in combination with our own software may jeopardize our intellectual property rights or limit our ability to sell through certain sales channels. If any third-party technology license expires, is terminated, or ceases to be available on commercially reasonable terms, we may be required to expend considerable resources integrating alternative third-party technology or developing our own substitute technology. In the interim, sales of our products may be delayed or suspended, or we may be forced to distribute our products with reduced feature sets or functionality.

Our products may experience defects that could negatively impact our customer relationships, market reputation, and operating results.

Our software products occasionally include coding defects (commonly referred to as “bugs”), which in some cases may interfere with or impair a customer’s ability to operate or use the software. Similarly, our hardware products could include design or manufacturing defects that could cause them to malfunction. The quality control measures we use are not designed or intended to detect and remedy all defects. Any product defects could result in loss of customers or revenues, delays in revenue recognition, increased product returns, damage to our market reputation, and significant warranty or other expense and could have a material adverse impact on our financial condition and operating results.

Lengthy procurement lead times and unpredictable life cycles and customer demand for some of our products may result in significant inventory risks.

With respect to many of our products, particularly our audio products, we must procure component parts and build finished inventory far in advance of product shipments. Certain of these products may have unpredictable life cycles and encounter rapid technological obsolescence as a result of dynamic market conditions. We procure product components and build inventory based upon our forecasts of product life cycle and customer demand. If we are unable to accurately forecast product life cycle and customer demand or unable to manage our inventory levels in response to shifts in customer demand, the result may be insufficient, excess, or obsolete product inventory. Insufficient product inventory may impair our ability to fulfill product orders and negatively affect our revenues, while excess or obsolete inventory may require a write-down on products and components to their net realizable value, which would negatively affect our results of operations.

Our revenues and operating results depend significantly on our third-party reseller and distribution channels. Our failure to effectively manage our distribution channels for our products and services could adversely affect our revenues and gross margins and therefore our profitability.

We distribute many of our products indirectly through third-party resellers and distributors. We also distribute products directly to end-user customers. Successfully managing the interaction of our direct and indirect channel efforts to reach various potential customer industries for our products and services is a complex process. For example, in response to our direct sales strategies or for other business reasons, our current resellers and distributors may from time to time choose to resell our competitors’ products in addition to, or in place of, our products. Moreover, since each distribution method has distinct risks and gross margins, our failure to identify and implement the most advantageous balance in the delivery model for our products and services could adversely affect our revenues and gross margins and therefore our profitability.

Potential acquisitions could be difficult to consummate and integrate into our operations, and they could disrupt our business, dilute stockholder value, or impair our financial results.

As part of our business strategy, from time to time we may seek to grow our business through acquisitions of or investments in new or complementary businesses, technologies, or products that we believe can improve our ability to compete in our existing customer markets or allow us to enter new markets. There are numerous risks associated with acquisitions and investment transactions including, but not limited to, failing to realize anticipated returns on investment, unanticipated costs and liabilities associated with the acquisition, and difficulty assimilating the operations, policies and personnel of the acquired company.

Our revenues and operating results are difficult to predict and may fluctuate from period to period.

Our results of operations have been, and may continue to, be subject to significant quarterly variation. Our revenues and operating results for any particular quarter may also vary due to a number of factors, including, but not limited to, those enumerated under the section "Cautionary Note on Forward-Looking Statements," appearing elsewhere in this Form 10-K and:

- the timing of large or enterprise-wide sales and our ability to recognize revenues from such sales;
- demand planning and logistics;
- renewal rates under subscription contracts;
- reliance on third-party reseller and distribution channels;
- disruptions in our supply chain;
- changes in operating expenses;
- price protections and provisions for inventory obsolescence extended to resellers and distributors;
- seasonal factors, such as higher consumer demand at year-end; and
- complex accounting rules for revenue recognition.

The occurrence and interaction of these variables may cause our revenues and operating results to fluctuate from period to period. As a result, period-to-period comparisons of our revenues and operating results may not provide an adequate indication of our future performance. We cannot be certain when, or if, our operations will be profitable in future periods.

Our revenue backlog estimates are based on certain assumptions and are subject to unexpected adjustments and cancellations, and backlog orders may not be timely converted to revenues in any particular fiscal period, if at all, or be indicative of our actual operating results for any future period.

Our revenue backlog, as we define it, consists of firm orders received and includes both (i) orders where the customer has paid in advance of our performance obligations being fulfilled, which are reflected as deferred revenues on our balance sheet, and (ii) orders for future product deliveries or services that have not yet been invoiced by us. To the extent that our customers cancel their orders with us, or reduce their requirements during a particular period for any reason, we will not realize revenue or profit from the associated revenue backlog. Even where a project proceeds as scheduled, it is possible that the customer may default and fail to pay amounts owed to us. Material delays, payment defaults, or cancellations could reduce the amount of revenue backlog currently reported, and consequently, could inhibit the conversion of that backlog into revenues. Furthermore, orders included in our revenue backlog may not be profitable. We may experience variances in the realization of our revenue backlog because of project delays or cancellations resulting from external market factors and economic factors beyond our control. In addition, even if we realize all of the revenue from the projects in our revenue backlog, if our expenses associated with these projects are higher than expected, our results of operations and financial condition would be adversely affected.

Risks Related to Our Intellectual Property

Our intellectual property and trade secrets are valuable assets that may be subject to third-party infringement and misappropriation.

As a technology company, our intellectual property and trade secrets are among our most valuable assets. Infringement or misappropriation of these assets can result in lost revenues, and thereby ultimately reduce their value. We rely on a combination of patent, copyright, trademark, and trade secret laws, as well as confidentiality procedures, contractual provisions, and anti-piracy technology in certain of our products to protect our intellectual property and trade secrets. Most of these tools require vigilant monitoring of competitor and other third-party activities and of end-user usage of our products to be effective. These tools may not provide adequate protection in all instances, may be subject to circumvention, or may require a vigilance that in some cases exceeds our capabilities or resources. Additionally, our business model is increasingly focused on software products and, as we offer more software products, our revenues may be more vulnerable to loss through piracy. While we may seek to engage with those potentially infringing our intellectual property to negotiate a license for use, we also may seek legal recourse. As noted in more detail above, the legal regimes of certain foreign jurisdictions in which we operate may not protect our intellectual property or trade secrets to the same extent as do the laws of the United States. If our intellectual property or trade secrets are misappropriated in foreign jurisdictions, we may be without adequate remedies to address these issues. Regardless of jurisdiction, assuming legal protection exists, and infringement or misappropriation is detected, any enforcement action that we may pursue could be costly and time-consuming, the outcome will be uncertain, and the alleged offender in some cases may seek to have our intellectual property rights invalidated. If we are unable to protect our intellectual property and trade secrets, our business could be harmed.

Our results could be materially adversely affected if we are accused of, or found to be, infringing third parties' intellectual property rights.

Because of technological change in our industry, extensive and sometimes uncertain patent coverage, and the rapid issuance of new patents, it is possible that certain of our products or business methods may infringe the patents or other intellectual property rights of third parties. Companies in the technology industry own large numbers of patents, copyrights, trademarks, and trade secrets and frequently enter into litigation based on allegations of infringement or other violations of intellectual property rights. Our technologies may not be able to withstand any third-party claims or rights against their use. We have received claims and have been subject to litigation alleging that we infringe patents owned by third parties, and we may in the future be subject to such claims and litigation. Regardless of the scope or validity of such patents, or the merits of any patent claims by potential or actual litigants, we could incur substantial costs in defending intellectual property claims and litigation, and such claims and litigation could distract management's attention from normal business operations. In addition, we provide indemnification provisions in agreements with certain customers covering potential claims by third parties of intellectual property infringement. These agreements generally provide that we will indemnify customers for losses incurred in connection with an infringement claim brought by a third party with respect to our products, and we have received claims for such indemnification. The results of any intellectual property litigation to which we are, or may become, a party, or for which we are required to provide indemnification, may require us to:

- cease selling or using products or services that incorporate the challenged intellectual property;
- make substantial payments for legal fees, settlement payments or other costs or damages;
- obtain a license, which may not be available on reasonable terms, to sell or use the relevant technology, which such license could require royalties that would significantly increase our cost of goods sold; or redesign products or services to avoid infringement, where such redesign could involve significant costs and result in delayed and/or reduced sales of the affected products.

<u>Risks Related to Our Liquidity and Financial Condition and Performance</u>

If we are not able to generate and maintain adequate liquidity our ability to operate our business could be adversely affected.

Generating and maintaining adequate liquidity is important to our business operations. We meet our liquidity needs primarily through cash generated by operations, supplemented from time to time with the proceeds of long-term debt and borrowings under our revolving credit facility, or New Credit Facility, governed by the credit agreement, dated January 5, 2021, among us, the lenders party thereto, and JPMorgan Chase Bank, N.A., as administrative agent, or the Credit Agreement. We have the ability to borrow up to $70.0 million under the New Credit Facility. We have also undertaken significant cost cutting measures and we may take additional measures to further improve our liquidity. Significant fluctuations in our cash balances could harm our ability to meet our immediate liquidity needs, impair our capacity to react to sudden or unexpected contractions or growth in our business, reduce our ability to withstand a sustained period of economic crisis, and impair our ability to compete with competitors with greater financial resources. In addition, fluctuations in our cash balances could cause us to draw on our New Credit Facility and therefore reduce available funds under the New Credit Facility (see "Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources" in Item 7 of this Form 10-K). If we are unable to generate sufficient cash flow or our borrowings are not sufficient, our liquidity may significantly decrease, which could have an adverse effect on our business.

Restrictions in the Credit Agreement may limit our activities.

The Credit Agreement contains restrictive covenants that limit our ability to engage in activities that could otherwise benefit us, including, among other things, limitations on our ability to make investments, incur additional indebtedness, sell assets, pay dividends and make other restricted payments, and create liens. We are also required to comply on an ongoing basis with certain financial covenants, including a maximum total net leverage ratio and a minimum fixed charge coverage ratio. Our ability to comply with these restrictions and covenants in the future is uncertain and could be affected by the levels of our cash flows from operations and events or circumstances beyond our control. Failure to comply with any of these restrictions or covenants may result in an event of default under the Credit Agreement, which could permit acceleration of the outstanding term loans and New Credit Facility borrowings under the Credit Agreement and require us to repay such indebtedness before its scheduled due date. Certain events of default under the Credit Agreement may also give rise to a default under other future indebtedness. If an event of default were to occur, we might not have sufficient funds available to make the payments required. If we are unable to repay amounts owed, our lenders may be entitled to foreclose on and sell substantially all of our assets, which secure our borrowings under the Credit Agreement.

Our substantial indebtedness could adversely affect our business, cash flow and results of operations.

As of December 31, 2020, we had $207.7 million of indebtedness, including borrowings under our Financing Agreement, which was terminated in connection with our entry into the Credit Agreement. This substantial level of indebtedness may:

- require us to dedicate a greater percentage of our cash flow from operations to payments on our debt, thereby reducing the availability of cash flow to fund capital expenditures, pursue other acquisitions or investments, and use for general corporate purposes;
- increase our vulnerability to general adverse economic conditions, including increases in interest rates with respect to borrowings under the Credit Agreement that bear interest at variable rates or when our indebtedness is being refinanced;
- limit our ability to obtain additional financing; and
- limit our flexibility in planning for, or reacting to, changes in or challenges relating to our business and industry, creating competitive disadvantages compared to other competitors with lower debt levels and borrowing costs.

We cannot make any assurance that our cash flow from operations, combined with any additional borrowings available to us, will be sufficient to enable us to repay our indebtedness, or to fund other liquidity needs. We may incur additional indebtedness in the future, which could cause these risks to intensify. If we are unable to generate sufficient cash flows to repay our indebtedness when due or to fund our other liquidity needs, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt, or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

Risks Related to Our Stock

Delaware law and our charter documents may impede or discourage a takeover, which could reduce the market price of our common stock.

We are a Delaware corporation, and the anti-takeover provisions of Delaware law impose various impediments to the ability of a third party to acquire control of us, even if a change in control would be beneficial to our existing stockholders. In addition, our board of directors, or a committee thereof, has the power, without stockholder approval, to designate the terms of one or more series of preferred stock and issue shares of preferred stock. The ability of our board of directors to create and issue a new series of preferred stock and certain provisions of Delaware law and our certificate of incorporation and bylaws, could impede a merger, takeover or other business combination involving us, or discourage a potential acquirer from making a tender offer for our common stock, which, under certain circumstances, could reduce the market price of our common stock.

Other Risks Related to our Business

Failure of our information systems or those of third parties or breaches of data security could cause significant harm to our business.

Our systems and processes involve the storage and transmission of proprietary information and sensitive or confidential data, including personal information of employees, customers, and others. In addition, we rely on information systems controlled by third parties. Information system failures, network disruptions, and system and data security breaches, manipulation, destruction, or leakage, whether intentional or accidental, could impair our ability to provide services to our customers or otherwise harm our ability to conduct our business. Any such failures, disruptions or breaches could also impede the development, manufacture or shipment of products, interrupt or delay processing of transactions and reporting financial results, result in theft or misuse of our intellectual property or other assets, or result in the unintentional disclosure of personal, proprietary, sensitive, or confidential information of employees, customers, and others. Our development and use of the Avid MediaCentral Platform, public and private marketplaces, cloud-based offerings, as well as our evolution toward an enterprise subscription model that requires us to host increasing amounts of customer data, increases the risk that our and our customers' data and financial and proprietary information could be more susceptible to such failures and data breaches. In addition, the need for substantial numbers of our employees to work remotely, such as due to the COVID-19 pandemic, could create additional data security risks.

Information system failures or unauthorized access could be caused by our failure to adequately maintain and enhance our systems and networks, external theft or attack, misconduct by our employees, contractors, vendors, or external bad actors, or many other causes such as power failures, earthquakes, fire, or other natural disasters. Cyber threats are constantly evolving, increasing the difficulty of detecting and successfully defending against them. We may have no current capability to detect certain vulnerabilities, which may allow them to persist in the environment over long periods of time. Cyber threats can have cascading impacts that unfold with increasing speed across our internal networks and systems and those of our partners and customers.

Any information system failures or unauthorized access to our network or systems could expose us, our customers, or the individuals affected to a risk of loss or misuse of this information, resulting in litigation and potential liability for us. In addition, we could incur substantial remediation costs, including costs associated with repairing our information systems, implementing further data protection measures, engaging third-party experts and consultants, and increased insurance premiums. In addition, significant or repeated reductions in the performance, reliability, security, or availability of our information systems and network infrastructure could significantly harm our brand and reputation and ability to attract and retain existing and potential users, customers, advertisers, and content providers.

Our international operations expose us to legal, regulatory and other risks.

We derive more than half of our revenues from customers outside of the United States, and we rely on foreign contractors for the supply and manufacture of many of our products. Sales to customers outside the United States accounted for 60%, 63% and 64% of our total net revenues in 2020, 2019 and 2018, respectively. We also conduct significant research and development activities overseas, including through third-party development vendors. For example, a portion of our research and development is outsourced to contractors operating in Kiev, Ukraine, we have customer support activities in the Philippines, and we have operations in Poland and Israel.

Our international operations expose us to a variety of risks, including:

- the financial and administrative burdens associated with environmental, tax, labor and employment, and export laws, as well as other business regulations, in foreign jurisdictions, including high compliance costs, inconsistencies among jurisdictions, and a lack of administrative or judicial interpretative guidance;
- reduced or varied protection for intellectual property rights in some countries;
- regional economic downturns;
- economic, social, and political instability, security concerns, and the risk of war;
- fluctuations in foreign currency exchange rates;
- longer collection cycles for accounts receivable;
- difficulties in enforcing contracts;
- difficulties in managing and staffing international implementations and operations, and executing our business strategy internationally;
- difficulties managing a global labor force;
- potentially adverse tax consequences, including the complexities of foreign value added or other tax systems and restrictions on the repatriation of earnings;
- increased financial accounting and reporting burdens and complexities;
- difficulties in maintaining effective internal control over financial reporting and disclosure controls;
- costs and delays associated with developing products in multiple languages; and
- foreign exchange controls that may prevent or limit our ability to repatriate income earned in foreign markets.

Additionally, recent legal developments in Europe have created compliance uncertainty regarding certain transfers of personal data from Europe to the United States. For example, the General Data Protection Regulation, or GDPR, which became effective in the European Union, or EU, in 2018, applies to any of our activities conducted from an establishment in the EU or related to products and services that we offer to EU users. The GDPR created a range of new data privacy related compliance obligations, which could cause us to change our business practices, and will significantly increase financial penalties for noncompliance, including possible fines of up to 4% of global annual turnover for the preceding financial year or €20 million (whichever is higher) for the most serious infringements.

We may not be successful in developing, implementing, or maintaining policies and strategies that will be effective in managing the varying risks in each country where we do business. Our failure to manage these risks successfully, including developing appropriate contingency plans for our outsourced research and development work, could harm our international operations, reduce our international sales, and increase our costs, thus adversely affecting our business, operating results, and financial condition.

Fluctuations in foreign exchange rates may result in short-term currency exchange losses and could adversely affect our revenues from foreign markets and our manufacturing costs in the long term.

Our international sales are largely transacted through foreign subsidiaries and generally in the currency of the end-user customers. Consequently, we are exposed to short-term currency exchange risks that may adversely affect our revenues, operating results, and cash flows. The majority of our international sales are transacted in euros. To hedge against the dollar/euro exchange exposure of the resulting forecasted payables, receivables and cash balances, we may enter into foreign currency contracts. The success of our hedging programs depends on the accuracy of our forecasts of transaction activity in foreign currency. To the extent that these forecasts are over- or understated during periods of currency volatility, we may experience currency gains or losses. Our hedging activities, if enacted, may only offset a portion of the adverse financial impact resulting from unfavorable movement in dollar/euro exchange rates, which could adversely affect our financial position or results of operations.

Furthermore, the significance to our business of sales in Europe subjects us to risks associated with long-term changes in the dollar/euro exchange rate. A sustained strengthening of the U.S. dollar against the euro would decrease our expected future U.S. dollar revenues from European sales, and could have a significant adverse effect on our overall profit margins. Continuing uncertainty regarding economic conditions, including the solvency of these countries and the stability of the Eurozone, could lead to significant long-term economic weakness and reduced economic growth in Europe, the occurrence of which, or the potential occurrence of which, could lead to a sustained strengthening of the U.S. dollar against the euro, adversely affecting the profitability of our European operations.

In addition, we source and manufacture many of our products in China and our costs may increase should the renminbi not remain stable with the U.S. dollar. Although the renminbi is pegged against a basket of currencies determined by the People’s Bank of China, the renminbi may appreciate or depreciate significantly in value against the U.S. dollar in the long term. In addition, if China were to permit the renminbi to float to a free market rate of exchange, it is widely anticipated that the renminbi would appreciate significantly in value against U.S. dollar. An increase in the value of the renminbi against the U.S. dollar would have the effect of increasing the labor and production costs of our Chinese manufacturers in U.S. dollar terms, which may result in their passing such costs to us in the form of increased pricing, which would adversely affect our profit margins if we could not pass those price increases along to our customers.

Global economic weakness and uncertainty could adversely affect our revenues, gross margins and expenses.

Our business is impacted by global economic conditions, which have been in recent years, and continue to be, volatile. Specifically, our revenues and gross margins depend significantly on global economic conditions and the demand for our products and services in the markets in which we compete. Economic weakness and uncertainty have resulted, and may result in the future, in decreased revenue, gross margin, earnings or growth rates, and difficulty managing inventory levels. Sustained uncertainty about global economic conditions may adversely affect demand for our products and services and could cause demand to differ materially from our expectations as customers curtail or delay spending on our products and services. Economic weakness and uncertainty also make it more difficult for us to make accurate forecasts of revenues, gross margins and expenses.

Our international operations increase the risk that we could violate the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act and similar foreign anti-corruption laws.

We operate in several foreign jurisdictions. The U.S. Foreign Corrupt Practices Act, or FCPA, and similar foreign anti-corruption laws generally prohibit companies and their intermediaries from offering, promising, authorizing, or making payments to foreign officials for the purpose of influencing any act or decision of such official in his or her official capacity, inducing the official to do any act in violation of his or her lawful duty, or to secure any improper advantage in obtaining or retaining business. Recent years have seen a substantial increase in the global enforcement of anti-corruption laws, with more frequent voluntary self-disclosures by companies, aggressive investigations and enforcement proceedings by both the U.S. Department of Justice and the SEC resulting in record fines and penalties, increased enforcement activity by non-U.S. regulators, and increases in criminal and civil proceedings brought against companies and individuals.

We operate in a number of countries that are recognized as having governmental corruption problems to some degree and where local customs and practices may not foster strict compliance with anti-corruption laws, including China. Our continued operation and expansion outside the United States could increase the risk of such violations in the future. Although we have policies that mandate compliance with these anti-corruption laws and require training, we cannot assure you that these policies and procedures will protect us from unauthorized reckless or criminal acts committed by our employees or agents. In the event that we believe or have reason to believe that our employees or agents have or may have violated applicable anti-corruption laws, including the FCPA, we may be required to investigate or have outside counsel investigate the relevant facts and circumstances, which can be expensive and require significant time and attention from senior management. Violations of these laws may result in significant criminal or civil sanctions, which could disrupt our business and result in a material adverse effect on our reputation, business, results of operations, or financial condition.

We rely to a significant extent on manufacturing and hardware development vendors with operations in foreign jurisdictions. This may reduce our control over the manufacturing activities, create uncertainty with respect to intended cost savings and expose our proprietary assets to greater risk of misappropriation. Changes to these vendor relationships may result in delays or disruptions that could harm our business.

We rely to a significant extent on vendors for the development and manufacture of certain of our hardware products, primarily in Mexico. These relationships provide us with more flexible resource capabilities, access to global talent, and cost savings, but also expose us to risks that may not exist or may be less pronounced with respect to our internal operations. We are able to exercise only limited oversight of our contractors, including with respect to their engineering and manufacturing processes, resource allocations, delivery schedules, security procedures, and quality control. Language and cultural, and time zone differences complicate effective management of contractors that are located abroad. Additionally, competition for talent in certain locations may lead to high turnover rates that disrupt development or manufacturing continuity. The manufacturers we use also manufacture products for other companies, including our competitors. Our contractors could choose to prioritize capacity for other users, increase the prices they charge us or reduce or eliminate deliveries to us, which could have a material adverse effect on our business. Pricing terms offered by contractors may be highly variable over time reflecting, among other things, order volume, local inflation, and exchange rates. Some of our contractor relationships are based on contract, while others operate on a purchase order basis, where we do not have the benefit of written protections with respect to pricing or other critical terms.

Many of our contractors require access to our intellectual property and our confidential and proprietary information to perform their services. Protection of these assets in certain non-U.S. jurisdictions may be less robust than in the United States. We must rely on policies and procedures we have instituted with our contractors and certain confidentiality and contractual provisions in our written agreements, to the extent they exist, for protection. These safeguards may be inadequate to prevent breaches. If a breach were to occur, available legal or other remedies may be limited or otherwise insufficient to compensate us for any resulting damages.

Furthermore, if one of our international vendors were, for any reason, to cease or experience significant disruptions in its operations, among others as a result of political unrest, we might be unable to replace it on a timely basis with a comparably priced provider. We would also have to expend time and resources to train any new development or manufacturing vendor. If any of the vendors were to suffer an interruption in its business, or experience delays, disruptions, or quality control problems in development or manufacturing operations, or if we had to change development or manufacturing vendors, our ability to provide services to our customers would be delayed and our business, operating results and financial condition would be adversely affected.

Our success depends in part on our ability to hire and retain competent and skilled management and technical, sales, and other personnel.

We are dependent on the continued service and performance of our management team and key technical, sales, and other personnel and our success will depend in part on our ability to recruit and retain these employees in a competitive job market. If we fail to recruit and retain, including through competitive compensation, competent and skilled personnel, we may incur increased costs or experience challenges with the execution of our strategic plan. Also, if we fail to maintain an inclusive and discrimination-free workplace, we risk losing employees.

Our competitors may in some instances be able to offer a work environment with higher compensation or more opportunities to work with cutting-edge technology than we can. If we are unable to retain our key personnel or appropriately match skill sets with our needs, we would be required to expend significant time and financial resources to identify and hire new qualified personnel and to transfer significant internal historical knowledge, which might significantly delay or prevent the achievement of our business objectives. Refer to risk factor “The novel coronavirus, or COVID-19, and actions taken in response to it have adversely affected our business and are likely to continue to adversely affect our business, financial condition and results of operations” for the impact COVID-19 may have on this risk factor.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We lease approximately 100,000 square feet in Burlington, Massachusetts for our principal corporate and administrative offices, as well as for significant R&D activities. The lease expires in May 2028.

We lease approximately 24,000 square feet in Dublin, Ireland for the final assembly and distribution of our products. We lease approximately 24,000 square feet in the Philippines for our Asia operations, including customer support and administrative functions.

We also lease office space for sales operations and research and development in several other domestic and international locations.

ITEM 3. LEGAL PROCEEDINGS

We are involved in legal proceedings from time to time arising from the normal course of business activities, including claims of alleged infringement of intellectual property rights and contractual, commercial, employee relations, product or service performance, or other matters. Our industry is characterized by the existence of a large number of patents and frequent claims and litigation regarding patent and other intellectual property rights.

The outcome of legal proceedings and claims brought against us is subject to significant uncertainty and, as a result, our financial position or results of operations may be negatively affected by the unfavorable resolution of one or more of these proceedings for the period in which a matter is resolved. See Part I, Item 1A, “Risk Factors – Risks Related to our Intellectual Property - Our results could be materially adversely affected if we are accused of, or found to be, infringing third parties’ intellectual property rights.”

For a discussion of certain other legal matters and contingencies, see the discussion under “Contingencies” in Note K to the financial statements included in herein.

ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock is listed on the Nasdaq Global Select Market under the symbol AVID. The approximate number of holders of record of our common stock at March 5, 2021 was 240. This number does not include stockholders for whom shares were held in a "nominee" or "street" name.

We have never declared or paid cash dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future. Our Credit Agreement restricts our ability to declare and pay dividends in cash on our capital stock under certain circumstances. Our Credit Agreement permits us to pay up to $30.0 million of dividends in cash on our capital stock in any fiscal year if at the time of and immediately after giving effect (including giving effect on a pro forma basis) to such dividend no default or event of default under the Credit Agreement has occurred and is continuing; provided that the $30.0 million cap does not apply if our total net leverage ratio is less than or equal to 2.50 to 1.00 at the time of and immediately after giving effect (including giving effect on a pro forma basis) to such dividend.

Stock Performance Graph

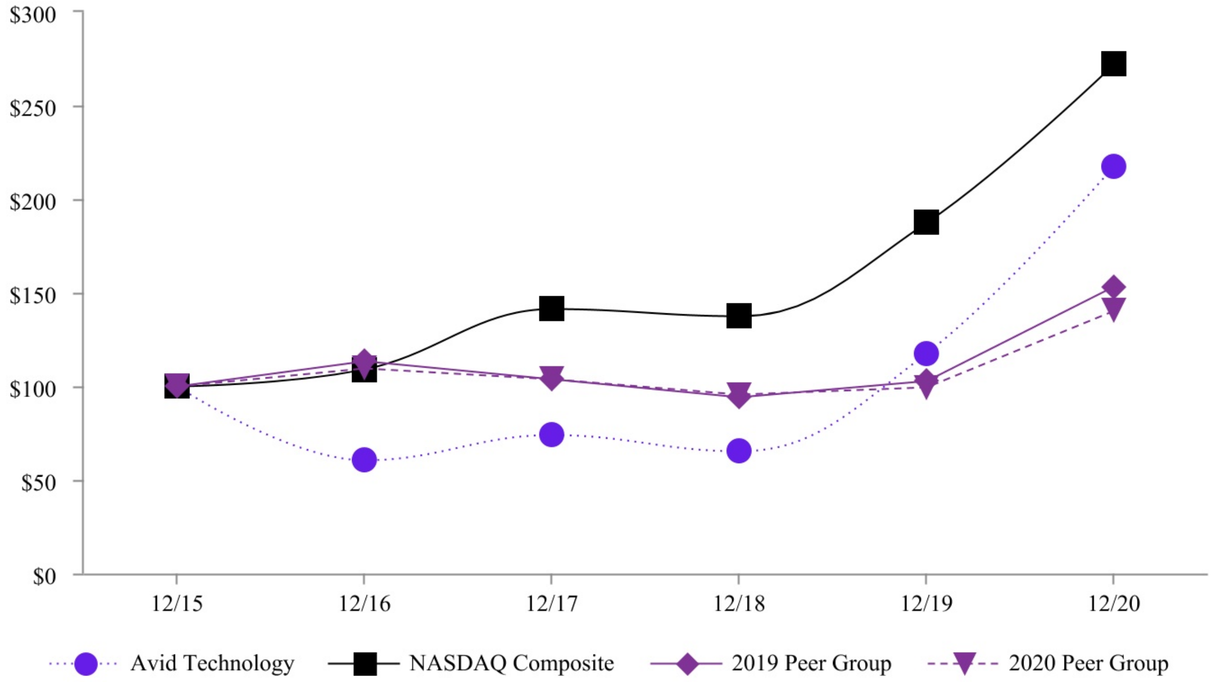
The following graph compares the cumulative stockholder return on our common stock during the period from December 31, 2015 through December 31, 2020 with the cumulative return during the period for:

- the Nasdaq Composite Index (all companies traded on Nasdaq Capital, Global or Global Select Markets),
- the 2019 Avid Peer Group Index, and
- the 2020 Avid Peer Group Index (see details following the graph).

This comparison assumes the investment of $100 on December 31, 2015 in our common stock, the Nasdaq Market Index, and the Avid Peer Group Index, and assumes that dividends, if any, were reinvested.

COMPARISON OF FIVE-YEAR CUMULATIVE TOTAL RETURN

Among Avid Technology, Inc., the Nasdaq Composite Index,
and the Avid Peer Groups



Because our products and services are diverse, we do not believe any single published industry index is appropriate for comparing stockholder return. As a result, we compare our common stock returns to a peer group index, which was composed of Nasdaq traded companies selected to best represent our peers based on various criteria, including industry classification, number of employees, and market capitalization.

The composition of the Avid Peer Group Index is dictated by the peer group selected by the compensation committee of our board of directors for reference in setting executive compensation. The compensation committee seeks generally to include companies with similar product and service offerings to those of Avid while also achieving a balance of smaller and larger sized peer companies in terms of market capitalizations and revenue.

The Avid Peer Group Index for 2020 was composed of: 3D Systems Corporation, A10 Networks Inc., Altair Engineering, Inc., Benefitfocus Inc., Box, Inc., Brightcove Inc., Calamp Corporation, Calix, Inc., Harmonic, Inc., IMAX Corporation, Limelight Networks Inc., Microstrategy, Inc., OneSpan Inc., Progress Software Corporation, Ribbon Communications Inc., Shutterstock, Inc., Telenav Inc., and Zix Corporation.

The Avid Peer Group Index is weighted based on market capitalization.

ITEM 6. SELECTED FINANCIAL DATA

The selected condensed consolidated financial data below should be read in conjunction with Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and Item 8, “Financial Statements and Supplementary Financial Information,” included elsewhere in this Form 10-K. The selected condensed consolidated financial data as of December 31, 2020, 2019, 2018, 2017, and 2016 and for the years ended December 31, 2020, 2019, 2018, 2017, and 2016 has been derived from our audited consolidated financial statements.

CONSOLIDATED STATEMENTS OF OPERATIONS DATA:

(in thousands, except per share data)

	For the Year Ended December 31,				
	2020 (1)	2019 (1)	2018 (1)	2017 (2)	2016 (2)
Net revenues	$ 360,466	$ 411,788	$ 413,282	$ 419,003	$ 511,930
Cost of revenues	132,146	162,713	174,118	176,887	179,207
Gross profit	228,320	249,075	239,164	242,116	332,723
Operating expenses:					
Research and development	57,018	62,343	62,379	68,212	81,564
Marketing and selling	87,637	99,944	101,273	106,257	110,338
General and administrative	47,052	53,362	55,230	53,892	61,471
Amortization of intangible assets	—	694	1,450	1,450	2,498
Restructuring costs, net	5,046	629	5,148	7,059	12,837
Total operating expenses	196,753	216,972	225,480	236,870	268,708
Operating income	31,567	32,103	13,684	5,246	64,015
Interest and other expense, net	(19,133)	(29,578)	(23,087)	(18,668)	(18,671)
Income (loss) before income taxes	12,434	2,525	(9,403)	(13,422)	45,344
Provision for (benefit from) income taxes	1,372	(5,076)	1,271	133	(2,875)
Net income (loss)	$ 11,062	$ 7,601	$ (10,674)	$ (13,555)	$ 48,219
Net income (loss) per share – basic	$ 0.25	$ 0.18	$ (0.26)	$ (0.33)	$ 1.20
Net income (loss) per share – diluted	$ 0.25	$ 0.17	$ (0.26)	$ (0.33)	$ 1.20
Weighted-average common shares outstanding – basic	43,822	42,649	41,662	41,020	40,021
Weighted-average common shares outstanding – diluted	44,878	43,495	41,662	41,020	40,176

(1) As a result of our adoption of Accounting Standards Codification, or ASC, Topic 606 effective January 1, 2018 using the modified retrospective method, prior period amounts have not been adjusted to conform with ASC 606 and therefore may not be comparable. See our policy on “Revenue Recognition” in Note B to our Consolidated Financial Statements in Item 8 of this Form 10-K.

(2) Our revenues and operating results have been affected by the deferral of revenues from customer transactions occurring prior to 2011. On January 1, 2011, we adopted Accounting Standards Update, or ASU, No. 2009-14. Substantially all revenue arrangements prior to January 1, 2011 were generally recognized on a ratable basis over the service period of Implied Maintenance Release PCS. Subsequent to January 1, 2011, product revenues are generally recognized upon delivery and Implied Maintenance Release PCS and other service and support elements are recognized as services are rendered.

CONSOLIDATED BALANCE SHEET DATA:

(in thousands)

	As of December 31,				
	2020	2019	2018	2017	2016
Cash, cash equivalents and marketable securities	$ 79,899	$ 69,085	$ 56,103	$ 57,223	$ 44,948
Working capital (deficit)	25,721	(3,528)	8,923	(61,753)	(86,931)
Total assets (1)	305,138	304,293	265,843	234,684	249,581
Deferred revenues (current and long-term amounts)	99,258	97,901	99,601	194,613	225,684
Long-term liabilities (1)	250,291	247,119	244,831	287,174	281,556
Total stockholders' deficit	(132,924)	(155,085)	(166,661)	(268,570)	(269,911)

(1) On January 1, 2019, we adopted ASC Topic 842, Leases, or ASC 842, using the modified retrospective transition approach, as provided by ASU No. 2018-11, Leases - Targeted Improvements, or ASU 2018-11. We elected the package of practical expedients permitted under the transition guidance. Results for reporting periods beginning after January 1, 2019 are presented under ASC 842, while prior periods have not been adjusted and continue to be reported in accordance with our historic accounting under previous GAAP. The primary impact of ASC 842 is that substantially all of our leases are recognized on the balance sheet, by recording right-of-use assets and short-term and long-term lease liabilities. The new standard does not have a material impact on our consolidated statement of operations and cash flows, and the effects of applying ASC 842 as a cumulative-effect adjustment to retained earnings as of January 1, 2019 is immaterial.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

EXECUTIVE OVERVIEW

Business Overview

We develop, market, sell, and support software and integrated solutions for video and audio content creation, management and distribution. We are a leading technology provider that powers the media and entertainment industry. We do this by providing an open and efficient platform for digital media, along with a comprehensive set of tools and workflow solutions. Our solutions are used in production and post-production facilities; film studios; network, affiliate, independent and cable television stations; recording studios; live-sound performance venues; advertising agencies; government and educational institutions; corporate communications departments; and by independent video and audio creative professionals, as well as aspiring professionals. Projects produced using our tools, platform, and ecosystem include feature films, television programming, live events, news broadcasts, sports productions, commercials, music, video, and other digital media content. With over one million creative users and thousands of enterprise clients relying on our technology platforms and solutions around the world, Avid enables the industry to thrive in today's connected media and entertainment world.

Our mission is to empower media creators with innovative technology and collaborative tools to entertain, inform, educate, and enlighten the world. Our clients rely on Avid to create prestigious and award-winning feature films, music recordings, television shows, live concerts, sporting events, and news broadcasts. Avid has been honored for technological innovation with 18 Emmy Awards, one Grammy Award, two Oscars, and the first ever America Cinema Editors Technical Excellence Award. In 2018, Avid was named the recipient of the prestigious Philo T. Farnsworth Award by the Television Academy to honor Avid's 30 years of continuous, transformative technology innovations, including products that have improved and accelerated the editing and post production process for television.

Operations Overview

Our strategy for connecting creative professionals and media enterprises with audiences in a powerful, efficient, collaborative, and profitable way leverages our Avid MediaCentral Platform - the open, extensible, and customizable foundation that streamlines and simplifies content workflows by integrating all Avid or third-party products and services that run on top of it. The platform provides secure and protected access, and enables fast and easy creation, delivery, and monetization of content.

We work to ensure that we are meeting customer needs, staying ahead of industry trends, and investing in the right areas through a close and interactive relationship with our customer base. The Avid Customer Association was established to be an innovative and influential media technology community. It represents thousands of organizations and over 30,000 professionals from all levels of the industry including inspirational and award-winning thought leaders, innovators, and storytellers. The Avid Customer Association fosters collaboration between Avid, its customers, and other industry colleagues to help shape our product offerings and provide a means to shape our industry together.

A key element of our strategy is our transition to a recurring revenue-based model through a combination of subscription offerings and long-term agreements. We started offering subscription licensing options for some of our products and solutions in 2014 and by the end of 2020 had approximately 296,000 paid subscriptions. These licensing options offer choices in pricing and deployment to suit our customers' needs. Our subscription offerings to date have primarily been sold to creative professionals, though we expect to increase subscription sales to media enterprises going forward as we expand offerings and move through customer upgrade cycles, which we expect will further increase recurring revenue on a longer-term basis. Our long-term agreements are comprised of multi-year agreements with large media enterprise customers to provide specified products and services, including SaaS offerings, and channel partners and resellers to purchase minimum amounts of products and service over a specified period of time.

Another key aspect of our strategy has been to implement programs to increase operational efficiencies and reduce costs. We are making significant changes in business operations to better support the company's strategy and overall performance. We are optimizing our go-to-market strategy, simplifying our strategy to address specific customer markets to help maximize our commercial success, which we expect will improve effectiveness, while increasing efficiency and driving growth of our pipeline and ultimately revenue.

A summary of our revenue sources for the year ended December 31, 2020 is as follows (in thousands):

	Year Ended December 31,	
	2020	2019
Subscriptions	$ 72,831	$ 45,181
Maintenance	124,175	130,443
Subscriptions and Maintenance	197,006	175,624
Perpetual Licenses	27,858	34,932
Software Licenses and Maintenance	224,864	210,556
Integrated Solutions	112,904	172,513
Professional Services and Training	22,698	28,719
Total Revenue	$ 360,466	$ 411,788

Impact of COVID-19 on Our Business

We have operations in numerous countries, which exposes us to risks associated with public health crises such as the novel coronavirus (COVID-19) that was declared a pandemic by the World Health Organization. COVID-19 adversely impacted our business operations and results of operations for the second, third and fourth quarters of 2020, as described in more detail in Results of Operations below. We expect the evolving COVID-19 pandemic to continue to have an adverse impact on our business and results of operations, as the ongoing pandemic is likely to continue to depress economic activity and reduce the demand for our products and services, as well as disrupt supply chains. Although the duration and severity of the COVID-19 pandemic, and resulting economic impacts, remain uncertain, we expect that our business operations and results of operations, will be adversely impacted through 2021, and possibly longer. These economic impacts are the result of, but not limited to:

- the postponement or cancellation of film and television productions, major sporting events, and live music events;
- delays in purchasing and projects by our enterprise customers and channel partners;
- disruption to the supply chain caused by distribution and other logistical issues, including disruptions arising from government restrictions; and
- decreased productivity due to travel restrictions, work-from-home policies or shelter-in-place orders.

We are focused on navigating the challenges presented by COVID-19, with a primary focus on preserving our liquidity and managing our cash flows by taking preemptive action to enhance our ability to meet our short-term liquidity needs. To address actual and expected reductions in net revenues, we have reduced our discretionary spending, revisited our investment strategies, and reduced payroll costs, including through temporary employee furloughs and pay cuts. In addition, in May 2020 we received $7.8 million of funding under the U.S. government’s Paycheck Protection Program, or PPP, in the form of a low-interest loan that may be forgiven under certain conditions. We may be required to take additional steps to preserve our liquidity depending on the duration and severity of the pandemic and its impact on our operations and cash flows. For further discussion of these issues, see “Liquidity and Capital Resources.”

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our consolidated financial statements have been prepared in accordance with GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosures of contingent assets and liabilities as of the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. We regularly reevaluate our estimates and judgments, including those related to the following: revenue recognition and allowances for sales returns and exchanges; stock-based compensation; income tax assets and liabilities; and restructuring charges and accruals. We base our estimates and judgments on historical experience and various other factors we believe to be reasonable under the circumstances, the results of which form the basis for judgments about the carrying values of assets and liabilities and the amounts of revenues and expenses that are not readily apparent from other sources. Actual results may differ from these estimates.

We believe the following critical accounting policies most significantly affect the portrayal of our financial condition and involve our most difficult and subjective estimates and judgments.

Revenue Recognition

We enter into contracts with customers that include various combinations of products and services, which are typically capable of being distinct and are accounted for as separate performance obligations. We account for a contract when (i) it has approval and commitment from both parties, (ii) the rights of the parties have been identified, (iii) payment terms have been identified, (iv) the contract has commercial substance, and (v) collectability is probable. We recognize revenue upon transfer of control of promised products or services to customers, which typically occurs upon shipment or delivery depending on the terms of the underlying contracts, in an amount that reflects the consideration we expect to receive in exchange for those products or services.

See Note P to our Consolidated Financial Statements in Item 8 of this Form 10-K for disaggregated revenue schedules and further discussion regarding revenue and deferred revenue performance obligations and the timing of revenue recognition.

We often enter into contractual arrangements that have multiple performance obligations, one or more of which may be delivered subsequent to the delivery of other performance obligations. These arrangements may include a combination of products, support, training, and professional services. We allocate the transaction price of the arrangement based on the relative estimated standalone selling price, or SSP, of each distinct performance obligation.

Our process for determining SSP for each performance obligation involves significant management judgment. In determining SSP, we maximize observable inputs and consider a number of data points, including:

- the pricing of standalone sales (in the limited instances where available);
- the pricing established by management when setting prices for deliverables that are intended to be sold on a standalone basis;
- contractually stated prices for deliverables that are intended to be sold on a standalone basis;
- other pricing factors, such as the geographical region in which the products are sold and expected discounts based on the customer size and type.

Determining SSP for performance obligations which we never sell separately also requires significant judgment. In estimating the SSP in these circumstances, we consider the likely price that would have resulted from established pricing practices had the deliverable been offered separately and the prices a customer would likely be willing to pay.

We only include estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. We reduce transaction prices for estimated returns and other allowances that represent variable consideration under ASC 606, which we estimate based on historical return experience and other relevant factors, and record a corresponding refund liability as a component of accrued expenses and other current liabilities. Other forms of contingent revenue or variable consideration are infrequent.

While not a common practice for us, in the event we grant the customer the option to acquire additional products or services in an arrangement, we consider if the option provides a material right to the customer that it would not receive without entering into the contract (e.g., an incremental discount compared to the range of discounts typically given for similar products or services). If a material right is deemed to exist, we account for the option as a distinct performance obligation and recognize revenue when those future products or services are transferred or when the option expires.

We also record as revenue all amounts billed to customers for shipping and handling costs and record the actual shipping costs as a component of cost of revenues. Reimbursements received from customers for out-of-pocket expenses are recorded as revenues, with related costs recorded as cost of revenues. We present revenues net of any taxes collected from customers and remitted to government authorities.

Our contracts rarely contain significant financing components as payments from customers are due within a short period from when our performance obligations are satisfied.

We are applying the practical expedient for the deferral of sales commissions and other contract acquisition costs, which are expensed as incurred, because the amortization period would be one year or less.

Stock-Based Compensation

We account for stock-based compensation at fair value. The vesting of stock options and restricted stock awards may be based on time, performance, market conditions, or a combination of time, performance, and market conditions. In the future, we may grant stock awards, options, or other equity-based instruments allowed by our stock-based compensation plans, or a combination thereof, as part of our overall compensation strategy.

We generally use the Black-Scholes option pricing model to estimate the fair value of stock option grants with time-based vesting. The Black-Scholes option pricing model relies on a number of key assumptions to calculate estimated fair values. Our assumed dividend yield of zero is based on the fact that we have never paid cash dividends, we have no present intention to pay cash dividends, and our current credit agreement limits our ability to pay dividends. Our expected stock-price volatility assumption is based on actual historic stock volatility for periods equivalent to the expected term of the award. The assumed risk-free interest rate is the U.S. Treasury security rate with a term equal to the expected life of the option. The assumed expected life is based on company-specific historical experience, considering the exercise behavior of past grants and models the pattern of aggregate exercises. The fair values of restricted stock and restricted stock unit awards with time-based vesting are based on the intrinsic values of the awards at the date of grant as these awards have a purchase price of $0.01 per share.

We have also issued stock option grants or restricted stock unit awards with vesting based on market conditions. Performance-based restricted stock units will vest based on achievement of our relative total shareholder return against the Russell 2000 Index over a three-year period. The fair values and derived service periods for all grants that include vesting based on market conditions are estimated using the Monte Carlo simulation method. For stock option grants that include vesting based on performance conditions, the fair values are estimated using the Black-Scholes option pricing model. For restricted stock unit awards that include vesting based on performance conditions, the fair values are estimated based on the intrinsic values of the awards at the date of grant as these awards have a purchase price of $0.01 per share.

Income Tax Assets and Liabilities

We record deferred tax assets and liabilities based on the net tax effects of tax credits, operating loss carryforwards, and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes compared to the amounts used for income tax purposes. We regularly review our deferred tax assets for recoverability with consideration for such factors as historical losses, projected future taxable income, and the expected timing of the reversals of existing temporary differences. A valuation allowance is recorded when it is more likely than not that some portion or all of the deferred tax assets will not be realized.

Management believes the remaining deferred tax assets, based largely on the history of U.S. tax losses, warrant a valuation allowance based on the weight of available negative evidence. We also determined that a full valuation allowance is warranted on a portion of our foreign deferred tax assets.

Our assessment of the valuation allowance on our U.S. and foreign deferred tax assets could change in the future based on our levels of pre-tax income and other tax-related adjustments. Reversal of the valuation allowance in whole or in part would result in a non-cash reduction in income tax expense during the period of reversal. To the extent some or all of our valuation allowance is reversed, future financial statements would reflect an increase in non-cash income tax expense until such time as our deferred tax assets are fully utilized.

The amount of income taxes we pay is subject to our interpretation of applicable tax laws in the jurisdictions in which we file. We have taken and will continue to take tax positions based on our interpretation of such tax laws. There can be no assurance that a taxing authority will not have a different interpretation of applicable law and assess us with additional taxes. Should we be assessed with additional taxes, it could have a negative impact on our results of operations or financial condition.

We account for uncertainty in income taxes recognized in our financial statements by applying a two-step process to determine the amount of tax provision or benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon examination by the taxing authorities based on the technical merits of the position. If the tax position is deemed more likely than not to be sustained, the tax position is then assessed to determine the amount of provision or benefit to recognize in the financial statements. The amount of provision or benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. Our provision for income taxes includes the effects of any resulting tax reserves, referred to as unrecognized tax benefits, that are considered appropriate as well as the related net interest and penalties.

Restructuring Charges and Accruals

Based on our policies for the calculation and payment of severance benefits, we account for employee-related restructuring charges as an ongoing benefit arrangement in accordance with ASC Topic 712, *Compensation - Nonretirement Postemployment Benefits*. Severance-related charges are accrued when it is determined that a liability has been incurred, which is when the expected severance payments are probable and can be reasonably estimated.

Restructuring charges require significant estimates and assumptions, including severance period assumptions. Our estimates involve a number of risks and uncertainties, some of which are beyond our control, including future real estate market conditions and our ability to successfully enter into subleases or termination agreements with terms as favorable as those assumed when arriving at our estimates. We monitor these estimates and assumptions on at least a quarterly basis for changes in circumstances and any corresponding adjustments to the accrual are recorded in our statement of operations in the period when such changes are known.

RESULTS OF OPERATIONS

The following table sets forth certain items from our consolidated statements of operations as a percentage of net revenues for the periods indicated:

	Year Ended December 31,		
	2020	2019	2018
Net revenues:			
Product revenues	39.1 %	50.4 %	49.6 %
Services revenues	60.9 %	49.6 %	50.4 %
Total net revenues	100.0 %	100.0 %	100.0 %
Cost of revenues	36.7 %	39.5 %	42.1 %
Gross margin	63.3 %	60.5 %	57.9 %
Operating expenses:			
Research and development	15.8 %	15.1 %	15.1 %
Marketing and selling	24.3 %	24.3 %	24.5 %
General and administrative	13.0 %	13.0 %	13.3 %
Amortization of intangible assets	— %	0.2 %	0.4 %
Restructuring costs, net	1.4 %	0.1 %	1.2 %
Total operating expenses	54.5 %	52.7 %	54.6 %
Operating income	8.8 %	7.8 %	3.3 %
Interest and other expense, net	(5.3)%	(7.2)%	(5.6)%
Income (loss) before income taxes	3.5 %	0.6 %	(2.3)%
(Benefit from) provision for income taxes	0.4 %	(1.2)%	0.3 %
Net income (loss)	3.1 %	1.8 %	(2.6)%

Net Revenues

Our net revenues are derived mainly from sales of video and audio products and solutions for digital media content production, management and distribution, and related professional services and maintenance contracts. We also sell individual licenses for our software products through our webstore. We commonly sell large, complex solutions to our customers that, due to their strategic nature, have long lead times where the timing of order execution and fulfillment can be difficult to predict. In addition, the rapid evolution of the media industry is changing our customers' needs, businesses, and revenue models, which is influencing their short-term and long-term purchasing decisions. As a result of these factors, the timing and amount of product revenue recognized related to orders for large, complex solutions, as well as the services associated with them, can fluctuate from quarter to quarter and cause significant volatility in our quarterly and annual operating results. See the risk factors discussed in Part I - Item 1A under the heading "Risk Factors" of this Form 10-K.

Net Revenues for the Years Ended December 31, 2020 and 2019

(dollars in thousands)

	2020 Net Revenues	Change $	Change %	2019 Net Revenues
Video products and solutions	$ 77,232	$ (53,993)	(41.1)%	$ 131,225
Audio products and solutions	63,530	(12,690)	(16.6)%	76,220
Total products and solutions	140,762	(66,683)	(32.1)%	207,445
Services	219,704	15,361	7.5%	204,343
Total net revenues	$ 360,466	$ (51,322)	(12.5)%	$ 411,788

Net Revenues for the Years Ended December 31, 2019 and 2018

(dollars in thousands)

	2019 Net Revenues	Change $	Change %	2018 Net Revenues
Video products and solutions	$ 131,225	$ (1,051)	(0.8)%	$ 132,276
Audio products and solutions	76,220	3,389	4.7%	72,831
Total products and solutions	207,445	2,338	1.1%	205,107
Services	204,343	(3,832)	(1.8)%	208,175
Total net revenues	$ 411,788	$ (1,494)	(0.4)%	$ 413,282

The following table sets forth the percentage of our net revenues attributable to geographic regions for the periods indicated:

	Year Ended December 31, 2020	2019	2018
United States	40%	37%	36%
Other Americas	7%	8%	7%
Europe, Middle East and Africa	39%	39%	42%
Asia-Pacific	14%	16%	15%

Video Products and Solutions Revenues

2020 Compared to 2019

Video products and solutions revenues decreased $54.0 million, or 41.1%, for 2020, compared to 2019. The decrease in video revenues was primarily due to customers shifting from perpetual Media Composer licenses to subscription-based licenses. In addition, there was a decrease in revenue due to overall lower sales as a result of COVID-19.

2019 Compared to 2018

Video products and solutions revenues decreased $1.1 million, or 0.8%, for 2019, compared to 2018. The decrease in video revenues was due to customers shifting from perpetual Media Composer licenses to subscription-based licenses.

Audio Products and Solutions Revenues

2020 Compared to 2019

Audio products and solutions revenues decreased $12.7 million, or 16.6%, for 2020, compared to 2019. The decrease in audio revenues was primarily due to lower sales as a result of COVID-19,which negatively impacted revenues for the reasons discussed above under “Executive Overview – Impact of COVID-19 on our Business.”

2019 Compared to 2018

Audio products and solutions revenues increased $3.4 million, or 4.7%, for 2019, compared to 2018. The increase in audio revenues was primarily due to Pro Tools subscription increases and higher Control Surface sales and the S1 and S4 product launches in Q4.

Services Revenues

2020 Compared to 2019

Services revenues are derived primarily from maintenance contracts, subscription services, as well as professional services and training. The $15.4 million, or 7.5%, increase in services revenues in 2020 was primarily due to strong growth in our subscription services, partially offset by lower professional services revenue due to the negative effects of COVID-19.

2019 Compared to 2018

The $3.8 million, or 1.8%, decrease in services revenues for 2019, compared to 2018, was primarily due to a decline in maintenance from the end of sale of maintenance on certain legacy storage systems at the end of 2018 and a decline in professional services revenue from exiting lower margin work.

Revenue Backlog

At December 31, 2020, we had revenue backlog of approximately $435.5 million, of which approximately $231.3 million is expected to be recognized in the next 12 months, compared to $440.2 million of revenue backlog at December 31, 2019. Revenue backlog, as we define it, consists of firm orders received and includes both (i) orders where the customer has paid in advance of our performance obligations being fulfilled, and (ii) orders for future product deliveries or services that have not yet been invoiced by us. Revenue backlog associated with arrangement consideration paid in advance primarily consists of deferred revenue related to (i) the undelivered portion of annual support contracts and (ii) Implied Maintenance Release PCS performance obligations. Revenue backlog associated with orders for future product deliveries and services where cash has not been received primarily consists of (i) product orders received but not yet shipped, (ii) professional services not yet rendered, and (iii) future years of multi-year support agreements not yet billed. Our definition of backlog includes contractual commitments with customers that specify minimum future purchases, however, since these contractual arrangements do not specify which specific products and services must be purchased to fulfill these commitments, they do not meet the definition of an unfulfilled remaining performance obligation under GAAP.

Orders included in revenue backlog may be reduced, canceled, or deferred by our customers. The expected timing of the recognition of revenue backlog as revenue is based on our current estimates and could change based on a number of factors, including (i) the timing of delivery of products and services, (ii) customer cancellations or change orders, or (iii) changes in the estimated period of time Implied Maintenance Release PCS is provided to customers. As there is no industry standard definition of revenue backlog, our reported revenue backlog may not be comparable with other companies. Revenue backlog as of any particular date should not be relied upon as indicative of our net revenues for any future period.

Cost of Revenues, Gross Profit, and Gross Margin Percentage

Cost of revenues consists primarily of costs associated with:

- procurement of components and finished goods;
- assembly, testing, and distribution of finished products;
- warehousing;
- customer support related to maintenance;
- royalties for third-party software and hardware included in our products;
- amortization of technology; and
- providing professional services and training.

Amortization of technology included in cost of revenues represents the amortization of developed technology assets acquired as part of acquisitions and is described further in the Amortization of Intangible Assets section below.

Costs of Revenues for the Years Ended December 31, 2020 and 2019

(dollars in thousands)

	2020 Costs	Change $	Change %	2019 Costs
Products	$ 84,222	$ (25,577)	(23.3)%	$ 109,799
Services	47,924	(1,252)	(2.5)%	49,176
Amortization of intangible assets	—	(3,738)	(100.0)%	3,738
Total cost of revenues	132,146	(30,567)	(18.8)%	162,713
Gross profit	$ 228,320	$ (20,755)	(8.3)%	$ 249,075

Costs of Revenues for the Years Ended December 31, 2019 and 2018

(dollars in thousands)

	2019 Costs	Change $	Change %	2018 Costs
Products	$ 109,799	$ (959)	(0.9)%	$ 110,758
Services	49,176	(6,384)	(11.5)%	55,560
Amortization of intangible assets	3,738	(4,062)	(52.1)%	7,800
Total costs of revenues	162,713	(11,405)	(6.6)%	174,118
Gross profit	$ 249,075	$ 9,911	4.1%	$ 239,164

<u>Gross Margin Percentage</u>

Gross margin percentage, which is net revenues less costs of revenues divided by net revenues, fluctuates based on factors such as the mix of products sold, the cost and proportion of third-party hardware and software included in the systems sold, the offering of product upgrades, price discounts and other sales-promotion programs, the distribution channels through which products are sold, the timing of new product introductions, sales of aftermarket hardware products such as disk drives, and currency exchange-rate fluctuations. Our total gross margin percentage for 2020, compared to 2019, increased due to a shift toward more higher margin subscription offerings and positive supply chain initiatives.

Gross Margin % for the Years Ended December 31, 2020, 2019 and 2018

	2020 Gross Margin %	(Decrease) Increase in Gross Margin %	2019 Gross Margin %	Increase in Gross Margin %	2018 Gross Margin %
Products	40.2%	(6.9)%	47.1%	1.1%	46.0%
Services	78.2%	2.3%	75.9%	2.6%	73.3%
Total Gross Margin	63.3%	2.8%	60.5%	2.6%	57.9%

2020 Compared to 2019

The products gross margin percentage for 2020 decreased (6.9)% from 2019, due to a change in mix in products sold as well as the decrease in overall revenue due to COVID-19. The services gross margin percentage increased 2.3% from 2019 due to an increase in our high margin subscription business.

2019 Compared to 2018

The products gross margin percentage for 2019 increased to 47.1% from 46.0% for 2018. The change was primarily due to cost savings resulting from our programs to reduce costs and increase operational efficiencies.

Operating Expenses and Operating Income

Operating Expenses and Operating Income for the Years Ended December 31, 2020 and 2019
(dollars in thousands)

	2020 Expenses	Change $	Change %	2019 Expenses
Research and development expenses	$ 57,018	$ (5,325)	(8.5)%	$ 62,343
Marketing and selling expenses	87,637	(12,307)	(12.3)%	99,944
General and administrative expenses	47,052	(6,310)	(11.8)%	53,362
Amortization of intangible assets	—	(694)	(100.0)%	694
Restructuring costs, net	5,046	4,417	702.2%	629
Total operating expenses	$ 196,753	$ (20,219)	(9.3)%	$ 216,972
Operating income	$ 31,567	$ (536)	(1.7)%	$ 32,103

Operating Expenses and Operating Income for the Years Ended December 31, 2019 and 2018
(dollars in thousands)

	2019 Expenses	Change $	Change %	2018 Expenses
Research and development expenses	$ 62,343	$ (36)	(0.1)%	$ 62,379
Marketing and selling expenses	99,944	(1,329)	(1.3)%	101,273
General and administrative expenses	53,362	(1,868)	(3.4)%	55,230
Amortization of intangible assets	694	(756)	(52.1)%	1,450
Restructuring costs, net	629	(4,519)	(87.8)%	5,148
Total operating expenses	$ 216,972	$ (8,508)	(3.8)%	$ 225,480
Operating income	$ 32,103	$ 18,419	134.6%	$ 13,684

Research and Development Expenses

Research and development, or R&D, expenses include costs associated with the development of new products and the enhancement of existing products, and consist primarily of employee salaries and benefits, facilities costs, depreciation, costs for consulting and temporary employees, and prototype and other development expenses. R&D expenses decreased $5.3 million, or 8.5%, during the year ended December 31, 2020, compared to 2019. The table below provides further details regarding the changes in components of R&D expense.

Year-Over-Year Change in R&D Expenses for the Years Ended December 31, 2020 and 2019
(dollars in thousands)

	2020 (Decrease)/Increase From 2019 $	2020 (Decrease)/Increase From 2019 %	2019 (Decrease)/Increase From 2018 $	2019 (Decrease)/Increase From 2018 %
Personnel-related	$ (3,984)	(10.1)%	$ 2,745	7.5%
Consulting and outside services	(196)	(2.2)%	(1,477)	(14.1)%
Facilities and information technology	(368)	(3.4)%	(1,651)	(13.2)%
Computer hardware and supplies	(933)	(42.3)%	267	13.8%
Other expenses	156	18.2%	82	11.3%
Total research and development expenses decrease	$ (5,325)	(8.5)%	$ (36)	(0.1)%

2020 Compared to 2019

The decrease in personnel-related expenses for 2020, compared to 2019, was primarily due to a decrease in salary expense as a result of our temporary furloughs and pay cuts and reduced travel expenses as a result of COVID-19. The decrease in all other expense categories for 2020 compared to the same periods in 2019 were primarily due to our initiatives to increase operational efficiencies and reduce costs as a response to COVID-19.

2019 Compared to 2018

The decreases in all R&D expense categories, except personnel-related, for 2019, compared to 2018, were primarily the result of our programs to increase operational efficiencies and reduce costs. The increase in personnel-related expense was due to an increase in salary expense.

Marketing and Selling Expenses

Marketing and selling expenses consist primarily of employee salaries and benefits for selling, marketing, and pre-sales customer support personnel, commissions, travel expenses, advertising and promotional expenses, web design costs, and facilities costs. Marketing and selling expenses decreased $12.3 million, or 12.3%, during the year ended December 31, 2020, compared to 2019. The table below provides further details regarding the changes in components of marketing and selling expense.

Year-Over-Year Change in Marketing and Selling Expenses for Years Ended December 31, 2020 and 2019

(dollars in thousands)

	2020 (Decrease)/Increase From 2019		**2019 (Decrease)/Increase From 2018**	
	$	**%**	**$**	**%**
Foreign-exchange (gains) and losses	$ (150)	(26.9)%	$ 102	22.5%
Personnel-related	(6,286)	(6.3)%	(2,132)	(2.1)%
Consulting and outside services	(545)	(5.1)%	1,129	9.5%
Facilities and information technology	(1,116)	(4.4)%	596	2.3%
Advertising and promotions	(4,787)	(79.6)%	(1,530)	(20.3)%
Other expenses	577	9.1%	506	7.1%
Total marketing and selling expenses decrease	$ (12,307)	(12.3)%	$ (1,329)	(1.3)%

2020 Compared to 2019

For the year ended December 31, 2020, net foreign-exchange losses, which are included in marketing and selling expenses, were $0.4 million, compared to losses of $0.6 million for 2019. The foreign-exchange losses result from foreign currency denominated transactions and the revaluation of foreign currency denominated assets and liabilities. The decrease in personnel-related expenses for 2020 compared to 2019 was primarily due to decreases in salary expense as a result of our temporary furloughs and pay cuts and reduced travel expenses as a result of COVID-19. The decrease in all other expense categories for 2020 compared to 2019 were primarily due to our initiatives to increase operational efficiencies and reduce costs as a response to COVID-19.

2019 Compared to 2018

For the year ended December 31, 2019, net foreign-exchange losses, which are included in marketing and selling expenses, were $0.6 million, compared to losses of $0.5 million for 2018. The foreign-exchange losses result from foreign currency denominated transactions and the revaluation of foreign currency denominated assets and liabilities. The decrease in personnel-related expenses for 2019 compared to 2018, was primarily due to decreases in incentive-based compensation accrual and decreased travel expenses as a result of our smart spending initiative. The increase in consulting and outside services for 2019 compared to 2018 was primarily the result of increased webstore fees due to higher transactions on our webstore. The decrease in advertising and promotions expenses for 2019 compared to 2018 was primarily the result of our programs to increase operational efficiencies and reduce costs.

General and Administrative Expenses

General and administrative, or G&A, expenses consist primarily of employee salaries and benefits for administrative, executive, finance, and legal personnel, audit, legal, and strategic consulting fees, and insurance, information systems, and facilities costs. Information systems and facilities costs reported within G&A expenses are net of allocations to other expenses categories. G&A expenses decreased $6.3 million, or 11.8%, during the year ended December 31, 2020, compared to 2019. The table below provides further details regarding the changes in components of G&A expense.

Year-Over-Year Change in G&A Expenses for the Years Ended December 31, 2020 and 2019

(dollars in thousands)

	2020 (Decrease)/Increase From 2019		2019 (Decrease)/Increase From 2018	
	$	%	$	%
Consulting and outside services	$ (5,163)	(32.3)%	$ (1,023)	(6.0)%
Personnel-related	(816)	(3.5)%	(1,117)	(4.6)%
Facilities and information technology	(522)	(6.4)%	(313)	(3.7)%
Other expenses	191	3.2%	585	10.6%
Total general and administrative expenses decrease	$ (6,310)	(11.8)%	$ (1,868)	(3.4)%

2020 Compared to 2019

The decrease in personnel-related expenses for 2020, compared to 2019, was primarily due to a decrease in salary expense as a result of our temporary furloughs and pay cuts and reduced travel expenses as a result of COVID-19. The decrease in all other expense categories for 2020 compared to the same periods in 2019, were primarily due to our initiatives to increase operational efficiencies and reduce costs as a response to COVID-19.

2019 Compared to 2018

The decrease in consulting and outside services expenses for 2019, compared to 2018, was primarily the result of decreases in litigation expenses and contractors costs. The decrease in personnel-related expenses for 2019 compared to 2018 was due to decreases in incentive-based compensation accrual. The decrease in facilities and information technology was primarily the result of our cost efficiency program.

Amortization of Intangible Assets

Intangible assets result from acquisitions and include developed technology, customer-related intangibles, trade names, and other identifiable intangible assets with finite lives. These intangible assets are amortized using the straight-line method over the estimated useful lives of such assets, which are generally two years to 12 years. Amortization of developed technology is recorded within cost of revenues. Amortization of customer-related intangibles, trade names, and other identifiable intangible assets is recorded within operating expenses.

As of June 30, 2019, intangible assets were fully amortized. See Note G, Intangible Assets and Goodwill, to our Consolidated Financial Statements in Item 8 of the Form 10-K for further information regarding our identifiable intangible assets.

Restructuring Costs, Net

In February 2016, we committed to a restructuring plan that encompassed a series of measures intended to allow us to more efficiently operate in a leaner, more directed cost structure. These included reductions in our workforce, consolidation of facilities, transfers of certain business processes to lower cost regions, and reductions in other third-party services costs. In October 2020, we committed to a restructuring plan in order to reorganize the business to better support the company's strategy and overall performance. We have also implemented programs to increase operational efficiencies and reduce costs as a result of COVID-19.

During the year ended December 31, 2020, we recorded $4.9 million of severance costs for 93 positions that were eliminated during 2020.

During the year ended December 31, 2019, we recorded $0.6 million of severance costs for 54 positions that were eliminated during 2019.

During the year ended December 31, 2018, we recorded $3.6 million of severance costs for 84 positions that were eliminated during 2018 and the first quarter of 2019, $1.1 million of leasehold improvement write-off resulting from the consolidation of our facilities in Burlington, Massachusetts, and $0.1 million of facilities restructuring related adjustments.

Interest and Other Expense, Net

Interest and other expense, net, generally consists of interest income and interest expense.

Interest and Other Income (Expense) for the Years Ended December 31, 2020 and 2019

(dollars in thousands)

	2020 Income (Expense)	Change $	Change %	2019 Income (Expense)
Interest income	$ 70	$ 34	94.4%	$ 36
Interest expense	(20,071)	6,641	(24.9)%	(26,712)
Other income (expense), net	868	3,770	(129.9)%	(2,902)
Total interest and other expense, net	$ (19,133)	$ 10,445	(35.3)%	$ (29,578)

Interest and Other Income (Expense) for the Years Ended December 31, 2019 and 2018

(dollars in thousands)

	2019 Income (Expense)	Change $	Change %	2018 Income (Expense)
Interest income	$ 36	$ (159)	(81.5)%	$ 195
Interest expense	(26,712)	(3,238)	13.8%	(23,474)
Other income (expense), net	(2,902)	(3,094)	(1,611.5)%	192
Total interest and other expense, net	$ (29,578)	$ (6,491)	28.1%	$ (23,087)

2020 Compared to 2019

The decrease in interest expense for 2020 compared to 2019 was due to the repayment of our outstanding convertible notes on June 15, 2020 as well as savings on our term loan interest under our credit facility due to the decrease in the LIBOR rate over 2020. See Note Q, Long-Term Debt and Credit Agreement, to our Consolidated Financial Statements in Item 8 of this Form 10-K for further information.

2019 Compared to 2018

The increase in interest expense for 2019 compared to 2018, was due to the additional $100.0 million term loan we obtained in 2019 and fees related to the refinancing. See Note Q, Long-Term Debt and Credit Agreement, to our Consolidated Financial Statements in Item 8 of this Form 10-K for further information.

Provision for (Benefit from) Income Taxes

Provision for (Benefit from) Income Taxes for the Years Ended December 31, 2020 and 2019

(dollars in thousands)

	2020	Change		2019
	Benefit	**$**	**%**	**Provision**
Provision for (benefit from) income taxes	$ 1,372	$ 6,448	(127.0)%	$ (5,076)

Provision for Income Taxes for the Years Ended December 31, 2019 and 2018

(dollars in thousands)

	2019	Change		2018
	Provision	**$**	**%**	**Provision**
(Benefit from) provision for income taxes	$ (5,076)	$ (6,347)	(499.4)%	$ 1,271

Our effective tax rate, which represents our tax provision as a percentage of income before tax, was 11.0%, (201.0)%, and (13.5)%, respectively, for 2020, 2019, and 2018.

The increase in our 2020 provision was primarily driven by a non-recurring benefit in our 2019 provision. Our 2019 provision included the removal of valuation allowances on some of our foreign net operating loss carryforwards. During the year ended December 31, 2019 we determined that our Irish subsidiary had reached a level of sustained profitability sufficient enough to release a significant portion of the valuation allowance on its net operating loss carryforward. Accordingly, we recorded a $6.0 million benefit related to a valuation allowance against the Irish net operating loss carryforward deferred tax asset. Additionally, during the year ended December 31, 2019 we completed a legal entity reorganization that reduced the number of our German subsidiaries. This reorganization allowed us to remove a valuation allowance on the net operating loss carryforward deferred tax asset of one of the surviving German entities. Accordingly, we recorded a benefit of $1.5 million, which is net of a reserve for a related uncertain tax position. The year over year increase driven by the non-recurring combined benefit was partially offset by a decrease in the provision due to release of a reserve for an uncertain tax position in our Israel subsidiary due to an audit settlement and changes in the jurisdictional mix of earnings.

The decrease in our 2019 provision was driven by the removal of valuation allowances on our Irish and German net operating loss carryforwards, as noted above, which totaled a combined benefit of $7.5 million. The combined benefit was partially offset by an increase in the provision due to changes in the jurisdictional mix of earnings including the now ongoing taxability of our earnings in Ireland and Germany which results in a non-cash tax expense.
We have significant accumulated deferred tax assets including the tax effects of net operating losses and tax credit carryovers. The realization of the net deferred tax assets is dependent upon the generation of sufficient future taxable income in the applicable tax jurisdictions. We regularly review our deferred tax assets for recoverability with consideration for such factors as historical losses, projected future taxable income, the expected timing of the reversals of existing temporary differences, and tax planning strategies. ASC Topic 740, Income Taxes, requires us to record a valuation allowance when it is more likely than not that some portion or all of the deferred tax assets will not be realized. Management believes the remaining deferred tax assets, based largely on the history of U.S. tax losses, warrant a valuation allowance based on the weight of available negative evidence. We have also determined that a full valuation allowance is warranted on a portion of our foreign deferred tax assets.

The Coronavirus Aid, Relief, and Economic Act, or CARES Act, includes several income tax provisions such as net operating loss, or NOL, carryback and carryforward benefits and other tax deduction benefits. As noted previously, the U.S. deferred tax asset has a full valuation; accordingly, these NOL and other benefit provisions had no impact on our financial statements for the period ended December 31, 2020. The CARES Act accelerates the alternative minimum tax, or AMT, credit refund originally enacted by the Tax Cut and Jobs Act in 2017. As of December 31, 2020, we have received the cash from the IRS associated with this refund receivable which had been recorded as a long-term asset at December 31, 2019.

LIQUIDITY AND CAPITAL RESOURCES

Liquidity and Sources of Cash

Our principal source of liquidity is cash and cash equivalents, which totaled $79.9 million as of December 31, 2020. We have generally funded operations in recent years through the use of existing cash balances, supplemented from time to time with the proceeds of long-term debt and borrowings under our credit facilities.

Our cash requirements vary depending on factors such as the growth of the business, changes in working capital, capital expenditures, and obligations under our cost efficiency program. We expect to operate the business and execute our strategic initiatives principally with funds generated from operations, remaining net proceeds from the term loan borrowings under the Credit Agreement, and draws of up to a maximum of $70.0 million under the Credit Agreement's revolving credit facility. We anticipate that we will have sufficient internal and external sources of liquidity to fund operations and anticipated working capital and other expected cash needs for at least the next 12 months from the filing of our annual report as well as for the foreseeable future.

One key aspect of our strategy has been to implement programs to increase operational efficiencies and reduce costs. We are making significant changes in business operations to better support the company's strategy and overall performance. We are optimizing our go-to-market strategy, simplifying our strategy to address specific customer markets to help maximize our commercial success, which we expect will improve effectiveness, while increasing efficiency and driving growth of our pipeline and ultimately revenue. We believe these collective efforts will continue to improve our efficiency as an organization, increasing gross margins and overall profitability.

Financing Agreement

On February 26, 2016, we entered into the Financing Agreement , or the Financing Agreement, with the lenders party thereto. Pursuant to the Financing Agreement, the lenders agreed to provide us with (a) a term loan in the aggregate principal amount of $100.0 million, or the Term Loan, and (b) a revolving credit facility of up to a maximum of $5.0 million in borrowings outstanding at any time, or the Credit Facility. On November 9, 2017, we entered into an amendment to the Financing Agreement which increased the aggregate principal amount of the term loan to $115.0 million and increased the commitments under the revolving credit facility to $10.0 million. On May 10, 2018, we entered into a further amendment to the Financing Agreement that extended the maturity of the Financing Agreement to May 2023, and increased the aggregate principal amount of the term loan to $137.7 million and increased the commitments under the revolving credit facility to $22.5 million.

On April 8, 2019, we entered into an amendment to the Financing Agreement. The amendment provided for an additional delayed draw term loan commitment in the aggregate principal amount of $100.0 million, or the Delayed Draw Funds, for the purpose of funding the purchase of a portion of the Notes in a tender offer. On May 2, 2019, we received the Delayed Draw Funds under the Financing Agreement. We used $72.7 million of the Delayed Draw Funds for the purchase of a portion of the Notes, $0.6 million for the Notes interest payment, and $6.0 million for the payment of refinancing fees. On June 18, 2019, we repaid $20.7 million of the Delayed Draw Funds. The $79.3 million Delayed Draw Funds borrowed would have matured on May 10, 2023 under the Financing Agreement.

On May 19, 2020, we entered into an amendment to the Financing Agreement which increased the leverage ratio that the Company was required to maintain such that following the effective date of this amendment, the Company was required to maintain a leverage ratio of no greater than 6.00:1.00 for each of the quarters ending June 30, 2020 and September 30, 2020, 5.75:1.00 for each of the quarters ending December 31, 2020 and March 31, 2021, 5.25:1.00 for the quarter ending June 30, 2021, 5.00:1.00 for the quarter ending September 30, 2021, 4.50:1.00 for the quarter ending December 31, 2021, 4.30:1.00 for the quarter ending March 31, 2022, 4.00:1.00 for each of the quarters ending June 30, 2022 and September 30, 2022, and 3.75:1.00 for each of the quarters ending December 31, 2022 and March 31, 2023. The amendment also reset the prepayment premium to 1.5% of the principal amount of the loans prepaid through the end of 2020, 0.5% of the principal amount of the loans prepaid through the end of 2021, and 0.0% thereafter.

Effective with the May 19, 2020 amendment to the Financing Agreement, interest accrued on outstanding borrowings at a rate of either the LIBOR Rate (as defined in the Financing Agreement) plus 6.25% or a Reference Rate (as defined in the Financing

Agreement) plus 5.75%, at the option of the Company. Prior to the effective date of such Amendment, the applicable margin with respect to the LIBOR Rate was 6.25% and the applicable margin with respect to the Reference Rate was 5.25%.

Credit Agreement (New Credit Facility)

On January 5, 2021, we entered into the Credit Agreement, or the Credit Agreement, among us, the Lenders party thereto, and JPMorgan Chase Bank, N.A., as the administrative agent, or the Agent. Pursuant to the Credit Agreement, the Lenders agreed to provide us with (a) a term loan in the aggregate principal amount of $180.0 million, or the New Term Loan and (b) a revolving credit facility of up to a maximum of $70.0 million in borrowings outstanding at any time, or the New Credit Facility. We borrowed the full amount of the New Term Loan, or $180.0 million, on the closing date, but did not borrow any amount under the New Credit Facility on the closing date. The borrowings under the New Term Loan and cash on hand were used to repay outstanding borrowings under the Financing Agreement in connection the termination of the Financing Agreement, as described above. Prior to the maturity of the New Credit Facility, any amounts borrowed under the New Credit Facility may be repaid and, subject to the terms and conditions of the Credit Agreement, reborrowed in whole or in part without penalty.

Financial terms and prepayments. Under the Credit Agreement, interest accrues on outstanding borrowings under the New Term Loan and the New Credit Facility at a rate of the Adjusted LIBO Rate, the Adjusted EURIBO Rate or the Alternate Base Rate (each as defined in the Credit Agreement), at the option of the Company, plus a spread of 2.00% to 3.25% for Adjusted LIBO Rate and Adjusted EURIBO Rate loans, with a 0.25% LIBOR floor, and 1.00% to 2.25% for Alternate Base Rate loans, in each case depending on our leverage ratio. In addition, we must pay to the Lenders, on a quarterly basis, a commitment fee at a rate of 0.20% to 0.50%, depending on our leverage ratio, on the average daily amount equal to (1) the total revolving commitments under the New Credit Facility less (2) total amount of the outstanding borrowings under the New Credit Facility during the immediately preceding quarter. During the term of the New Credit Facility, we are entitled to reduce the maximum amounts of the Lenders’ commitments under the New Credit Facility. We may prepay all or any portion of the borrowings under the Credit Agreement prior to the stated maturity, subject to the payment of certain break funding amounts, if applicable. In addition, subject to exceptions we will be required to prepay the Term Loan with proceeds we receive from specified events, including sales of assets, insurance proceeds and condemnation awards and the incurrence of certain indebtedness. The New Term Loan requires quarterly principal payments commencing in March 2021 equal to 5.0% of the original principal amount of the New Term Loan in years 1 and 2, 7.5% of the original principal amount of the New Term Loan in year 3, and 10% of the original principal amount of the New Term Loan in years 4 and 5, with the remaining aggregate principal amount due at maturity.

Collateral and guarantees. We and our subsidiary, Avid Technology Worldwide, Inc., or Avid Worldwide, granted a security interest on substantially all of our assets to secure the obligations of all obligors under the New Term Loan and the New Credit Facility. Avid Worldwide provided a guarantee of all our obligations under the Credit Agreement. Our future subsidiaries (other than certain foreign and immaterial subsidiaries) are also required to become a party to the applicable security agreements and guarantee the obligations under the Credit Agreement.

Representations and restrictive covenants. The Credit Agreement contains representations, warranties and restrictive covenants that are customary for an agreement of this kind, including, for example, covenants that restrict us from incurring additional indebtedness, granting liens, making investments and restricted payments, making acquisitions, entering into swap agreements, paying dividends, making payments of or amending the terms of certain subordinated indebtedness, engaging in sale and leaseback transactions, and engaging in transactions with affiliates.

Events of default. The Credit Agreement contains customary events of default under which our payment obligations may be accelerated. These events of default include, among others, failure to pay amounts payable under the Credit Agreement when due, breach of representations and warranties, failure to perform covenants, a change of control, default or acceleration of material indebtedness, certain judgments and certain impairments to the collateral.

Financial covenants. The Credit Agreement contains two financial covenants. The Company is required to maintain a maximum total net leverage ratio, generally defined as the ratio of (x) consolidated total indebtedness minus liquidity maintained in the United States up to $25 million to (y) consolidated EBITDA, not to exceed 4.00 to 1:00 for the fiscal quarters ending March 31, 2021 through June 30, 2021; 3.75 to 1.00 for the fiscal quarters ending September 30, 2021 through December 31, 2021; 3.50 to 1.00 for the fiscal quarters ending March 31, 2022 through June 30, 2022; 3.25 to 1.00 for the fiscal quarters ending September

30, 2022 through December 31, 2022; and 3.00 to 1.00 for fiscal quarters ending on or after March 31, 2023. The Company is also required to maintain a fixed charge coverage ratio not less than 1.20 to 1.00 at the end of each fiscal quarter ending on or after March 31, 2021. The Credit Agreement’s fixed charge coverage ratio is generally defined as the ratio of (x) consolidated EBITDA minus unfinanced capital expenditures, cash tax expense and certain restricted payments to (y) consolidated fixed charges.

Our ability to satisfy the maximum total net leverage covenant and the minimum fixed charge coverage ratio covenant in the future is dependent on our ability to increase bookings and billings above levels experienced over the last 12 months. In recent quarters, we have experienced volatility in bookings and billings resulting from, among other things, (i) our transition towards subscription and recurring revenue streams and the resulting decline in traditional upfront product sales, (ii) dramatic changes in the media industry and the impact it has on our customers, (iii) the impact of new and anticipated product launches and features, (iv) volatility in currency rates, and (v) in the three most recent quarters, the economic impacts of the COVID-19 pandemic.

In the event bookings and billings in future quarters are lower than we currently anticipate, we may be forced to take remedial actions which could include, among other things (and where allowed by the Lenders), (i) further cost reductions, (ii) seeking replacement financing, (iii) raising additional debt or equity funding or (iv) disposing of certain assets or businesses. Such remedial actions, which may not be available on favorable terms or at all, could have a material adverse impact on our business. If we are not in compliance with the maximum total net leverage ratio or the minimum fixed charge coverage ratio and are unable to obtain an amendment or waiver, such noncompliance may result in an event of default under the Credit Agreement, which could permit acceleration of the outstanding indebtedness under the Credit Agreement and require us to repay such indebtedness before the scheduled due date. If an event of default were to occur, we might not have sufficient funds available to make the payments required. If we are unable to repay amounts owed, the Lenders may be entitled to foreclose on and sell substantially all of our assets that secure our borrowings under the Credit Agreement.

2.00% Convertible Senior Notes

On June 15, 2015, we issued $125.0 million aggregate principal amount of our 2.00% Convertible Senior Notes due 2020, or the Notes. In connection with the offering of the Notes, on June 9, 2015, we entered into a capped call derivative transaction with a third party, or the Capped Call.

On April 11, 2019, we announced the commencement of a cash tender offer, or the Offer, for any and all of our outstanding Notes. On May 9, 2019, as of the expiration of the Offer, Notes with an aggregate principal amount of $74.0 million were validly tendered. We accepted for purchase all Notes that were validly tendered at the expiration of the Offer at a purchase price equal to $982.50 per $1,000 principal amount of Notes, and settled the Offer on May 13, 2019 for $72.7 million in cash. We recorded $74.0 million extinguishment of debt, $0.6 million of equity reacquisition, and $2.9 million loss on the extinguishment of debt. In connection with the Offer, the number of options under the Capped Call was reduced to 28,867 to mirror the remaining principal outstanding for the Notes, and an immaterial partial unwind cash payment was received in May 2019.

On June 15, 2020, the maturity date of the Notes, we fully repaid the outstanding principal and unpaid interest on the Notes. In connection with such repayment, the Capped Call was unwound.

Paycheck Protection Program Loan

On May 11, 2020, we received $7.8 million of proceeds in connection with its incurrence of a loan under the Paycheck Protection Program, or PPP. The loan has a fixed interest rate of 1% and matures in two years. Interest payments are deferred for six months. On November 17, 2020 we applied to the SBA for the PPP loan to be forgiven in full. We believe we used the proceeds of the PPP loan for purposes consistent with the PPP. While we currently believe that our use of the loan proceeds will meet the conditions for forgiveness of the loan, we cannot assure that we will be eligible for forgiveness of the loan, in whole or in part. Any PPP loan balance remaining following forgiveness by the SBA will be fully repaid on or before the maturity date of the loan.

The CARES Act allowed employers to defer the deposit and payment of the employer's share of Social Security payroll taxes that would otherwise have been owed from the date of enactment of the legislation through December 31, 2020. The legislation requires that the deferred taxes be paid over a two-year period, with half the amount required to be paid by December 31, 2021, and the other half by December 31, 2022. As of December 31, 2020, we have recorded the payment deferral within "Accrued compensation and benefits" and "Other long-term liabilities" on the balance sheet.

Cash Flows

The following table summarizes our cash flows for the years ended December 31, 2020, 2019, and 2018 (in thousands):

	Year Ended December 31,		
	2020	**2019**	**2018**
Net cash provided by operating activities	$ 39,555	$ 19,641	$ 15,822
Net cash used in investing activities	(5,692)	(7,185)	(9,917)
Net cash (used in) provided by financing activities	(24,549)	(7,644)	2,536
Effect of foreign currency exchange rates on cash and cash equivalents	1,748	(331)	(780)
Net increase in cash, cash equivalents and restricted cash	$ 11,062	$ 4,481	$ 7,661

Cash Flows from Operating Activities

Cash provided by operating activities aggregated $39.6 million for the year ended December 31, 2020. The improvement compared to prior years was primarily attributable to lower operating expenses as the result of our programs to increase operational efficiencies and reduce costs.

Cash Flows from Investing Activities

For the year ended December 31, 2020, the net cash flow used in investing activities reflected $5.7 million used for the purchase of property and equipment. Our purchases of property and equipment largely consist of computer hardware and software to support R&D activities, and leasehold improvements.

Cash Flows from Financing Activities

For the year ended December 31, 2020, net cash flows used in financing activities were primarily the result of the repayment of our Notes, partially offset by borrowings under the PPP loan.

CONTRACTUAL AND COMMERCIAL OBLIGATIONS

The following table outlines our contractual payment obligations as of December 31, 2020 (in thousands):

	Total	**Less than 1 Year**	**1 – 3 Years**	**3 – 5 Years**	**After 5 Years**
Term Loan	201,208	4,781	196,427	—	—
PPP Loan	7,800	—	7,800	—	—
Other long-term debt	1,271	160	356	409	346
Operating leases	44,684	8,558	13,454	10,896	11,776
Unconditional purchase obligations	8,971	8,971	—	—	—
	$ 263,934	$ 22,470	$ 218,037	$ 11,305	$ 12,122

Other contractual arrangements that may result in cash payments consisted of the following at December 31, 2020 (in thousands):

	Total	Less than 1 Year	1 – 3 Years	3 – 5 Years	After 5 Years
Stand-by letters of credit	3,698	850	1,949	—	899
	$ 3,698	$ 850	$ 1,949	$ —	$ 899

As described above, all outstanding borrowings under the Financing Agreement were repaid in January 2021, in connection with the termination of the Financing Agreement and the entry into the Credit Agreement.

Any portion of the PPP Loan that is not forgiven, must be repaid by May 2022. See more details in Note Q, Long-Term Debt and Credit Agreement, to our Consolidated Financial Statements in Item 8 of this Form 10-K.

We entered into a long-term agreement to purchase a variety of information technology solutions from a third party in the second quarter of 2020, which included an unconditional commitment to purchase a minimum of $32.2 million of products and services over the initial five years of the agreement. We have purchased $3.0 million of products and services pursuant to this agreement as of December 31, 2020.

We have letters of credit that are used as security deposits in connection with our leased Burlington, Massachusetts headquarters office space. In the event of default on the underlying leases, the landlords would, at December 31, 2020, be eligible to draw against the letters of credit to a maximum of $1.3 million in the aggregate. The letters of credit are subject to aggregate reductions provided that we are not in default of the underlying leases and meet certain financial performance conditions. In no case will the letters of credit amounts for the Burlington leases be reduced to below $1.2 million in the aggregate throughout the lease periods.

In addition, we have letters of credit in connection with security deposits for other facility leases totaling $0.6 million in the aggregate, as well as letters of credit totaling $1.9 million that otherwise support our ongoing operations. These letters of credit have various terms and expire during 2021 and beyond, while some of the letters of credit may automatically renew based on the terms of the underlying agreements.

OFF-BALANCE SHEET ARRANGEMENTS

We do not engage in off-balance sheet financing arrangements or have any variable-interest entities. At December 31, 2020, we did not have any off-balance sheet arrangements as defined in Item 303(a)(4)(ii) of Regulation S-K.

RECENT ACCOUNTING PRONOUNCEMENTS

Recently Adopted Accounting Pronouncement

See Note B, Summary of Significant Accounting Policies, to our Consolidated Financial Statements in Item 8 of the Form 10-K for a description of recently adopted accounting standards.

Recently Accounting Pronouncement to be Adopted

See Note B, Summary of Significant Accounting Policies, to our Consolidated Financial Statements in Item 8 of the Form 10-K for a description of certain issued accounting standards that have not been adopted and may impact our financial statements in future reporting periods.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

Foreign Currency Exchange Risk

We have significant international operations and derive more than half of our revenues from customers outside the United States. This business is, for the most part, transacted through international subsidiaries and generally in the currency of the end-user customers. Therefore, we are exposed to the changes in foreign currency exchange rates that could adversely affect our revenues, net income and cash flow.

For the year ended December 31, 2020, 2019, and 2018, we recorded net losses of $0.4 million, $0.6 million, and $0.5 million, respectively, that resulted from foreign currency denominated transactions and the revaluation of foreign currency denominated assets and liabilities.

A hypothetical change of 10% in appreciation or depreciation of foreign currency exchange rates from the quoted foreign currency exchange rates as of December 31, 2020, would not have a significant impact on our financial position, results of operations or cash flows.

Interest Rate Risk

We borrowed $100.0 million under the Term Loan on February 26, 2016, and an additional $15.0 million and $22.7 million under the Term Loan on November 9, 2017 and May 10, 2018, respectively. Until January 5, 2021, we also maintained a revolving Credit Facility that allowed us to borrow up to $22.5 million. On April 8, 2019, we entered into an amendment to the Financing Agreement, which provided for an additional delayed draw term loan commitment in the aggregate principal amount of $100.0 million, or the Delayed Draw Funds. Under the terms of the amendment effective May 19, 2020, interest accrued on the Delayed Draw Funds, outstanding borrowings under the Term Loan and the Credit Facility at a rate of either the LIBOR Rate (as defined in the Financing Agreement) plus 6.75% or a Reference Rate (as defined in the Financing Agreement) plus 5.75%, at our option. A hypothetical 10% increase or decrease in interest rates paid on outstanding borrowings under the Financing Agreement would not have had a material impact on our financial position, results of operations or cash flows. As described above, all outstanding borrowings under the Financing Agreement were repaid in January 2021, in connection with the termination of the Financing Agreement and the entry into the Credit Agreement.

On June 15, 2015, we issued $125.0 million aggregate principal amount of our Notes pursuant to the terms of an indenture. We purchased $2.0 million of the Notes during 2017, $16.2 million during 2018, $3.9 million on January 22, 2019, and an additional $74.0 million through a cash tender offer on May 13, 2019. Interest accrued on the Notes at an annual rate of 2.00%, payable semi-annually on June 15 and December 15 of each year. On June 15, 2020, the maturity date of the Notes, we fully paid the outstanding principal and unpaid interest on the Notes.

Under the Credit Agreement entered into on January 5, 2021, interest accrues on outstanding borrowings at a rate of the Adjusted LIBO Rate, the Adjusted EURIBO Rate or the Alternate Base Rate (each as defined in the Credit Agreement), at the option of the Company, plus a spread of 2.00% to 3.25% for Adjusted LIBO Rate and Adjusted EURIBO Rate loans, with a 0.25% LIBOR floor, and 1.00% to 2.25% for Alternate Base Rate loans, in each case depending on our leverage ratio. A hypothetical 10% increase or decrease in interest rates paid on outstanding borrowings under the Credit Agreement would not have had a material impact on our financial position, results of operations or cash flows.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY FINANCIAL INFORMATION

AVID TECHNOLOGY, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS AND FINANCIAL STATEMENT SCHEDULE

	Page
CONSOLIDATED FINANCIAL STATEMENTS INCLUDED IN ITEM 8:	
Reports of Independent Registered Public Accounting Firm	50
Consolidated Statements of Operations for the years ended December 31, 2020, 2019 and 2018	52
Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2020, 2019 and 2018	53
Consolidated Balance Sheets as of December 31, 2020 and 2019	54
Consolidated Statements of Stockholders' Deficit for the years ended December 31, 2020, 2019 and 2018	55
Consolidated Statements of Cash Flows for the years ended December 31, 2020, 2019 and 2018	56
Notes to Consolidated Financial Statements	57

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Stockholders and Board of Directors
Avid Technology, Inc.
Burlington, Massachusetts

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Avid Technology, Inc. and subsidiaries (the “Company”) as of December 31, 2020 and 2019, the related consolidated statements of operations and comprehensive income (loss), stockholders’ deficit, and cash flows for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, 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 Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) and our report dated March 9, 2021 expressed an unqualified opinion thereon.

Change in Accounting Principle

As discussed in Note H to the consolidated financial statements, on January 1, 2019, the Company changed its method of accounting for leases due to the adoption of ASU 2016-02, Leases (ASC 842) using the modified retrospective transition approach, as provided by ASU No. 2018-11, Leases - Targeted Improvements.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

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

Revenue Recognition – Enterprise Agreements

As described in Note P, the Company, from time to time, enters into enterprise agreements whereby the customer agrees to purchase specified products and services over an extended period of time, often for a single fixed contractual price. For such agreements, management identifies each performance obligation in the contract and allocates the total contract price to each performance obligation based on relative estimated stand-alone selling price. Once the transaction price is allocated to the individual performance obligations, the components are recognized in the respective categories of revenue consistent with the timing of the recognition of the Company’s identified performance obligations described in Note P.

We identified the process of the determination of performance obligations and the related stand-alone selling price for each performance obligation present in these enterprise agreements as a critical audit matter. Auditing these transactions was especially challenging and complex due to the effort required to identify the substantial number of varying performance obligations present in each agreement, and assess the related estimated stand-alone selling price and transaction price allocation.

The primary procedures we performed to address this critical audit matter included:

- Evaluating the design of and testing the operating effectiveness of certain controls related to management's identification, assessment, and review of distinct performance obligations, including the related stand-alone selling price, within enterprise agreements.

- Evaluating management’s accounting policies and practices, including the reasonableness of management’s judgments and assumptions related to: (i) the identification of each performance obligation and its pattern of delivery, and (ii) determination of the stand-alone selling price of each performance obligation identified and related transaction price allocation.

- Testing a sample of enterprise agreements together with their underlying order documents to evaluate: (i) the appropriate identification of each distinct performance obligation and its respective pattern of revenue recognition, and (ii) the appropriate determination of the stand-alone selling price.

/s/ BDO USA, LLP

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

Boston, Massachusetts
March 9, 2021

AVID TECHNOLOGY, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Year Ended December 31,		
	2020	**2019**	**2018**
Net revenues:			
Products	$ 140,762	$ 207,445	$ 205,107
Services	219,704	204,343	208,175
Total net revenues	360,466	411,788	413,282
Cost of revenues:			
Products	84,222	109,799	110,758
Services	47,924	49,176	55,560
Amortization of intangible assets	—	3,738	7,800
Total cost of revenues	132,146	162,713	174,118
Gross profit	228,320	249,075	239,164
Operating expenses:			
Research and development	57,018	62,343	62,379
Marketing and selling	87,637	99,944	101,273
General and administrative	47,052	53,362	55,230
Amortization of intangible assets	—	694	1,450
Restructuring costs, net	5,046	629	5,148
Total operating expenses	196,753	216,972	225,480
Operating income	31,567	32,103	13,684
Interest income	70	36	195
Interest expense	(20,071)	(26,712)	(23,474)
Other income (loss), net	868	(2,902)	192
Income (loss) before income taxes	12,434	2,525	(9,403)
Provision for (benefit from) income taxes	1,372	(5,076)	1,271
Net income (loss)	$ 11,062	$ 7,601	$ (10,674)
Net income (loss) per common share – basic	$ 0.25	$ 0.18	$ (0.26)
Net income (loss) per common share – diluted	$ 0.25	$ 0.17	$ (0.26)
Weighted-average common shares outstanding – basic	43,822	42,649	41,662
Weighted-average common shares outstanding – diluted	44,878	43,495	41,662

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

AVID TECHNOLOGY, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in thousands)

	Year Ended December 31,		
	2020	**2019**	**2018**
Net income (loss)	$ 11,062	$ 7,601	$ (10,674)
Other comprehensive (loss) income:			
Foreign currency translation adjustments	2,253	(163)	(1,341)
Comprehensive income (loss)	$ 13,315	$ 7,438	$ (12,015)

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

AVID TECHNOLOGY, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except per share data)

	December 31, 2020	December 31, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 79,899	$ 69,085
Restricted cash	1,422	1,663
Accounts receivable, net of allowances of $1,478 and $958 at December 31, 2020 and 2019, respectively	78,614	73,773
Inventories	26,568	29,166
Prepaid expenses	6,044	9,425
Contract assets	18,579	19,494
Other current assets	2,366	6,125
Total current assets	213,492	208,731
Property and equipment, net	16,814	19,580
Goodwill	32,643	32,643
Right of use assets	29,430	29,747
Deferred tax assets, net	6,801	7,479
Other long-term assets	5,958	6,113
Total assets	$ 305,138	$ 304,293
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable	$ 21,823	$ 39,888
Accrued compensation and benefits	29,105	19,524
Accrued expenses and other current liabilities	42,264	36,759
Income taxes payable	1,664	1,945
Short-term debt	4,941	30,554
Deferred revenues	87,974	83,589
Total current liabilities	187,771	212,259
Long-term debt	202,759	199,034
Long-term deferred revenues	11,284	14,312
Long-term lease liabilities	28,462	28,127
Other long-term liabilities	7,786	5,646
Total liabilities	438,062	459,378
Commitments and contingencies (Note K)		
Stockholders' deficit:		
Preferred stock, $0.01 par value, 1,000 shares authorized; no shares issued or outstanding	—	—
Common stock, $0.01 par value, 100,000 shares authorized; 44,597 shares issued, and 44,420 shares and 43,150 shares outstanding at December 31, 2020 and 2019, respectively	442	430
Additional paid-in capital	1,036,658	1,027,824
Accumulated deficit	(1,168,347)	(1,179,409)
Accumulated other comprehensive loss	(1,677)	(3,930)
Total stockholders' deficit	(132,924)	(155,085)
Total liabilities and stockholders' deficit	$ 305,138	$ 304,293

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

AVID TECHNOLOGY, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' DEFICIT
(in thousands)

	Shares of Common Stock							
	Issued	In Treasury	Common Stock	Additional Paid-in Capital	Accumulated Deficit	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Deficit
Balances at January 1, 2018	42,339	(983)	$ 423	$ 1,035,808	$ (1,284,703)	$ (17,672)	$ (2,426)	$ (268,570)
Cumulative-effect adjustment due to adoption of ASC Topic 606	—	—	—	—	108,367	—	—	108,367
Stock issued pursuant to employee stock plans	—	592	—	(13,084)	—	12,441	—	(643)
Stock-based compensation	—	—	—	6,258	—	—	—	6,258
Net loss	—	—	—	—	(10,674)	—	—	(10,674)
Other comprehensive loss	—	—	—	—	—	—	(1,341)	(1,341)
Partial retirement of convertible senior notes conversion feature	—	—	—	(74)	—	—	—	(74)
Partial unwind capped call cash receipt	—	—	—	16	—	—	—	16
Balances at December 31, 2018	42,339	(391)	$ 423	$ 1,028,924	$ (1,187,010)	$ (5,231)	$ (3,767)	$ (166,661)
Stock issued pursuant to employee stock plans	811	391	7	(8,508)	—	5,231	—	(3,270)
Stock-based compensation	—	—	—	7,958	—	—	—	7,958
Net income	—	—	—	—	7,601	—	—	7,601
Other comprehensive loss	—	—	—	—	—	—	(163)	(163)
Partial retirement of convertible senior notes conversion feature	—	—	—	(577)	—	—	—	(577)
Partial unwind capped call cash receipt	—	—	—	27	—	—	—	27
Balances at December 31, 2019	43,150	—	$ 430	$ 1,027,824	$ (1,179,409)	$ —	$ (3,930)	$ (155,085)
Stock issued pursuant to employee stock plans	1,270	—	12	(1,830)	—	—	—	(1,818)
Stock-based compensation	—	—	—	10,664	—	—	—	10,664
Net income	—	—	—	—	11,062	—	—	11,062
Other comprehensive income	—	—	—	—	—	—	2,253	2,253
Balances at December 31, 2020	44,420	—	$ 442	$ 1,036,658	$ (1,168,347)	$ —	$ (1,677)	$ (132,924)

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

AVID TECHNOLOGY, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		
	2020	**2019**	**2018**
Cash flows from operating activities:			
Net income (loss)	$ 11,062	$ 7,601	$ (10,674)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	8,505	13,634	21,142
Provision for doubtful accounts	1,298	208	119
Loss on convertible notes extinguishment	—	2,878	—
Stock-based compensation expense	10,664	7,958	6,258
Non-cash provision for restructuring	5,046	—	1,083
Non-cash interest expense	3,651	6,143	8,987
Unrealized foreign currency transaction losses (gains)	1,570	971	(996)
(Benefit from) provision for deferred taxes	827	(6,309)	113
Changes in operating assets and liabilities:			
Accounts receivable	(6,124)	(6,227)	(6,689)
Inventories	2,598	3,790	(551)
Prepaid expenses and other assets	6,176	(44)	5,832
Accounts payable	(18,141)	626	9,148
Accrued expenses, compensation and benefits and other liabilities	10,432	(6,892)	(8,853)
Income taxes payable	(281)	91	38
Deferred revenue and contract assets	2,272	(4,787)	(9,135)
Net cash provided by operating activities	39,555	19,641	15,822
Cash flows from investing activities:			
Purchases of property and equipment	(5,692)	(7,185)	(9,936)
Decrease in other long-term assets	—	—	19
Net cash used in investing activities	(5,692)	(7,185)	(9,917)
Cash flows from financing activities:			
Proceeds from revolving line of credit	22,000	—	—
Repayment on revolving line of credit	(22,000)	—	—
Proceeds from long-term debt	7,800	79,292	22,688
Repayment of debt	(2,250)	(1,438)	(18,451)
Payments for repurchase of outstanding notes	(28,867)	(76,269)	—
Proceeds from the issuance of common stock under employee stock plans	547	309	355
Common stock repurchases for tax withholdings for net settlement of equity awards	(2,365)	(3,586)	(998)
Partial retirement of the convertible notes conversion feature and capped call option unwind	875	27	(58)
Payments for credit facility issuance costs	(289)	(5,979)	(1,000)
Net cash (used in) provided by financing activities	(24,549)	(7,644)	2,536
Effect of exchange rate changes on cash, cash equivalents and restricted cash	1,748	(331)	(780)
Net increase in cash, cash equivalents and restricted cash	11,062	4,481	7,661
Cash, cash equivalents and restricted cash at beginning of year	72,575	68,094	60,433
Cash, cash equivalents and restricted cash at end of year	$ 83,637	$ 72,575	$ 68,094
Supplemental information:			
Cash and cash equivalents	$ 79,899	$ 69,085	$ 56,103
Restricted cash	$ 1,422	1,663	8,500
Restricted cash included in other long-term assets	$ 2,316	1,827	3,491
Total cash, cash equivalents and restricted cash shown in the statement of cash flows	$ 83,637	$ 72,575	$ 68,094
Cash (refunded) paid for income taxes, net	$ (391)	$ 783	$ (2,791)
Cash paid for interest	$ 17,499	$ 12,262	$ 14,505
Non-cash transaction – property and equipment included in accounts payable or accruals	$ —	$ 23	$ 220

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

AVID TECHNOLOGY, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

A. BUSINESS

Description of Business

Avid Technology, Inc. (“Avid”, “we” or “us”) develops, markets, sells, and supports software and integrated solutions for video and audio content creation, management, and distribution. We are a leading technology provider that powers the media and entertainment industry. We do this by providing an open and efficient platform for digital media, along with a comprehensive set of tools and workflow solutions. Our solutions are used in production and post-production facilities; film studios; network, affiliate, independent and cable television stations; recording studios; live-sound performance venues; advertising agencies; government and educational institutions; corporate communications departments; and by independent video and audio creative professionals, as well as aspiring professionals. Projects produced using our tools, platform, and ecosystem include feature films, television programming, live events, news broadcasts, sports productions, commercials, music, video, and other digital media content.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The consolidated financial statements include our accounts and our wholly owned subsidiaries. Intercompany balances and transactions have been eliminated.

Basis of Presentation and Use of Estimates

Our preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenues and expenses during the reported periods. Actual results could differ from our estimates.

Revenue Recognition

We enter into contracts with customers that include various combinations of products and services, which are typically capable of being distinct and are accounted for as separate performance obligations. We account for a contract when (i) it has approval and commitment from both parties, (ii) the rights of the parties have been identified, (iii) payment terms have been identified, (iv) the contract has commercial substance, and (v) collectability is probable. We recognize revenue upon transfer of control of promised products or services to customers, which typically occurs upon shipment or delivery depending on the terms of the underlying contracts, in an amount that reflects the consideration we expect to receive in exchange for those products or services.

See Note P for disaggregated revenue schedules and further discussion on revenue and deferred revenue performance obligations and the timing of revenue recognition.

We often enter into contractual arrangements that have multiple performance obligations, one or more of which may be delivered subsequent to the delivery of other performance obligations. These arrangements may include a combination of products, support, training, and professional services. We allocate the transaction price of the arrangement based on the relative estimated standalone selling price, or SSP, of each distinct performance obligation.

Our process for determining SSP for each performance obligation involves significant management judgment. In determining SSP, we maximize observable inputs and consider a number of data points, including:

- the pricing of standalone sales (in the limited instances where available);
- the pricing established by management when setting prices for deliverables that are intended to be sold on a standalone basis;
- contractually stated prices for deliverables that are intended to be sold on a standalone basis;

- other pricing factors, such as the geographical region in which the products are sold and expected discounts based on the customer size and type.

Determining SSP for performance obligations which we never sell separately also requires significant judgment. In estimating the SSP in these circumstances, we consider the likely price that would have resulted from established pricing practices had the deliverable been offered separately and the prices a customer would likely be willing to pay.

We only include estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. We reduce transaction prices for estimated returns and other allowances that represent variable consideration under ASU No. 2014-09, Revenue from Contracts with Customers ("ASC 606") and record a corresponding refund liability as a component of accrued expenses and other current liabilities. Other forms of contingent revenue or variable consideration are infrequent.

While not a common practice for us, in the event we grant the customer the option to acquire additional products or services in an arrangement, we consider if the option provides a material right to the customer that it would not receive without entering into the contract (e.g., an incremental discount compared to the range of discounts typically given for similar products or services). If a material right is deemed to exist, we account for the option as a distinct performance obligation and recognize revenue when those future products or services are transferred or when the option expires.

We also record as revenue all amounts billed to customers for shipping and handling costs and record the actual shipping costs as a component of cost of revenues. Reimbursements received from customers for out-of-pocket expenses are recorded as revenues, with related costs recorded as cost of revenues. We present revenues net of any taxes collected from customers and remitted to government authorities.

Our contracts rarely contain significant financing components as payments from customers are due within a short period from when our performance obligations are satisfied.

We are applying the practical expedient for the deferral of sales commissions and other contract acquisition costs, which are expensed as incurred, because the amortization period would be one year or less.

Allowance for Sales Returns and Exchanges

We maintain allowances for estimated potential sales returns and exchanges from our customers, which represents variable consideration under ASC 606. We record a provision for estimated returns and other allowances as a reduction of revenues in the same period that related revenues are recorded based on historical experience and specific customer analysis. Use of management estimates is required in connection with establishing and maintaining a sales allowance for expected returns and other credits. The allowance also includes rebates offered through our partner program. If actual returns differ from the estimates, additional allowances could be required.

The following table sets forth the activity in the allowance for sales returns and exchanges for the years ended December 31, 2020, 2019, and 2018 (in thousands):

	Year Ended December 31,		
	2020	**2019**	**2018**
Allowance for sales returns and exchanges – beginning of year	$ 8,230	$ 9,003	$ 9,916
Additions and adjustments to the allowance	10,746	15,999	12,121
Deductions against the allowance	(9,670)	(16,772)	(13,034)
Allowance for sales returns and exchanges – end of year	$ 9,306	$ 8,230	$ 9,003

The allowance for sales returns and exchanges reflects an estimate of amounts invoiced that will not be collected, as well as other allowances and credits that have been or are expected to offset the trade receivables. The allowance for sales returns and exchanges is recorded as a component of accrued expenses and other current liabilities as of December 31, 2018, December 31, 2019 and December 31, 2020.

Allowances for Doubtful Accounts

We maintain allowances for estimated losses from bad debt resulting from the inability of our customers to make required payments for products or services. When evaluating the adequacy of the allowances, we analyze accounts receivable balances, historical bad debt experience, customer concentrations, customer credit worthiness, and current economic trends. To date, actual bad debts have not differed materially from management's estimates.

The following table sets forth the activity in the allowance for doubtful accounts for the years ended December 31, 2020, 2019, and 2018 (in thousands):

	Year Ended December 31,		
	2020	**2019**	**2018**
Allowance for doubtful accounts – beginning of year	$ 958	$ 1,339	$ 1,226
Bad debt expense	1,298	208	119
Reduction in allowance for doubtful accounts	(778)	(589)	(6)
Allowance for doubtful accounts – end of year	$ 1,478	$ 958	$ 1,339

Translation of Foreign Currencies

The functional currency of each of our foreign subsidiaries is the local currency, except for the Irish manufacturing branch and Orad Hi-Tech Systems Ltd. ("Orad") that we acquired in June 2015. The functional currency for both the Irish manufacturing branch and Orad is the U.S. dollar due to the extensive interrelationship of the operations of the Irish branch, Orad, and the U.S. parent, and the high volume of intercompany transactions among the two subsidiaries and the parent. The assets and liabilities of the subsidiaries whose functional currencies are currencies other than the U.S. dollar are translated into U.S. dollars at the current exchange rate in effect at the balance sheet date. Income and expense items for these entities are translated using rates that approximate those in effect during the period. Cumulative translation adjustments are included in accumulated other comprehensive income (loss), which is reflected as a separate component of stockholders' deficit. We do not record tax provisions or benefits for the net changes in the foreign currency translation adjustment as we intend to permanently reinvest undistributed earnings in our foreign subsidiaries.

The U.S. parent company, Irish manufacturing branch, and Orad, all of whose functional currency is the U.S. dollar, carry certain monetary assets and liabilities denominated in currencies other than the U.S. dollar. These assets and liabilities typically include cash, accounts receivable, and intercompany operating balances denominated in foreign currencies. These assets and liabilities are remeasured into the U.S. dollar at the current exchange rate in effect at the balance sheet date. Foreign currency transaction and remeasurement gains and losses are included within marketing and selling expenses in the results of operations.

The U.S. parent company and various other wholly owned subsidiaries have long-term intercompany loan balances denominated in foreign currencies that are remeasured into the U.S. dollar at the current exchange rate in effect at the balance sheet date. Such loan balances are not expected to be settled in the foreseeable future. Any gains and losses relating to these loans are included in the accumulated other comprehensive income (loss), which is reflected as a separate component of stockholders' deficit.

We have significant international operations and, therefore, our revenues, earnings, cash flows, and financial position are exposed to foreign currency risk from foreign-currency-denominated receivables, payables, sales and expense transactions, and net investments in foreign operations. We derive more than half of our revenues from customers outside the United States. The business is, for the most part, transacted through international subsidiaries and generally in the currency of the end-user customers. Therefore, we are exposed to the risks that changes in foreign currency could adversely affect our revenues, net income (loss), cash flow, and financial position. Foreign currency transaction and remeasurement losses and gains are included within marketing and selling expenses in the results of operations. For the year ended December 31, 2020, 2019, and 2018 we recorded net losses of $0.4 million, $0.6 million, and $0.5 million respectively, that resulted from foreign currency denominated transactions and the revaluation of foreign currency denominated assets and liabilities.

Cash, Cash Equivalents and Marketable Securities

We measure cash equivalents and marketable securities at fair value on a recurring basis. The cash equivalents and marketable securities consist primarily of money market investments, mutual funds, and insurance contracts held in deferred compensation plans. The money market investments and mutual funds held in our deferred compensation plan in the U.S. are reported at fair value within other current assets using quoted market prices with the gains and losses included as other income (expense) in our statement of operations. The insurance contracts held in the deferred compensation plans for employees in Israel and Germany are reported at fair value within other long-term assets using other observable inputs. Other than the investments held in our deferred compensation plans, we held no marketable securities at December 31, 2020 or 2019.

Concentration of Credit Risk

Financial instruments that potentially subject us to concentrations of credit risk consist of cash, cash equivalents, restricted cash, and accounts receivable. We place our cash and cash equivalents with financial institutions that management believes to be of high credit quality. Concentrations of credit risk with respect to trade receivables are limited due to the large number of customers that make up our customer base and their dispersion across different regions. No individual customer accounted for 10% or more of our total net revenues or net accounts receivable in the periods presented.

Inventories

Inventories are stated at the lower of cost (determined on a first-in, first-out basis) or net realizable value. Management regularly reviews inventory quantities on hand and writes down inventory to our realizable value to reflect estimated obsolescence or lack of marketability based on assumptions about future inventory demand and market conditions. Inventory in the digital-media market, including our inventory, is subject to rapid technological change or obsolescence; therefore, utilization of existing inventory may differ from our estimates.

Property and Equipment

Property and equipment is recorded at cost and depreciated using the straight-line method over the estimated useful life of the asset. We typically depreciate our property and equipment using the following minimum and maximum useful lives:

	Depreciable Life	
	Minimum	**Maximum**
Computer and video equipment and software, including internal use software	2 years	5 years
Manufacturing tooling and testbeds	3 years	5 years
Office equipment	3 years	5 years
Furniture, fixtures, and other	3 years	8 years

We capitalize certain development costs incurred in connection with our internal use software. Costs incurred in the preliminary stages of development are expensed as incurred. Once an application has reached the development stage, internal and external costs, if direct, are capitalized until the software is substantially complete and ready for its intended use. Capitalized costs are recorded as part of property and equipment. Maintenance and training costs are expensed as incurred. Internal use software is amortized on a straight-line basis over its estimated useful life, generally three years.

Leasehold improvements are amortized over the shorter of the useful life of the improvement or the remaining term of the lease. Expenditures for maintenance and repairs are expensed as incurred. Upon retirement or other disposition of assets, the cost and related accumulated depreciation are eliminated from the accounts and the resulting gain or loss is reflected in “other income, net” in the results of operations.

Acquisition-Related Intangible Assets and Goodwill

Acquisition-related intangible assets consisted of customer relationships, developed technology, trade names, and non-compete agreements. These assets were determined to have either finite or indefinite lives. For finite-lived intangible assets, amortization was straight-line over the estimated useful lives of such assets, which are generally two years to 12 years. Straight-line amortization was used because we cannot reliably determine a discernible pattern over which the economic benefits would be realized. We do not have any indefinite-lived intangible assets.

We account for goodwill under ASU No. 2017-04, *Simplifying the Test for Goodwill Impairment*. We concluded that we have only one reporting unit and stockholders' deficit of $132.9 million as of December 31, 2020. According to the guidance, the goodwill of reporting units with zero or negative carrying values will not be impaired.

Long-Lived Assets

We periodically evaluate our long-lived assets for events and circumstances that indicate a potential impairment. A long-lived asset is assessed for impairment when the undiscounted expected future cash flows derived from that asset are less than its carrying value. The cash flows used for this analysis take into consideration a number of factors including past operating results, budgets and economic projections, market trends, and product development cycles. The amount of any impairment would be equal to the difference between the estimated fair value of the asset, based on a discounted cash flow analysis, and its carrying value.

Advertising Expenses

All advertising costs are expensed as incurred and are classified as marketing and selling expenses. Advertising expenses were not material in the periods presented.

Research and Development Costs

Research and development costs are expensed as incurred. Development costs for software to be sold that are incurred subsequent to the establishment of technological feasibility, but prior to the general release of the product, are capitalized. Upon general release, these costs are amortized using the straight-line method over the expected life of the related products, generally 12 to 36 months. The straight-line method generally results in approximately the same amount of expense as that calculated using the ratio that current period gross product revenues bear to total anticipated gross product revenues. We periodically evaluate the assets, considering a number of business and economic factors, to determine if an impairment exists. No amounts have been capitalized during 2020, 2019, and 2018 as the costs incurred subsequent to the establishment of technological feasibility have not been material.

Income Taxes

We account for income taxes using an asset and liability approach that requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in our financial statements or tax returns. We record deferred tax assets and liabilities based on the net tax effects of tax credits, operating loss carryforwards, and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes compared to the amounts used for income tax purposes. Deferred tax assets are regularly reviewed for recoverability with consideration for such factors as historical losses, projected future taxable income, and the expected timing of the reversals of existing temporary differences. We are required to record a valuation allowance when it is more likely than not that some portion or all of the deferred tax assets will not be realized.

We account for uncertainty in income taxes recognized in our financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon examination by the taxing authorities, based on the technical merits of the position. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves ("unrecognized tax benefits") that are considered appropriate, as well as the related net interest and penalties.

Accounting for Stock-Based Compensation

Our stock-based employee compensation plans allow us to grant stock awards, options, or other equity-based instruments, or a combination thereof, as part of our overall compensation strategy. For stock-based awards granted, we record stock-based compensation expense based on the grant date fair value over the requisite service periods for the individual awards, which generally equal the vesting periods. The vesting of stock-based award grants may be based on time, performance conditions, market conditions, or a combination of time, performance and market conditions. We account for forfeitures when they occur.

Product Warranties

We provide warranties on externally sourced and internally developed hardware. The warranty period for all of our products is generally 90 days to one year, but can extend up to five years depending on the manufacturer's warranty or local law. For internally developed hardware and in cases where the warranty granted to customers for externally sourced hardware is greater than that provided by the manufacturer, we record an accrual for the related liability based on historical trends and actual material and labor costs. At the end of each quarter, we reevaluate our estimates to assess the adequacy of the recorded warranty liabilities and adjusts the accrued amounts accordingly.

Computation of Net Income (Loss) Per Share

Net income (loss) per share is presented for both basic earnings per share ("Basic EPS") and diluted earnings per share ("Diluted EPS"). Basic EPS is based on the weighted-average number of common shares outstanding during the period, excluding non-vested restricted stock held by employees. Diluted EPS is based on the weighted-average number of common and potential common shares outstanding during the period. Potential common shares result from the assumed exercise of outstanding stock options and non-vested restricted stock and restricted stock units, the proceeds and remaining unrecorded compensation expense of which are then assumed to have been used to repurchase outstanding common stock using the treasury stock method. For periods when we report a loss, all potential common stock is considered anti-dilutive. For periods when we report net income, potential common shares with combined purchase prices and unamortized compensation costs in excess of our average common stock fair value for the related period or that are contingently issuable are considered anti-dilutive. Our convertible senior notes were issued in 2015, and we apply the treasury stock method in measuring the dilutive impact of those potential common shares to be issued.

Accounting for Restructuring Plans

We record facility-related and contract termination restructuring charges in accordance with ASC Topic 420, *Liabilities: Exit or Disposal Cost Obligations*. Based on our policies for the calculation and payment of severance benefits, we account for employee-related restructuring charges as an ongoing benefit arrangement in accordance with ASC Topic 712, *Compensation - Nonretirement Postemployment Benefits*. Prior to January 1, 2019, we recognized facility-related restructuring charges upon exiting all or a portion of a leased facility and meeting cease-use and other requirements. The amount of restructuring charges were based on the fair value of the lease obligation for the abandoned space, which included a sublease assumption that could be reasonably obtained. Upon adoption of ASC 842 on January 1, 2019, we had facilities restructuring accruals which were reclassified to the right of use asset account. We revisit right of use ("ROU") asset value and assess liability based on vacancy and sub-lease in accordance with ASC Topic 842 *Leases* ("ASC 842").

Related Party Transactions

From time to time we enter into arrangements with parties which may be affiliated with us, executive officers, and members of our board of directors. These transactions are primarily comprised of sales transactions in the normal course of business and are immaterial to the financial statements for all periods presented.

Leases

We have entered into a number of facility leases to support our research and development activities, sales operations, and other corporate and administrative functions in North America, Europe, and Asia, which qualify as operating leases under U.S. GAAP. We also have a limited number of equipment leases that also qualify as operating leases. We determine if contracts with vendors represent a lease or have a lease component under U.S. GAAP at contract inception. During 2020, we also entered into a limited number of equipment leases that qualify as finance leases. Our leases have remaining terms ranging from less than one year to seven years. We lease corporate office space in Burlington, Massachusetts, which expires in May 2028. Some of our leases include options to extend or terminate the lease prior to the end of the agreed upon lease term. For purposes of calculating lease liabilities, lease terms include options to extend or terminate the lease when it is reasonably certain that we will exercise such options.

Operating lease right of use assets and liabilities are recognized based on the present value of the future minimum lease payments over the lease term at the lease commencement date. As our leases generally do not provide an implicit rate, we use an estimated incremental borrowing rate in determining the present value of future payments. The incremental borrowing rate represents an estimate of the interest rate we would incur at lease commencement to borrow an amount equal to the lease payments on a collateralized basis over the term of a lease within a particular location and currency environment. The operating leases are included in “Right of use assets,” “Accrued expenses and other current liabilities,” and “Long-term lease liabilities” on our consolidated balance sheets.

Finance lease right of use assets and liabilities are recognized based on the present value of the future minimum lease payments over the lease term at the lease commencement date. Each lease agreement provides an implicit discount rate used to determine the present value of future payments. The finance leases are included in “Other assets”, “Accrued expenses and other current liabilities” and “Other long-term liabilities” on our condensed consolidated balance sheet.

Lease costs are included within research and development, marketing and selling, and general and administrative lines on the consolidated statements of operations, and the related cash payments are included in the operating cash flows on the consolidated statements of cash flows. Short-term lease costs, variable lease costs, finance lease costs, and sublease income are not material.

Our lease agreements do not contain any material residual value guarantees or material restrictive covenants.

Related to the adoption of ASC Topic 842 *Leases* (“ASC 842”), and for leases executed subsequent to the adoption of ASC 842 our policy elections are as follows:

Separation of lease and non-lease components	Non-lease components are excluded from our right of use (“ROU”) assets and lease liabilities and expensed as incurred.
Short-term policy	We have elected the short-term lease recognition exemption for all applicable classes of underlying assets. Short-term disclosures include only those leases with a term greater than one month and 12 months or less, and expense is recognized on a straight-line basis over the lease term. Leases with an initial term of 12 months or less, that do not include an option to purchase the underlying asset that we are reasonably certain to exercise, are not recorded on the consolidated balance sheets.

Recently Adopted Accounting Pronouncement

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2016-13 ("ASU 2016-13") "*Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*", which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost. ASU 2016-13 replaces the existing incurred loss impairment model with an expected loss model which requires the use of forward-looking information to calculate credit loss estimates. It also eliminates the concept of other-than-temporary impairment and requires credit losses related to certain available-for-sale debt securities to be recorded through an allowance for credit losses rather than as a reduction in the amortized cost basis of the securities. These changes result in earlier recognition of credit losses. We adopted ASU 2016-13 using the modified retrospective approach as of January 1, 2020. The cumulative effect upon adoption was not material to our consolidated financial statements.

Recent Accounting Pronouncements to be Adopted

In December 2019, the Financial Accounting Standards Board (“FASB”) issued ASU 2019-12, *Simplifying the Accounting for Income Taxes* (“ASU 2019-12”). ASU 2019-12 is intended to enhance and simplify aspects of the income tax accounting guidance in ASC 740 as part of the FASB's simplification initiative. This guidance is effective for fiscal years and interim periods within those years beginning after December 15, 2020 with early adoption permitted. The Company has determined the impact this guidance may have on its consolidated financial statements and related disclosures is immaterial.

In March 2020, the FASB issued ASU 2020-04, *Facilitation of the Effects of Reference Rate Reform on Financial Reporting* ("ASU 2020-04"). ASU 2020-04 is intended to provide temporary optional expedients and exceptions to the U.S. GAAP guidance on contract modifications and hedge accounting to ease the financial reporting burdens related to the expected market transition from the London Interbank Offered Rate (LIBOR) and other interbank offered rates to alternative reference rates. This guidance is effective beginning on March 12, 2020, and the Company may elect to apply the amendments prospectively through December 31, 2022. The Company is currently evaluating the impact this guidance may have on its consolidated financial statements and related disclosures.

C. NET INCOME (LOSS) PER SHARE

Net income (loss) per common share is presented for both Basic EPS and Diluted EPS. Basic EPS is based on the weighted-average number of common shares outstanding during the period. Diluted EPS is based on the weighted-average number of common shares and common shares equivalents outstanding during the period.

The potential common shares that were considered anti-dilutive securities were excluded from the diluted earnings per share calculations for the relevant periods either because the sum of the exercise price per share and the unrecognized compensation cost per share was greater than the average market price of our common stock for the relevant periods, or because they were considered contingently issuable. The contingently issuable potential common shares result from certain stock options and restricted stock units granted to our employees that vest based on performance conditions, market conditions, or a combination of performance and market conditions.

When there is a loss from continuing operations, potential common shares should not be included in the computation of Diluted EPS because the exercise or conversion of any potential shares increases the number of shares in the denominator and results in a lower loss per share. Therefore, all outstanding stock options and restricted stock units at December 31, 2018 are anti-dilutive and not included in the EPS calculation.

The following table sets forth (in thousands) common shares considered anti-dilutive securities at December 31, 2020, 2019 and 2018.

	December 31, 2020	December 31, 2019	December 31, 2018
Options	4	565	892
Non-vested restricted stock units	737	2,642	2,945
Anti-dilutive potential common shares	741	3,207	3,837

The following table sets forth (in thousands) the basic and diluted weighted common shares outstanding at December 31, 2020, 2019, and 2018:

	2020	2019	2018
Weighted common shares outstanding - basic	43,822	42,649	41,662
Net effect of common stock equivalents	1,056	846	—
Weighted common shares outstanding - diluted	44,878	43,495	41,662

On June 15, 2015, we issued $125.0 million aggregate principal amount of our 2.00% convertible senior notes due 2020 (the "Notes") in an offering conducted in accordance with Rule 144A under the Securities Act of 1933. The Notes were convertible into cash, shares of our common stock, or a combination of cash and shares of common stock, at our election, based on an initial conversion rate, subject to adjustment. In connection with the offering of the Notes, we entered into a capped call transaction with a third party (the "Capped Call") (see Note Q, Long-Term Debt and Credit Agreement). We use the treasury stock method in computing the dilutive impact of the Notes. The Notes are convertible into shares but our stock price was less than the conversion price at December 31, 2019 and 2018, and therefore, the Notes are excluded from diluted income per share. The Capped Call is not reflected in diluted net income (loss) per share as it will always be anti-dilutive. The Notes were fully paid on June 15, 2020 when they came due.

D. FAIR VALUE MEASUREMENTS

Assets and Liabilities Measured at Fair Value on a Recurring Basis

We measure deferred compensation investments on a recurring basis. At December 31, 2020 and 2019, our deferred compensation investments were classified as either Level 1 or Level 2 in the fair value hierarchy. Assets valued using quoted market prices in active markets and classified as Level 1 are money market and mutual funds. Assets valued based on other observable inputs and classified as Level 2 are insurance contracts. The assets held at fair value are included in "Other current assets" and "Other long-term assets" on our condensed consolidated balance sheet as of December 31, 2020.

The following tables summarize our deferred compensation investments measured at fair value on a recurring basis (in thousands):

		Fair Value Measurements at Reporting Date Using		
	December 31, 2020	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Financial Assets:				
Deferred compensation investments	$ 522	$ 282	$ 240	$ —

		Fair Value Measurements at Reporting Date Using		
	December 31, 2019	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Financial Assets:				
Deferred compensation investments	$ 1,156	$ 338	$ 818	$ —

Financial Instruments Not Recorded at Fair Value

The carrying amounts of our other financial assets and liabilities including cash, accounts receivable, accounts payable, and accrued liabilities approximate their respective fair values because of the relatively short period of time between their origination and their expected realization or settlement.

E. INVENTORIES

Inventories consisted of the following at December 31, 2020 and 2019 (in thousands):

	December 31,	
	2020	2019
Raw materials	$ 8,223	$ 9,036
Work in process	353	371
Finished goods	17,992	19,759
Total	$ 26,568	$ 29,166

At December 31, 2020 and 2019, finished goods inventory included $1.2 million and $1.5 million, respectively, associated with products shipped to customers or deferred labor costs for arrangements where revenue recognition had not yet commenced.

F. PROPERTY, PLANT AND EQUIPMENT

Property and equipment consisted of the following at December 31, 2020 and 2019 (in thousands):

	December 31,	
	2020	2019
Computer and video equipment and software	$ 137,489	$ 133,695
Manufacturing tooling and testbeds	4,781	4,209
Office equipment	4,957	4,963
Furniture, fixtures and other	10,133	10,425
Leasehold improvements	36,784	37,440
	194,144	190,732
Less: accumulated depreciation and amortization	177,330	171,152
Total	$ 16,814	$ 19,580

We capitalize certain development costs incurred in connection with our internal use software. For the year ended December 31, 2020, we capitalized $1.6 million of contract labor and internal labor costs related to internal use software, and recorded the capitalized costs in computer and video equipment and software. There were $2.2 million of contract labor and internal labor costs capitalized for the year ended December 31, 2019. Internal use software is amortized on a straight line basis over its estimated useful life of three years, and we recorded $3.1 million and $1.9 million of amortization expense during 2020 and 2019, respectively.

Depreciation and amortization expense related to property and equipment was $8.5 million and $9.2 million for the years ended December 31, 2020 and 2019, respectively.

G. INTANGIBLE ASSETS AND GOODWILL

Intangible Assets

Amortization expense related to intangible assets in the aggregate was $0.0 million, $4.4 million, and $9.3 million for the years ended December 31, 2020, 2019, and 2018, respectively. As of June 30, 2019, intangible assets were fully amortized.

Goodwill

The acquisition of Orad resulted in goodwill of $32.6 million in 2015. Through the evaluation of the discrete financial information that is regularly reviewed by the chief operating decision makers (our chief executive officer and chief financial officer), we have determined that we have one reportable segment. We have stockholders' deficit of $132.9 million as of December 31, 2020. As the goodwill of our reporting unit has a negative carrying value, it will not be impaired.

H. LEASES

We used an average incremental borrowing rate of 6% as of January 1, 2019, the adoption date of ASC 842, for our leases that commenced prior to that date. The weighted-average remaining lease term of our operating leases is six years as of December 31, 2020. Lease costs for minimum lease payments is recognized on a straight-line basis over the lease term. Our total lease costs were $9.1 million for the year ended December 31, 2020 and related cash payments were $9.0 million for the year ended December 31, 2020. For the year December 31, 2020, right of use assets obtained in exchange for new operating lease liabilities was $5.7 million.

The accompanying consolidated results of operations reflect rent expense on a straight-line basis over the term of the leases. Total expense under operating leases was $10.2 million, $10.3 million, and $9.5 million for the years ended December 31, 2020, 2019, and 2018, respectively.

The table below reconciles the undiscounted future minimum lease payments under non-cancelable leases with terms of more than one year to the total lease liabilities recognized on the consolidated balance sheets as of December 31, 2020 (in thousands):

Year Ending December 31,	Operating Leases	Finance Leases
2021	7,774	289
2022	6,603	255
2023	5,665	226
2024	4,946	—
2025	5,071	—
Thereafter	11,758	—
Total future minimum lease payments	41,817	770
Less effects of discounting	(7,485)	(23)
Total lease liabilities	$ 34,332	$ 747
Reported as of December 31, 2020		
Current lease liabilities included in accrued expenses and other current liabilities	5,870	275
Long-term lease liabilities	28,462	—
Other long-term liabilities	—	472
Total lease liabilities	$ 34,332	$ 747

Included in the operating lease commitments below are obligations under leases for which we have vacated the underlying facilities as part of various restructuring plans. These leases expire at various dates through 2026 and represent an aggregate obligation of $2.0 million. We received $0.8 million, $1.3 million, and $1.2 million of sublease income during the years ended December 31, 2020, 2019, and 2018, respectively. The future minimum lease commitments under non-cancelable leases at December 31, 2020 were as follows (in thousands):

Year Ending December 31,	Operating Leases
2021	$ 8,558
2022	$ 7,259
2023	$ 6,195
2024	$ 5,383
2025	$ 5,513
Thereafter	$ 11,776
Total	$ 44,684

Finance lease right of use assets and liabilities are recognized based on the present value of the future minimum lease payments over the lease term at the lease commencement date. Each lease agreement provides an implicit discount rate used to determine the present value of future payments. The weighted-average discount rate is 2.3% as of September 30, 2020, the commencement date for our leases. The finance leases are included in “Other assets” and “Other long-term liabilities” on our condensed consolidated balance sheet as of December 31, 2020.

I. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

Accrued expenses and other current liabilities consisted of the following at December 31, 2020 and 2019 (in thousands):

	December 31,	
	2020	2019
Consulting and professional fees	$ 1,136	$ 1,025
Operating lease liabilities - short term	5,870	6,645
Accrued royalties	3,302	1,549
Accrued warranty	1,095	1,337
Employee restructuring	3,687	157
Sales return & allowance	9,306	8,230
Other (individual items less than 5% of total current liabilities)	17,868	17,816
Total	$ 42,264	$ 36,759

J. OTHER LONG-TERM LIABILITIES

Other long-term liabilities consisted of the following at December 31, 2020 and 2019 (in thousands):

	December 31,	
	2020	2019
Finance lease liabilities	472	—
Deferred compensation	5,818	5,186
Other long-term liabilities	1,496	460
Total	$ 7,786	$ 5,646

K. COMMITMENTS AND CONTINGENCIES

Commitments

We entered into a long-term agreement to purchase a variety of information technology solutions from a third party in the second quarter of 2020, which included an unconditional commitment to purchase a minimum of $32.2 million of products and services over the initial five-year term of the agreement. We have purchased $3.0 million pursuant to this agreement as of December 31, 2020 to develop Azure-certified solutions.

We have letters of credit that are used as security deposits in connection with our leased Burlington, Massachusetts office space. In the event of default on the underlying leases, the landlords would, at December 31, 2020, be eligible to draw against the letters of credit to a maximum of $1.3 million in the aggregate. The letters of credit are subject to aggregate reductions provided that we are not in default under the underlying leases and meets certain financial performance conditions. In no case will the letters of credit amounts for the Burlington leases be reduced to below $1.2 million in the aggregate throughout the lease periods.

We also have letters of credit in connection with security deposits for other facility leases totaling $0.6 million in the aggregate, as well as letters of credit totaling $1.9 million that otherwise support our ongoing operations. These letters of credit have various terms and expire during 2021 and beyond, while some of the letters of credit may automatically renew based on the terms of the underlying agreements.

We have future minimum lease commitments under non-cancelable leases totaling $44.7 million which are described in detail in Note H, Leases.

Purchase Commitments and Sole-Source Suppliers

At December 31, 2020, we entered into purchase commitments for certain inventory and other goods used in our normal operations. The purchase commitments covered by these agreements are for a period of less than 1 year and in the aggregate total $9.0 million.

We depend on sole-source suppliers for certain key hardware components of our products. Although we have procedures in place to mitigate the risks associated with our sole-sourced suppliers, we cannot be certain that we will be able to obtain sole-sourced components or finished goods from alternative suppliers or that we will be able to do so on commercially reasonable terms without a material impact on our results of operations or financial position. We procure product components and build inventory based on forecasts of product life cycle and customer demand. If we are unable to provide accurate forecasts or manage inventory levels in response to shifts in customer demand, we may have insufficient, excess, or obsolete product inventory.

Contingencies

Our industry is characterized by the existence of a large number of patents and frequent claims and litigation regarding patent and other intellectual property rights. In addition to the legal proceedings described above, we are involved in legal proceedings from time to time arising from the normal course of business activities, including claims of alleged infringement of intellectual property rights and contractual, commercial, employee relations, product or service performance, or other matters. We do not believe these matters will have a material adverse effect on our financial position or results of operations. However, the outcome of legal proceedings and claims brought against us is subject to significant uncertainty. Therefore, our financial position or results of operations may be negatively affected by the unfavorable resolution of one or more of these proceedings for the period in which a matter is resolved. Our results could be materially adversely affected if we are accused of, or found to be, infringing third parties' intellectual property rights.

Following the termination of our former Chairman and Chief Executive Officer on February 25, 2018, we received a notice alleging that we breached the former employee's employment agreement. On April 16, 2019 we received an additional notice again alleging we breached the former employee's employment agreement. We have since been in communications with our former Chairman and Chief Executive Officer's counsel. While we intend to defend any claim vigorously, when and if a claim is actually filed, we are currently unable to estimate an amount or range of any reasonably possible losses that could occur as a result of this matter.

On July 14, 2020, we sent a notice to a customer demanding sums that we believe are due to Avid pursuant to a contract. On October 7, 2020, the customer sent a notice to us denying any legal liability and demanding payment for breach of contract resulting from various alleged delays by us. While we intend to defend any claim vigorously when and if a claim is actually filed, we are currently unable to estimate an amount or range of any reasonably possible losses that could occur related to this matter.

We consider all claims on a quarterly basis and based on known facts assesses whether potential losses are considered reasonably possible, probable, and estimable. Based upon this assessment, we then evaluate disclosure requirements and whether to accrue for such claims in our consolidated financial statements.

We record a provision for a liability when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated and such amount is material. These provisions are reviewed at least quarterly and adjusted to reflect the impacts of negotiations, settlements, rulings, advice of legal counsel, and other information and events pertaining to a particular case.

At December 31, 2020 and as of the date of filing of these consolidated financial statements, we believe that, other than as set forth in this note, no provision for liability nor disclosure is required related to any claims because: (a) there is no reasonable possibility that a loss exceeding amounts already recognized (if any) may be incurred with respect to such claim; (b) a reasonably possible loss or range of loss cannot be estimated; or (c) such estimate is immaterial.

Additionally, we provide indemnification to certain customers for losses incurred in connection with intellectual property infringement claims brought by third parties with respect to our products. These indemnification provisions generally offer perpetual coverage for infringement claims based upon the products covered by the agreement and the maximum potential amount of future payments we could be required to make under these indemnification provisions is theoretically unlimited. To date, we have not incurred material costs related to these indemnification provisions; accordingly, we believe the estimated fair value of these indemnification provisions is immaterial. Further, certain arrangements with customers include clauses whereby we may be subject to penalties for failure to meet certain performance obligations; however, we have not recorded any related material penalties to date.

We provide warranties on externally sourced and internally developed hardware. For internally developed hardware and in cases where the warranty granted to customers for externally sourced hardware is greater than that provided by the manufacturer, we record an accrual for the related liability based on historical trends and actual material and labor costs. The following table sets forth the activity in the product warranty accrual account for the years ended December 31, 2020, 2019, and 2018 (in thousands):

Accrual balance at January 1, 2018	$ 2,545
Accruals for product warranties	858
Cost of warranty claims	(1,697)
Accrual balance at December 31, 2018	1,706
Accruals for product warranties	973
Cost of warranty claims	(1,342)
Accrual balance at December 31, 2019	1,337
Accruals for product warranties	1,065
Cost of warranty claims	(1,307)
Accrual balance at December 31, 2020	$ 1,095

L. CAPITAL STOCK

Preferred Stock

We have authorized up to one million shares of preferred stock, $0.01 par value per share, for issuance. Each series of preferred stock shall have such rights, preferences, privileges, and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges, and liquidation preferences, as may be determined by our board of directors (the “Board”).

Stock Incentive Plans

There is an aggregate of 9,440,000 of our shares of $0.01 par value per share common stock authorized and reserved for issuance under the Avid Technology, Inc. Amended and Restated 2014 Stock Incentive Plan (the “Plan”). The Plan was originally adopted by the Board on September 14, 2014 and approved by our stockholders on October 29, 2014. In connection with the approval of the Plan, our Amended and Restated 2005 Stock Incentive Plan has been closed; no additional awards may be granted under that Plan. Shares available for issuance under the Plan totaled 246,000 as of December 31, 2020.

Under the Plan, we may grant stock awards or options to purchase our common stock to employees, officers, directors, and consultants. The exercise price for options generally must be no less than market price on the date of grant. Awards may be performance-based where vesting or exercisability is conditioned on achieving performance objectives, time-based, or a combination of both. Current option grants become exercisable over various periods, typically three years to four years for employees and one year for non-employee directors, and have a maximum term of seven years to ten years. Restricted stock and restricted stock unit awards with time-based vesting typically vest over three years to four years for employees and one year for non-employee directors.

We use the Black-Scholes option pricing model to estimate the fair value of stock option grants with time-based vesting. The Black-Scholes model relies on a number of key assumptions to calculate estimated fair value. The assumed dividend yield of zero is based on the fact that we have never paid cash dividends and has no present expectation to pay cash dividends and our current credit agreement limits our ability to pay dividends. The expected volatility is based on actual historic stock volatility for periods equivalent to the expected term of the award. The assumed risk-free interest rate is the U.S. Treasury security rate with a term equal to the expected life of the option. The assumed expected life is based on company-specific historical experience considering the exercise behavior of past grants and models the pattern of aggregate exercises.

The fair value of restricted stock and restricted stock unit awards with time-based vesting is based on the intrinsic value of the awards at the date of grant, as the awards have a purchase price of $0.01 per share.

We also issue option grants or restricted stock unit awards with vesting based on market conditions. Performance-based restricted stock units will vest based on achievement of our relative total shareholder return against the Russell 2000 Index over a three-year period. The fair values and derived service periods for all grants that include vesting based on market conditions are estimated using the Monte Carlo valuation method. For stock option grants that include vesting based on performance conditions, the fair values are estimated using the Black-Scholes option pricing model. For restricted stock unit awards that include vesting based on performance conditions, the fair values are estimated based on the intrinsic values of the awards at the date of grant, as the awards have a purchase price of $0.01 per share.

Information with respect to options granted under all stock option plans for the year ended December 31, 2020 was as follows:

	Total Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (years)	Aggregate Intrinsic Value (in thousands)
Options Outstanding at December 31, 2017	2,290,017	$9.65	2.31	—
Granted	—	—		
Exercised	—	—		
Forfeited or Expired	(1,398,125)	10.42		
Options Outstanding at December 31, 2018	891,892	$8.46	1.55	—
Granted	—	—		
Exercised	(70,006)	7.39		
Forfeited or Expired	(256,886)	10.70		
Options outstanding at December 31, 2019	565,000	$7.57	1.17	$ 571
Granted	—	—		
Exercised	(319,000)	7.65		
Forfeited or Expired	—	—		
Options outstanding at December 31, 2020	246,000	$7.48	0.44	$ 1,358
Exercisable at:				
December 31, 2018	891,892	$8.46	1.55	$—
December 31, 2019	565,000	$7.57	1.17	$571
December 31, 2020	246,000	$7.48	0.44	$1,358

The cash received from stock options exercised during the years ended December 31, 2020 and 2019 were $1.6 million and $0.5 million. No stock options were exercised during 2018

Information with respect to non-vested time-based restricted stock units for the year ended December 31, 2020 was as follows:

	Number of Restricted Stock Units	Weighted-Average Grant-Date Fair Value	Shares Retained to Cover Statutory Minimum Withholding Taxes
Outstanding at December 31, 2017	1,809,138	$5.49	
Granted	1,783,728	5.08	
Vested	(688,106)	5.61	213,531
Forfeited	(926,084)	5.42	
Outstanding at December 31, 2018	1,978,676	$5.12	
Granted	1,320,536	7.33	
Vested	(991,819)	5.16	307,005
Forfeited	(219,460)	5.98	
Outstanding at December 31, 2019	2,087,933	$6.41	
Granted	1,518,714	7.20	
Vested	(1,193,553)	6.33	403,798
Forfeited	(298,215)	6.52	
Outstanding at December 31, 2020	2,114,879	7.01	

Information with respect to non-vested performance-based restricted stock units for the year ended December 31, 2020 was as follows:

	Number of Performance-based Restricted Stock Units	Weighted-Average Grant-Date Fair Value	Shares Retained to Cover Statutory Minimum Withholding Taxes
Outstanding at December 31, 2017	1,254,110	$4.54	
Granted	771,124	4.84	
Vested	—	—	—
Forfeited	(1,059,091)	4.82	
Outstanding at December 31, 2018	966,143	$4.48	
Granted	411,043	7.11	
Vested	(666,451)	4.48	280,613
Forfeited	(156,470)	4.64	
Outstanding at December 31, 2019	554,265	$6.39	
Granted	578,316	6.64	
Vested	(328,673)	5.80	133,596
Forfeited	(150,480)	7.11	
Outstanding at December 31, 2020	653,428	6.74	

The weighted-average grant date fair value of time and performance-based restricted stock units granted during the years ended December 31, 2020, 2019, and 2018 was $7.05, $7.28, and $5.01, respectively. The total weighted-average fair value of time and performance-based restricted stock units vested during the years ended December 31, 2020, 2019, and 2018 was $9.5 million, $8.1 million, and $3.9 million, respectively.

Employee Stock Purchase Plan

On February 27, 2008, the Board approved our Second Amended and Restated 1996 Employee Stock Purchase Plan (the "ESPP"). On May 27, 2008 our stockholders approved an increase of the number of shares of our common stock authorized for issuance under the Second Amended and Restated ESPP from 1,700,000 to 2,500,000 shares. In May 2018, we registered an aggregate of 650,000 of our shares of $0.01 par value per share common stock, which have been authorized and reserved for issuance under the Avid Technology, Inc. Second Amended and Restated ESPP.

Our Second Amended and Restated ESPP offers our shares for purchase at a price equal to 85% of the closing price on the applicable offering period termination date. Shares issued under the ESPP are considered compensatory. Accordingly, we are required to measure fair value and record compensation expense for share purchase rights granted under the ESPP. In July 2015, the Board of Directors approved an amendment to the ESPP to change the subscription period from three to six months and accordingly to adjust the payroll cap to $5,000 per plan period. A total of 519,182 shares remained available for issuance under the ESPP at December 31, 2020.
We use the Black-Scholes option pricing model to calculate the fair value of shares issued under the ESPP. The Black-Scholes model relies on a number of key assumptions to calculate estimated fair values. The following table sets forth the weighted-average key assumptions and fair value results for shares issued under the ESPP during the years ended December 31, 2020, 2019, and 2018:

	Year Ended December 31,		
	2020	**2019**	**2018**
Expected dividend yield	0.00%	0.00%	0.00%
Risk-free interest rate	0.82%	2.37%	1.85%
Expected volatility	72.1%	48.6%	55.3%
Expected life (in years)	0.50	0.49	0.50
Weighted-average fair value of shares issued (per share)	$1.40	$1.04	$0.94

The following table sets forth the quantities and average prices of shares issued under the ESPP for the years ended December 31, 2020, 2019, and 2018:

	Year Ended December 31,		
	2020	**2019**	**2018**
Shares issued under the ESPP	61,750	69,179	117,653
Average price of shares issued	$8.67	$7.48	$4.22

We did not realize a material tax benefit from the tax deductions for stock option exercises, vested restricted stock units and shares issued under the ESPP during the years ended December 31, 2020, 2019, or 2018.

Stock-Based Compensation Expense

Stock-based compensation was included in the following captions in our consolidated statements of operations for the years ended December 31, 2020, 2019, and 2018, respectively (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Share-based compensation expense by type:			
Stock Options	$ —	$ —	$ —
Time-based Restricted Stock Units	8,340	5,900	4,011
Performance-based Restricted Stock Units	2,211	1,964	2,146
ESPP	113	94	101
Total Share-based compensation expense	$ 10,664	$ 7,958	$ 6,258

	Year Ended December 31,		
	2020	2019	2018
Cost of products revenues	$ 513	$ 343	$ 128
Cost of service revenues	826	274	194
Research and development expenses	1,725	1,068	667
Marketing and selling expenses	2,176	1,797	1,540
General and administrative expenses	5,424	4,476	3,729
Total	$ 10,664	$ 7,958	$ 6,258

At December 31, 2020, there was $13.1 million of total unrecognized compensation cost related to non-vested stock-based compensation awards granted under our stock-based compensation plans. We expect this amount to be amortized approximately as follows: $8.3 million in 2021, $3.7 million in 2022, and $1.1 million in 2023. At December 31, 2020, the weighted-average recognition period of the unrecognized compensation cost was approximately one year.

M. EMPLOYEE BENEFIT PLANS

Employee Benefit Plans

We have a Section 401(k) plan, which we refer to as the 401(k) plan, that covers substantially all U.S. employees. The 401(k) plan allows employees to make contributions up to a specified percentage of their compensation. We may, upon resolution by our board of directors, make discretionary contributions to the plan. Our contributions to the 401(k) plan totaled $0.5 million in 2020, and $1.6 million in both 2019 and 2018.

In addition, we have various retirement and post-employment plans covering certain international employees. Certain plans allow us to match employee contributions up to a specified percentage as defined by the plans. Our contributions to these plans totaled $1.4 million, $1.3 million, and $1.7 million in 2020, 2019, and 2018 respectively.

Deferred Compensation Plans

We maintain a nonqualified deferred compensation plan (the “Deferred Plan”). The Deferred Plan covers senior management and members of the Board. In November 2013, the Board determined to indefinitely suspend the Deferred Plan and not offer participants the opportunity to participate in the Deferred Plan as of 2014. The benefits payable under the Deferred Plan represent an unfunded and unsecured contractual obligation to pay the value of the deferred compensation in the future, adjusted to reflect deemed investment performance. Payouts are generally made upon termination of employment with us. The assets of the Deferred Plan, as well as the corresponding obligations, were approximately $0.3 million and $0.3 million at December 31, 2020 and 2019, respectively, and were recorded in “other current assets” and “accrued compensation and benefits” at those dates.

In connection with the acquisition of a business in 2010, we assumed the assets and liabilities of a deferred compensation arrangement for a single individual in Germany. The arrangement represents a contractual obligation to pay a fixed euro amount for a period specified in the contract. In connection with the acquisition of Orad, we assumed the assets and liabilities of a deferred compensation arrangement for employees in Israel. Our assets and liabilities related to the arrangements consisted of assets recorded in “other long-term assets” of $0.2 million at December 31, 2020 and $0.8 million at December 31, 2019, representing the value of related insurance contracts and investments, and liabilities recorded as “long-term liabilities” of $5.8 million at December 31, 2020 and $5.2 million at December 31, 2019, representing the fair value of the estimated benefits to be paid under the arrangements.

N. INCOME TAXES

On December 22, 2017, the tax act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018, commonly known as the Tax Cuts and Jobs Act (the “TCJA”), was signed into law. The TCJA changed many aspects of U.S. corporate income taxation and included reduction of the corporate income tax rate from 35% to 21%, implementation of a territorial tax system and imposition of a tax on deemed repatriated earnings of foreign subsidiaries.

As part of U.S. international tax reform, the TCJA imposes a transition tax on certain accumulated foreign earnings aggregated across all non-U.S. subsidiaries, net of foreign deficits. We were in an aggregate net foreign deficit position for U.S. tax purposes, and therefore not liable for the transition tax. Additionally, TCJA repealed the alternative minimum tax (“AMT”) and made existing AMT credit carryovers refundable. Accordingly, at December 31, 2017, we recorded a deferred tax benefit and income tax receivable for our existing AMT credit in the amount of $0.8 million.

The global intangible low-taxed income (“GILTI”) provisions of the TCJA impose a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. Under U.S. GAAP, we can make an accounting policy choice of either (1) treating taxes due on future U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred (the “period cost method”) or (2) factoring such amounts into the measurement of our deferred taxes (the “deferred method”). During the year ended December 31, 2018 we made a policy election to record tax effects of GILTI as an expense under the period cost method.

The CARES Act includes several income tax provisions such as net operating loss (“NOL”) carryback and carryforward benefits and other tax deduction benefits. As noted previously, the U.S. deferred tax asset has a full valuation; accordingly, these NOL and other benefit provisions had no impact on our financial statements for the period ended December 31, 2020. The CARES Act accelerates the alternative minimum tax (“AMT”) credit refund originally enacted by the TCJA. As of December 31, 2020, we have received the cash from the Internal Revenue Service associated with this refund receivable which had been recorded as a long-term asset at December 31, 2019.

Income (loss) before income taxes and the components of the income tax provision (benefit) consisted of the following for the years ended December 31, 2020, 2019, and 2018 (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Income (loss) from operations before income taxes:			
United States	$ 9,182	$ 4,311	$ (1,940)
Foreign	3,252	(1,786)	(7,463)
Total income (loss) from operations before income taxes	$ 12,434	$ 2,525	$ (9,403)
Provision for (Benefit from) income taxes:			
Current tax expense (benefit):			
Federal	$ —	$ (4)	$ (1)
State	133	58	59
Foreign benefit of net operating losses	(883)	(462)	(206)
Other foreign	1,295	1,632	1,372
Total current tax expense	545	1,224	1,224
Deferred tax (benefit) expense:			
Federal	—	—	—
Other foreign	827	(6,300)	47
Total deferred tax (benefit) expense	827	(6,300)	47
Total provision for (benefit from) income taxes	$ 1,372	$ (5,076)	$ 1,271

Net deferred tax assets (liabilities) consisted of the following at December 31, 2020 and 2019 (in thousands):

	December 31,	
	2020	2019
Deferred tax assets:		
Tax credit and net operating loss carryforwards	$ 254,745	$ 267,049
Allowances for bad debts	47	69
Difference in accounting for:		
Revenues	6,659	2,651
Costs and expenses	23,217	19,400
Inventories	1,466	2,282
Acquired intangible assets	62	187
Long-term lease liabilities	7,432	7,605
Gross deferred tax assets	293,628	299,243
Valuation allowance	(278,785)	(281,568)
Deferred tax assets after valuation allowance	14,843	17,675
Deferred tax liabilities:		
Difference in accounting for:		
Revenues	—	(1,052)
Costs and expenses	(626)	(1,527)
Inventories	(92)	—
Basis difference convertible notes	—	(326)
Right of use asset	(7,324)	(7,291)
Gross deferred tax liabilities	(8,042)	(10,196)
Net deferred tax assets	$ 6,801	$ 7,479
Recorded as:		
Deferred tax assets, net	6,801	7,479
Deferred tax liabilities, net	—	—
Net deferred tax assets	$ 6,801	$ 7,479

Deferred tax assets and liabilities reflect the net tax effects of the tax credits and net operating loss carryforwards and the temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The ultimate realization of the net deferred tax assets is dependent upon the generation of sufficient future taxable income in the applicable tax jurisdictions. During the year ended December 31, 2019 we determined that our Irish subsidiary has reached a level of sustained profitability sufficient enough to release a significant portion of the valuation allowance on its net operating loss carryforward. Accordingly, we reversed a $6.0 million valuation allowance against the Irish subsidiary's net operating loss carryforward deferred tax asset. Additionally, during the year ended December 31, 2019 we completed a legal entity reorganization that reduced the number of our German subsidiaries. This reorganization allowed us to reverse a valuation allowance on the net operating loss carryforward deferred tax asset of one of the surviving German entities resulting in an increase to the deferred tax asset, net of a provision for related uncertain tax position, of $1.5 million. Management believes the remaining deferred tax assets, based largely on the history of U.S. tax losses, warrant a valuation allowance based on the weight of available negative evidence.

For U.S. federal and state income tax purposes at December 31, 2020, we had tax credit carryforwards of $48.6 million, which will expire between 2021 and 2040, and net operating loss carryforwards of $719.9 million, the majority of which will expire between 2021 and 2037.
The federal net operating loss and tax credit amounts are subject to annual limitations under Section 382 change of ownership rules of the Internal Revenue Code. We completed an assessment at December 31, 2020 regarding whether there may have been a

Section 382 ownership change and concluded that it is more likely than not that none of our net operating loss and tax credit amounts are subject to any Section 382 limitation.

Additionally, we have foreign net operating loss carryforwards of $107.0 million and capital loss carryforwards of $1.6 million, each with an indefinite carryforward period and tax credit carryforwards of $6.2 million that begin to expire in 2030. We have determined there is uncertainty regarding the realization of a portion of these assets and have recorded a valuation allowance against $63.8 million of net operating losses, $1.6 million of capital losses and $6.2 million of tax credits at December 31, 2020.

Our assessment of the valuation allowance on the U.S. and foreign deferred tax assets could change in the future based on our levels of pre-tax income and other tax related adjustments. Reversal of the valuation allowance in whole or in part would result in a non-cash reduction in income tax expense during the period of reversal.

The following table sets forth a reconciliation of our income tax provision (benefit) to the statutory U.S. federal tax amount for the years ended December 31, 2020, 2019, and 2018:

	Year Ended December 31,		
	2020	**2019**	**2018**
Statutory tax	$ 2,611	$ 530	$ (1,975)
Tax credits utilized and expired	1,356	815	1,277
Foreign operations	981	921	1,854
Change in uncertain tax positions	(474)	11,185	58
Non-deductible expenses and other	425	2,474	301
Change in valuation allowance	(3,527)	(21,001)	(244)
Provision for (benefit from) income taxes	$ 1,372	$ (5,076)	$ 1,271

The increase in our statutory tax is driven by the increase in our income from operations before taxes. The change in our tax credits is driven by expiring U.S. research and development tax credits exceeding current year tax credits generated. Changes in the jurisdictional mix of our foreign profitability drives the change in the taxes on foreign operations. The changes in our uncertain tax positions relates to the 2020 settlement of an audit issue in our Israel subsidiary and in 2019 to our German net operating loss carryforward. As noted above, the deferred tax asset recorded for the German net operating loss carryforward is recorded net of this uncertain tax position. The changes in our non-deductible expenses was primarily driven by compensation deduction limitations under Internal Revenue Code section 162(m) in both 2020 and 2019. The 2020 decrease in our valuation allowance was primarily driven by the decrease of U.S. deferred tax assets and in 2019 by reversal of valuation allowances on our foreign net operating loss carryforwards. In 2019, we have determined that our Irish subsidiary has reached a level of sustained profitability sufficient enough to release a significant portion of the valuation allowance on its net operating loss carryforward. Accordingly, we recorded a $6.0 million benefit related to a valuation allowance against the Irish subsidiary net operating loss carryforward deferred tax asset. Additionally, the reorganization of our German subsidiaries allowed us to reverse a valuation allowance on the net operating loss carryforward deferred tax asset of one of the surviving German entities. We recorded a gross benefit of $12.6 million for this release and correspondingly recorded an $11.1 million charge for a related uncertain tax position resulting in a net benefit of $1.5 million.

As a result of TCJA and the current U.S. taxation of deemed repatriated earnings, the additional taxes that might be payable upon repatriation of foreign earnings are not significant. However, we do not have any current plans to repatriate these earnings because the underlying cash will be used to fund the ongoing operations of the foreign subsidiaries.

A tax position must be more likely than not to be sustained before being recognized in the financial statements. It also requires the accrual of interest and penalties as applicable on unrecognized tax positions. At December 31, 2018 and 2019, our unrecognized tax benefits and related accrued interest and penalties related to an audit issue at our subsidiary in Israel in the amount of $1.8 million, of which $1.8 million would affect our income tax provision and effective tax rate if recognized. Additionally, during 2019 we had an increase in our unrecognized tax positions of $11.1 million related to our German subsidiary net operating loss carryforward; this increase relates to the German subsidiary's legal entity reorganization mentioned above. During 2020, we reversed the accrual for the unrecognized tax position related to the audit issue at our subsidiary in Israel due to the settlement of the issue. The total decreases to the value of our unrecognized tax benefits during 2020, including the impacts of any foreign currency revaluations, were $(0.8) million. The balance of the unrecognized benefit at December 31,2020 relates only to the unrecognized tax position related to our German subsidiary net operating loss carryforward.

The following table sets forth a reconciliation of the beginning and ending amounts of unrecognized tax benefits for the years ended December 31, 2020, 2019, and 2018 (in thousands):

Unrecognized tax benefits at January 1, 2018	$	1,841
Decreases for tax positions taken during a prior period		(78)
Unrecognized tax benefits at December 31, 2018		1,763
Increases for tax positions taken during a prior period		11,248
Unrecognized tax benefits at December 31, 2019		13,011
Decreases for tax positions taken during a prior period		(818)
Unrecognized tax benefits at December 31, 2020	$	12,193

We recognize interest and penalties related to uncertain tax positions in income tax expense. Accrued interest and penalties related to uncertain tax positions at December 31, 2020 and 2019 were $0 million and $0.4 million, respectively.

The tax years 2010 and forward remain open to examination by taxing authorities in the jurisdictions in which we operate. The most significant operating jurisdictions include: the United States, Ireland, the Netherlands, Germany, Israel, Japan, and the United Kingdom.

O. RESTRUCTURING COSTS AND ACCRUALS

2016 Restructuring Plan

In February 2016, we committed to a restructuring plan that encompassed a series of measures intended to allow us to more efficiently operate in a leaner, more directed cost structure. These included reductions in our workforce, consolidation of facilities, transfers of certain business processes to lower cost regions, and reductions in other third-party services costs.

During the year ended December 31, 2019, we recorded restructuring costs of $0.6 million. The restructuring charges for the year ended December 31, 2019 included $0.6 million of severance costs related to approximately 54 positions eliminated during 2019.

During the year ended December 31, 2018, we recorded restructuring costs of $5.1 million. The restructuring charges for the year ended December 31, 2018 included $3.6 million for the severance costs related to approximately 84 positions eliminated during 2018 and the first quarter of 2019, recoveries of $(0.1) million of facility restructuring accrual adjustments, and $1.1 million of leasehold improvement write-off resulting from the consolidation of our facilities in Burlington, Massachusetts.

2020 Restructuring Plan

In October 2020, we committed to a restructuring plan in order to undergo a strategic reorganization of our business. We are making significant changes in business operations to better support our strategy and overall performance.

During the year ended December 31, 2020, we recorded restructuring costs of $5 million. The restructuring charges for the year ended December 31, 2020 were a result of severance costs related to approximately 93 positions eliminated during 2020.

Restructuring Summary

The following table sets forth restructuring expenses recognized for the years ended December 31, 2020, 2019, and 2018 (in thousands):

	Year Ended December 31,		
	2020	**2019**	**2018**
Employee	$ 4,949	$ 599	$ 3,641
Facility	97	5	(104)
Total facility and employee charges	5,046	604	3,537
Other	—	25	1,611
Total restructuring charges, net	$ 5,046	$ 629	$ 5,148

The following table sets forth the activity in the restructuring accruals for the years ended December 31, 2020, 2019, and 2018 (in thousands).

	Employee-Related	**Facilities-Related**	**Total**
Accrual balance at December 31, 2017	$ 1,998	$ 2,479	$ 4,477
Restructuring charges and revisions	3,641	(104)	3,537
Accretion	—	103	103
Cash payments	(3,099)	(2,159)	(5,258)
Foreign exchange impact on ending balance	1	(1)	—
Accrual balance at December 31, 2018	$ 2,541	$ 318	$ 2,859
Restructuring charges and revisions	599	—	599
Accretion	—	—	—
Cash payments	(2,964)	—	(2,964)
Foreign exchange impact on ending balance	(21)	—	(21)
Effect of adoption of ASC 842	—	(318)	(318)
Accrual balance at December 31, 2019	$ 155	$ —	$ 155
Restructuring charges and revisions	4,949	—	4,949
Accretion	—	—	—
Cash payments	(1,461)	—	(1,461)
Foreign exchange impact on ending balance	44	—	44
Accrual balance at December 31, 2020	3,687	—	3,687
Less: current portion	3,687	—	3,687
Long-term accrual balance as of December 31, 2020	$ —	$ —	$ —

The employee-related accruals at December 31, 2020 represent severance costs to former employees that will be paid out within 12 months, and are, therefore, included in the caption “accrued expenses and other current liabilities” in our consolidated balance sheets.

P. REVENUE

Revenue Components and Performance Obligations

Video Products and Solutions

We offer a wide range of video products and solutions in connection with our sales of storage and workflow solutions, our media management solutions, and our video creative tools, which include our Media Composer, NEXIS, Airspeed, Maestro, and MediaCentral product lines that consist of software licenses or integrated hardware and software solutions. We sell these products to customers under a contract or signed quote and payment terms are generally 30 to 60 days from delivery. Each individual product sold to a customer represents a distinct performance obligation for us and revenue is recognized at the point in time when control of the product transfers, which is typically when the product is shipped to the customer or, in the case of certain software licenses, when the software license term commences and is accessible by the customer.

Audio Products and Solutions

We offer a wide range of audio products and solutions in connection with our sales of digital audio software and workstation solutions and our control surfaces, consoles and live-sound systems, which include our Pro Tools, Pro Tools HD, Pro Tools | S6, VENUE | S6L, and Sibelius product lines that consist of software licenses or integrated hardware and software solutions. We sell these products to customers under a contract or signed quote and payment terms are generally 30 to 60 days from delivery. Each individual product sold to a customer represents a distinct performance obligation for us and revenue is recognized at the point in time when control of the product transfers, which is typically when the product is shipped to the customer or, in the case of certain software licenses, when the software license term commences and is accessible by the customer.

Subscription Services

We offer subscription versions of many of our software products with monthly, annual and multi-year terms. While we are beginning to offer subscription versions for most of our product portfolio in connection with our cloud strategy, current subscription sales primarily consist of our Media Composer, Pro Tools, and Sibelius offerings. We sell these products to customers under standard terms and conditions and payment is due upfront, except for webstore transactions which are billed monthly. Contract assets for annual and multi-year subscriptions billed monthly are recorded on our balance sheet upon customer commitment, net of expected early cancellations where we estimate variable consideration based on historical experience. Subscription services have several performance obligations, including a right to use the software and stand-ready performance obligations to (i) provide unspecified bug fixes and software enhancements, or Software Updates, and (ii) call support when and if needed. The estimated SSP of the right to use the licensed software is recognized at a point in time once control has been transferred and the customer has the ability to access the software. Stand-ready performance obligations related to Software Updates and call support are satisfied over time and revenue is recognized ratably over the term of the subscription.

Support Services

We offer support contracts, which are typically annual, for our video and audio products. Support contracts for individual products are sold bundled with initial product offerings or as renewals once initial contracts have lapsed. Support contracts are also sold on an enterprise basis where a customer purchases support for all Avid products owned. Support contracts are provided under our standard terms and conditions and payment is due in advance of the support being provided. Support contracts include stand-ready performance obligations to provide (i) Software Updates, (ii) call support, and (iii) hardware maintenance. Support contract performance obligations are satisfied over time and revenue is recognized ratably over the term of the support contract.

Historically, for many of our products, we had an ongoing practice of making when-and-if-available Software Updates available to customers free of charge for a period of time after initial sales to customers. The expectation created by this practice represents an implied performance obligation of a form of post-contract customer support (“Implied Maintenance Release PCS”) which represents a performance obligation. While we have ceased providing Implied Maintenance Release PCS on new product offerings, we continue to provide Implied Maintenance Release PCS for older products that were predominately sold in prior years. Revenue attributable to Implied Maintenance Release PCS performance obligations is recognized over time on a ratable basis over the period that Implied Maintenance Release PCS is expected to be provided, which is typically six years.

Professional Services, Training, and Other

We sell a variety of professional services, training, and other services that complement product and support offerings. Professional services consist primarily of standard configuration, commissioning (i.e., setting up equipment purchased) and on-air support (i.e., monitoring a customer's production environment available during initial system go-live, live sporting events, etc.) and providing customization services for some of our products. We also offer training and certification programs for many of our products and workflows. Other revenues include shipping and handling charges and reimbursable travel expenses. We sell professional services, training and other services under a contract or signed quote, and for larger projects, statements of work that outline the customer's specifications and requirements. Services are primarily sold on a time and materials basis, however, fixed fee arrangements are also executed from time to time. Payments are generally billed upon completion of the service or, for larger projects, on an installment basis as services are rendered. While the nature of service deliverables can vary significantly, each service deliverable generally represents a distinct performance obligation and revenue is recognized over time, typically in proportion of the total hours incurred as a percentage of total estimated hours required to complete the project.

Enterprise Agreements

From time to time, we enter into enterprise wide agreements whereby the customer agrees to purchase specified products and services from us over an extended period of time, often for a single fixed contractual price. For such agreements, management identifies each performance obligation in the contract and allocates the total contract price to each performance obligation based on relative estimated SSP. Once the transaction price is allocated to individual performance obligations, the components are recognized in the respective categories of revenue above consistent with the timing of the recognition of performance obligations described therein.

Disaggregated Revenue and Geography Information

The following is a summary of our revenues by type for the years ended December 31, 2020, 2019, and 2018 (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Video products and solutions net revenues	$ 77,232	$ 131,225	$ 132,276
Audio products and solutions net revenues	63,530	76,220	72,831
Products and solutions net revenues	140,762	207,445	205,107
Subscription services	72,831	45,181	35,888
Support services	124,175	130,443	139,205
Professional services, training and other services	22,698	28,719	33,082
Services net revenues	219,704	204,343	208,175
Total net revenues	$ 360,466	$ 411,788	$ 413,282

The following table sets forth our revenues by geographic region for the years ended December 31, 2020, 2019, and 2018 (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Revenues:			
United States	$ 143,518	$ 152,012	$ 150,877
Other Americas	24,026	32,783	27,494
Europe, Middle East and Africa	142,370	161,764	172,238
Asia-Pacific	50,552	65,229	62,673
Total net revenues	$ 360,466	$ 411,788	$ 413,282

Contract Asset

Contract asset activity for the years ended December 31, 2020 and 2019 was as follows (in thousands):

		December 31, 2020		December 31, 2019
Contract asset at January 1, 2020	$	19,494	$	16,513
Revenue in excess of billings		32,005		30,715
Customer billings		(32,920)		(27,734)
Contract asset at December 31, 2020	$	18,579	$	19,494

The decrease in contract assets during the year ended December 31, 2020 is due to the timing of payments due under our enterprise network agreements which predominately are payable annually, whereas performance obligations are fulfilled on a continuous basis partially offset by continued growth in our subscription offerings.

Deferred Revenue

Deferred revenue activity for the years ended December 31, 2020 and 2019 was as follows (in thousands):

		December 31, 2020		December 31, 2019
Deferred revenue at January 1, 2020	$	97,901	$	99,601
Billings deferred		72,633		76,665
Recognition of prior deferred revenue		(71,276)		(78,365)
Deferred revenue at December 31, 2020	$	99,258	$	97,901

A summary of the performance obligations included in deferred revenue as of December 31, 2020 is as follows (in thousands):

		December 31, 2020
Product	$	6,636
Subscription		5,736
Support Contracts		75,555
Implied Maintenance Release PCS		8,426
Professional services, training and other		2,905
Deferred revenue at December 31, 2020	$	99,258

Remaining Performance Obligations

For transaction prices allocated to remaining performance obligations, we apply practical expedients and do not disclose quantitative or qualitative information for remaining performance obligations (i) that have original expected durations of one year or less and (ii) where we recognize revenue equal to what we have the right to invoice and that amount corresponds directly with the value to the customer of our performance to date.

We have remaining performance obligations of $8.4 million attributable to Implied Maintenance Release PCS recorded in deferred revenue as of December 31, 2020. We expect to recognize revenue for these remaining performance obligations of $3.4 million, $2.1 million, $1.4 million, $0.9 million, and $0.5 million for the years ended December 31, 2021, 2022, 2023, 2024, and 2025, respectively, and $0.1 million thereafter.

As of December 31, 2020, we had approximately $46.2 million of transaction price allocated to remaining performance obligations for certain enterprise agreements that have not yet been invoiced and are therefore not recorded as deferred revenue on our balance sheet. Unbilled remaining performance obligations represent obligations we have to deliver for specific products and services in the future where there is not yet an enforceable right to invoice the customer. Our unbilled remaining performance obligations do not include contractually committed minimum purchases that are common in our strategic purchase agreements with resellers since our specific obligations to deliver products or services is not yet known, as customers may satisfy such commitments by purchasing an unknown combination of current or future product offerings. While the timing of fulfilling individual performance obligations under the contracts can vary dramatically based on customer requirements, we expect to recognize the $53.3 million in installments through 2026.

Remaining performance obligation estimates are subject to change and are affected by several factors, including terminations due to contract breach, contract amendments and changes in the expected timing of delivery.

Q. LONG-TERM DEBT AND CREDIT AGREEMENT

Long-term debt consisted of the following (in thousands):

	December 31, 2020	December 31, 2019
Term loan, net of unamortized debt issuance costs of $2,579 at December 31, 2020 and $3,334 at December 31, 2019, respectively	$ 198,629	$ 200,105
Notes, net of unamortized original issue discount and debt issuance costs of $0 at December 31, 2020 and $680 at December 31, 2019, respectively	—	28,187
PPP Loan	7,800	—
Other long-term debt	1,271	1,296
Total debt	207,700	229,588
Less: current portion	4,941	30,554
Total long-term debt	$ 202,759	$ 199,034

The following table summarizes the maturities of our borrowing obligations as of December 31, 2020 (in thousands):

Fiscal Year	Term Loan	PPP Loan	Other Long-Term Debt	Total
2021	$ 4,781	$ —	$ 160	$ 4,941
2022	6,375	7,800	172	14,347
2023	190,052	—	184	190,236
2024	—	—	197	197
2025	—	—	212	212
Thereafter	—	—	346	346
Total before unamortized discount	201,208	7,800	1,271	210,279
Less: unamortized discount and issuance costs	2,579	—	—	2,579
Less: current portion of long-term debt	4,781	—	160	4,941
Total long-term debt	$ 193,848	$ 7,800	$ 1,111	$ 202,759

2.00% Convertible Senior Notes due 2020

On June 15, 2015, we issued $125.0 million aggregate principal amount of our 2.00% Convertible Senior Notes, or the Notes, due 2020 in an offering conducted in accordance with Rule 144A under the Securities Act of 1933. The net proceeds from the offering were $120.3 million after deducting the offering expenses.

Interest accrued on the Notes at an annual rate of 2.00%, payable semi-annually on June 15 and December 15 of each year. Additional interest was payable upon the occurrence of certain events of default relating to our failure to deliver certain documents or reports to the Trustee, our failure to timely file any document or report required pursuant to Section 13 or 15(d) of the Exchange Act, or if the Notes were not freely tradable as of one year after the last date of original issuance of the Notes. The Notes were convertible into cash, shares of our common stock, or a combination of cash and shares of common stock, at our election, based on an initial conversion rate, subject to adjustment, of 45.5840 shares per $1,000 principal amount of Notes, which is equal to an initial conversion price of $21.94 per share. Prior to December 15, 2019, the Notes were convertible only in the following circumstances: (1) during any calendar quarter commencing after September 30, 2015, if the last reported sale price of our common stock is greater than or equal to 130% of the applicable conversion price for at least 20 trading days during a period of 30 consecutive trading days ending on the last trading day of the preceding calendar quarter; (2) during the five business day period after any five consecutive trading day period (the “Measurement Period”) in which the trading price per $1,000 principal amount of Notes for each trading day in the Measurement Period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate on such trading day; or (3) upon the occurrence of specified corporate transactions. On or after December 15, 2019 until the close of business on the second scheduled trading day immediately preceding the maturity date, holders had the right to convert their Notes at any time, regardless of the foregoing circumstances. We were not permitted to redeem the Notes prior to their maturity.

The Notes were senior unsecured obligations. Upon the occurrence of certain specified fundamental changes, the holders had the right to require us to repurchase all or a portion of the Notes for cash at 100% of the principal amount of the Notes being purchased, plus any accrued and unpaid interest.

In accounting for the Notes at issuance, we allocated proceeds from the Notes into debt and equity components according to the accounting standards for convertible debt instruments that may be fully or partially settled in cash upon conversion. The initial carrying amount of the debt component, which approximates its fair value, was estimated by using an interest rate for nonconvertible debt, with terms similar to the Notes. The excess of the principal amount of the Notes over the fair value of the debt component was recorded as a debt discount and a corresponding increase in additional paid-in capital. The debt discount is accreted to the carrying value of the Notes over their term as interest expense using the interest method. Upon issuance of the Notes, we recorded $96.7 million as debt and $28.3 million as additional paid-in capital in stockholders’ equity. The effective interest rate used to estimate the fair value of the debt was 7.66%.

We incurred transaction costs of $4.7 million relating to the issuance of the Notes. In accounting for these costs, we allocated the costs of the offering between debt and equity in proportion to the fair value of the debt and equity recognized. The transaction costs allocated to the debt component of approximately $3.6 million were recorded as a direct deduction from the face amount of the Notes and are being amortized as interest expense over the term of the Notes using the interest method. The transaction costs allocated to the equity component of approximately $1.1 million were recorded as a decrease in additional paid-in capital.

During 2017, we purchased 2,000 of our 125,000 outstanding Notes and settled $2.0 million of the Notes for $1.7 million in cash. We recorded $2.0 million extinguishment of debt, an immaterial amount of equity reacquisition, and an immaterial loss on the extinguishment of debt.

During 2018, we purchased an additional 16,247 of our 123,000 outstanding Notes and settled another $16.2 million of the Notes for $14.7 million in cash. We recorded $16.2 million extinguishment of debt, an immaterial amount of equity reacquisition, and an immaterial gain on the extinguishment of debt.

On January 22, 2019, we purchased an additional 3,900 of our 106,753 outstanding Notes and settled another $3.9 million of the Notes for $3.6 million in cash.

On April 11, 2019, we announced the commencement of a cash tender offer (the “Offer”) for any and all of our outstanding Notes. On May 9, 2019, as of the expiration of the Offer, Notes with an aggregate principal amount of $74.0 million were validly tendered. We accepted for purchase all Notes that were validly tendered at the expiration of the Offer at a purchase price equal to $982.5 per $1,000 principal amount of Notes, and settled the Offer on May 13, 2019 for $72.7 million in cash. We repurchased 73,986 Notes, recorded $74.0 million extinguishment of debt, $0.6 million of equity reacquisition, and a $2.9 million loss on the extinguishment of debt. In connection with the Offer, the number of options under the Capped Call was reduced to 28,867 to mirror the remaining principal outstanding for the Notes, and an immaterial partial unwind cash payment was received in May 2019.

On June, 15, 2020, the maturity date of the Notes, we fully repaid the outstanding principal and unpaid interest on the Notes. In connection with such repayment, we unwound the Capped Call.

For the years ended December 31, 2020 and 2019, we recorded debt discount accretion of $0.7 million and $3.3 million, respectively, as interest expense in our statement of operations. Total interest expense for the years ended December 31, 2020 and 2019 was $0.9 million and $4.4 million, respectively, reflecting the coupon and accretion of the discount.

Capped Call Transaction

In connection with the offering of the Notes, on June 9, 2015, we entered into a capped call derivative transaction with a third party (the “Capped Call”). The Capped Call was designed generally to reduce the potential dilution to the common stock and/or offset any cash payments we may have been required to make in excess of the principal amount upon conversion of the Notes in the event that the market price per share of the common stock is greater than the strike price of the Capped Call. The Capped Call had a strike price of $21.94 and a cap price of $26.00 and was exercisable by us when and if the Notes were converted. We paid $10.1 million for the Capped Call and recorded the payment as a decrease to additional paid-in capital.

In connection with the repurchase of 96,133 of the Notes in 2017, 2018, and 2019, we entered into partial unwind agreements with the third party, as a result of which the number of options under the original Capped Call transaction was reduced from 125,000 to 28,867. The capped call expired on June 15, 2020.

Financing Agreement

On February 26, 2016, we entered into a Financing Agreement (the “Financing Agreement”) with Cerberus Business Finance, LLC, as collateral and administrative agent, and the lenders party thereto (the “Lenders”). The Lenders agreed to provide us with (a) a term loan in the aggregate principal amount of $100.0 million (the “Term Loan”) and (b) a revolving credit facility (the “Credit Facility”) of up to a maximum of $5.0 million in borrowings outstanding at any time. We granted a security interest on substantially all of our assets to secure the obligations under the Credit Facility and the Term Loan. We were permitted to prepay all or any portion of the Term Loan prior to its stated maturity, subject to the payment of certain fees based on the amount repaid. The Term Loan also required us to use 50% of excess cash, as defined in the Financing Agreement, to repay outstanding principal of the loans under the Financing Agreement. The Financing Agreement contained customary representations and warranties, covenants, mandatory prepayments, and events of default under which our payment obligations would have been be accelerated. We were in compliance with the Financing Agreement covenants as of December 31, 2020.

On November 9, 2017, we entered into an amendment to the Financing Agreement. The amendment extended an additional $15.0 million term loan to us, thereby increasing the aggregate principal amount of the Term Loan to $115.0 million. The amendment also increased the amount of available revolving credit by $5.0 million to an aggregate amount of $10.0 million. The amendment also granted us the ability to use up to $15.0 million to purchase Notes and modified the definition of consolidated EBITDA used in the Leverage Ratio calculation to adjust for expected changes in deferred revenue due to the adoption of ASC 606.

On May 10, 2018, we entered into an amendment to the Financing Agreement that extended the maturity of the Financing Agreement to May 2023, and increased the Term Loan by $22.7 million and the amount available under the Credit Facility by $12.5 million to an aggregate amount of $22.5 million.

On April 8, 2019, we entered into an amendment to the Financing Agreement. The amendment provided for an additional delayed draw term loan commitment in the aggregate principal amount of $100.0 million, or the Delayed Draw Funds, for the purpose of funding the purchase of a portion of the Notes in a tender offer. On May 2, 2019, we received the Delayed Draw Funds under the Financing Agreement. We used $72.7 million of the Delayed Draw Funds for the purchase of a portion of the Notes, $0.6 million for the Notes interest payment, and $6.0 million for the payment of refinancing fees. On June 18, 2019, we repaid $20.7 million of the Delayed Draw Funds. The $79.3 million Delayed Draw Funds borrowed would have matured on May 10, 2023 under the Financing Agreement.

The Financing Agreement amendment effective April 8, 2019 was accounted for as a debt modification, and therefore, $1.6 million of the refinancing fees paid directly to the Lenders was recorded as deferred debt issuance costs, and $4.4 million of the refinancing fees paid to the third parties was expensed.

The Company drew down $22.0 million under the Credit Facility during March 2020. During September 2020, we repaid the outstanding balance of $22.0 million under the Credit Facility, and as of December 31, 2020 there were no amounts outstanding under the Credit Facility. We recognized $0.8 million of interest related to the Facility during the year ended December 31, 2020. We recorded $16.2 million of interest expense on the Term Loan for the year ended December 31, 2020.

As a subsequent event, all borrowings under the Financing Agreement were repaid in full and the Financing Agreement was terminated on January 5, 2021 in connection with the Company entering into the Credit Agreement.

Credit Agreement

On January 5, 2021 the Company entered into Credit Agreement (the "Credit Agreement") with JPMorgan Chase Bank, N.A. and a syndicate of banks, as collateral and administrative agent, and the lenders party thereto (the "New Lenders"). Pursuant to the Credit Agreement, the New Lenders agreed to provide the Company with (a) a term loan in the aggregate principal amount of $180 million (the "New Term Loan") and (b) a revolving credit facility (the "New Credit Facility") of up to a maximum of $70 million in borrowings outstanding at any time. The proceeds from the New Term Loan, plus available cash on hand, were used to repay outstanding borrowings of $201 million under the Company's existing credit facility with Cerberus Business Finance, LLC, which was then terminated. The new revolving credit facility, which was undrawn at closing, can be used for working capital, other general corporate purposes and for other permitted uses.

The New Term Loan has an initial interest rate of LIBOR plus an applicable margin of 3.00%, with a 0.25% LIBOR floor. The applicable margin on the term loan and the revolving credit facility ranges from 2.00% to 3.25%, depending on leverage.

The New Term Loan requires quarterly principal payments commencing in March 2021 equal to 5.0% of the original principal amount of the New Term Loan in years 1 and 2, 7.5% of the original principal amount of the New Term Loan in year 3, and 10% of the original principal amount of the New Term Loan in years 4 and 5, with the remaining aggregate principal amount due at maturity.

The Company granted a security interest on substantially all of their assets to secure the obligations under the New Credit Facility and the New Term Loan.

The Credit Agreement contains two financial covenants: (i) a requirement to maintain a total net leverage ratio, as defined in the credit agreement, of no more than 4.00 to 1.00 through June 30, 2021, with step downs thereafter, and (ii) a requirement to maintain a fixed charge covenant ratio, as defined in the credit agreement, of no less than 1.20 to 1.00. Both the New Term Loan and the revolving New Credit Facility mature on January 5, 2026.

PPP Loan

On May 11, 2020, the Company received $7.8 million of proceeds in connection with its incurrence of a loan under the PPP which was created through the Coronavirus Aid, Relief, and Economic Act ("CARES Act") and is administered by the U.S. Small Business Administration ("SBA"). The application for these funds requires the Company to, in good faith, certify that the current economic uncertainty made the loan request necessary to support the ongoing operations of the Company. This certification further requires the Company to take into account our current business activity and our ability to access other sources of liquidity sufficient to support ongoing operations in a manner that is not significantly detrimental to the business. The receipt of these funds, and the forgiveness of the loan attendant to these funds, is dependent on the Company having initially qualified for the loan and qualifying for the forgiveness of such loan based on our future adherence to the forgiveness criteria. The loan has a fixed interest rate of 1% and matures in two years. Interest payments are deferred for six months. We recognized an immaterial amount of interest expense related to the loan during the year ended December 31, 2020.

Pursuant to the CARES Act and implementing rules and regulations, the Company has applied to the SBA for the PPP loan to be forgiven. The Company has used the proceeds of the PPP loan for purposes consistent with the PPP. While the Company currently believes that its use of the loan proceeds will meet the conditions for forgiveness of the loan, the Company cannot assure that it will be eligible for forgiveness of the loan, in whole or in part. Any PPP loan balance remaining following forgiveness by the SBA will be fully repaid on or before the maturity date of the loan.

R. QUARTERLY RESULTS (UNAUDITED)

The following information has been derived from unaudited consolidated financial statements that, in the opinion of management, include all normal recurring adjustments necessary for a fair presentation of such information.

(In thousands, except per share data)	Quarter Ended							
	2020				2019			
	Dec. 31	Sept. 30	June 30	Mar. 31	Dec. 31	Sept. 30	June 30	Mar. 31
Net revenues	$ 104,301	$ 90,431	$ 79,281	$ 86,453	$ 116,306	$ 93,461	$ 98,701	$ 103,319
Cost of revenues	38,951	32,174	27,719	33,302	43,033	35,603	40,253	40,087
Amortization of intangible assets	—	—	—	—	—	—	1,788	1,950
Gross profit	65,350	58,257	51,562	53,151	73,273	57,858	56,660	61,282
Operating expenses:								
Research and development	14,902	13,623	13,068	15,425	16,018	14,860	15,180	16,285
Marketing and selling	22,660	19,998	19,690	25,289	26,603	22,334	26,129	24,878
General and administrative	12,908	10,796	10,604	12,744	14,816	12,034	12,722	13,788
Amortization of intangible assets	—	—	—	—	—	—	331	363
Restructuring costs (recoveries), net	4,038	723	140	145	113	229	(269)	558
Total operating expenses	54,508	45,140	43,502	53,603	57,550	49,457	54,093	55,872
Operating income (loss)	10,842	13,117	8,060	(452)	15,723	8,401	2,567	5,410
Interest and other expense, net	(3,929)	(4,423)	(5,498)	(5,283)	(5,584)	(5,519)	(13,290)	(5,185)
Income (loss) before income taxes	6,913	8,694	2,562	(5,735)	10,139	2,882	(10,723)	225
Provision for (benefit from) income taxes	(174)	707	717	122	(5,231)	(283)	—	438
Net income (loss)	$ 7,087	$ 7,987	$ 1,845	$ (5,857)	$ 15,370	$ 3,165	$ (10,723)	$ (213)
Net income (loss) per share – basic	$ 0.16	$ 0.18	$ 0.04	$ (0.14)	$ 0.36	$ 0.07	$ (0.25)	$ (0.01)
Net income (loss) per share – diluted	$ 0.16	$ 0.18	$ 0.04	$ (0.13)	$ 0.35	$ 0.07	$ (0.25)	$ (0.01)
Weighted-average common shares outstanding – basic	44,288	44,019	43,719	43,254	43,060	42,913	42,560	42,046
Weighted-average common shares outstanding – diluted	45,541	44,758	44,180	44,101	43,737	43,674	42,560	42,046

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not Applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, with the participation and supervision of our Chief Executive Officer and Chief Financial Officer, is responsible for our disclosure controls and procedures pursuant to Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Disclosure controls and procedures are controls and other procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified under SEC rules and forms. Disclosure controls and procedures include controls and procedures designed to ensure that information required to be disclosed in our reports filed under the Exchange Act is accumulated and communicated to our principal executive officer and our principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Our management, including the Chief Executive Officer and the Chief Financial Officer, carried out an evaluation of the effectiveness of our disclosure controls and procedures as of December 31, 2020. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on this evaluation, our management concluded that, as of December 31, 2020, these disclosure controls and procedures were effective at a reasonable level of assurance.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rule 13a-15(f) under the Exchange Act. 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 GAAP and includes those policies and procedures that:

(1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets;

(2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and

(3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of inherent limitations, no matter how well designed and operated, internal control over financial reporting may not prevent or detect misstatements and can only provide reasonable assurance of achieving the desired control objectives. In addition, the design of internal control over financial reporting must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Our Chief Executive Officer and Chief Financial Officer have performed an evaluation of our internal control over financial reporting under the framework in Internal Control-Integrated Framework (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission. The objective of this assessment was to determine whether our internal control over financial reporting was effective at December 31, 2020. Based on the results of this evaluation, we have concluded that our internal control over financial reporting was effective at December 31, 2020.

Our independent registered public accounting firm, BDO USA, LLP, has audited our consolidated financial statements and has issued an attestation report on our internal control over financial reporting as of December 31, 2020, which report is included herein.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended December 31, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitation on the Effectiveness of Internal Controls

The effectiveness of any system of internal control over financial reporting is subject to inherent limitations, including the exercise of judgment in designing, implementing, operating, and evaluating the controls and procedures, and the inability to eliminate misconduct completely. Accordingly, any system of internal control over financial reporting can only provide reasonable, not absolute, assurances. In addition, 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. We intend to continue to monitor and upgrade our internal controls as necessary or appropriate for our business, but cannot assure that such improvements will be sufficient to provide us with effective internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Stockholders and Board of Directors
Avid Technology, Inc.
Burlington, Massachusetts

Opinion on Internal Control over Financial Reporting

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

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of the Company as of December 31, 2020 and 2019, the related consolidated statements of operations and comprehensive income (loss), stockholders' deficit, and cash flows for each of the three years in the period ended December 31, 2020, and the related notes and our report dated March 9, 2021 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Item 9A, "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 U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit of internal control over financial reporting 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, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included 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/ BDO USA, LLP
Boston, Massachusetts
March 9, 2021

ITEM 9B. OTHER INFORMATION

Not Applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

We have adopted a Code of Business Conduct and Ethics applicable to all our employees, including our principal executive officer, principal financial officer, and principal accounting officer. We will provide any person, without charge, with a copy of our Code of Business Conduct and Ethics upon written request to Avid, 75 Network Drive, Burlington, MA 01803, Attention: Corporate Secretary. Our Code of Business Conduct and Ethics is also available in the Investor Relations section of our website at www.avid.com. If we were to amend or waive any provision of our Code of Business Conduct and Ethics applicable to any of our principal executive officers, our principal financial officer, our principal accounting officer, or any person performing similar functions, we intend to satisfy our disclosure obligations with respect to any such waiver or amendment by posting such information on our Internet website set forth above rather than by filing a Form 8-K.

The remainder of the response to this item will be contained in our Proxy Statement for our 2021 Annual Meeting of Stockholders, or the 2021 Proxy Statement, under the captions “Directors,” “Executive Officers,” “Delinquent 16(a) Reports,” “Board Committees,” and “Director Nomination Process,” all of which is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

The response to this item will be contained in our 2021 Proxy Statement under the captions “Director Compensation,” “Executive Compensation,” “Compensation Committee Report,” and “Compensation Committee Interlocks and Insider Participation” and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The response to this item will be contained in our 2021 Proxy Statement under the caption “Security Ownership of Certain Beneficial Owners and Management” and is incorporated herein by reference.

The disclosures required for securities authorized for issuance under equity compensation plans will be contained in the 2021 Proxy Statement under the caption “Equity Compensation Plan Information” and are incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The response to this item will be contained in our 2021 Proxy Statement under the captions “Board Committees” and “Related Person Transaction Policy” and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The response to this item will be contained in our 2021 Proxy Statement under the caption “Independent Registered Public Accounting Firm Fees” and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) 1. FINANCIAL STATEMENTS

The following consolidated financial statements are included in Item 8:

- Reports of Independent Registered Public Accounting Firms
- Consolidated Statements of Operations for the years ended December 31, 2020, 2019, and 2018
- Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2020, 2019, and 2018
- Consolidated Balance Sheets as of December 31, 2020 and 2019
- Consolidated Statements of Stockholders' Deficit for the years ended December 31, 2020, 2019, and 2018
- Consolidated Statements of Cash Flows for the years ended December 31, 2020, 2019, and 2018
- Notes to Consolidated Financial Statements

(a) 3. LISTING OF EXHIBITS. The list of exhibits, which are filed or furnished with this report or are incorporated herein by reference, is set forth in the Exhibit Index immediately preceding the exhibits and is incorporated herein by reference.

EXHIBIT INDEX

Exhibit No.	Description	Filed with this Form 10-K	Incorporated by Reference		
			Form or Schedule	SEC Filing Date	SEC File Number
3.1	Certificate of Amendment of the Third Amended and Restated Certificate of Incorporation of the Registrant		8-K	July 27, 2005	000-21174
3.2	Third Amended and Restated Certificate of Incorporation of the Registrant		10-Q	November 14, 2005	000-21174
3.3	Amended and Restated By-Laws of the Registrant		8-K	October 21, 2011	000-21174
3.4	Amendment to Amended and Restated By-Laws of the Registrant		10-K	March 9, 2020	001-36254
4.1	Specimen Certificate representing the Registrant's Common Stock		S-1	March 11, 1993*	033-57796
4.2	Amended Certificate of Designations, Preferences and Rights of Series A Junior Participating Preferred Stock		8-K	January 7, 2014	000-21174
4.3	Description of Securities Registered Under Section 12 of the Securities Exchange Act of 1934		10-K	March 9, 2020	001-36254
10.1	Network Drive at Northwest Park Office Lease dated as of November 20, 2009 between Avid Technology, Inc. and Netview 5 and 6 LLC (for premises at 65 Network Drive, Burlington, Massachusetts)		8-K	November 25, 2009	000-21174
10.2	Network Drive at Northwest Park Office Lease dated as of November 20, 2009 between Avid Technology, Inc. and Netview 1,2,3,4 & 9 LLC (for premises at 75 Network Drive, Burlington, Massachusetts)		8-K	November 25, 2009	000-21174
#10.3	1993 Director Stock Option Plan, as amended		10-K	February 29, 2008	000-21174
#10.4	Second Amended and Restated 1996 Employee Stock Purchase Plan, as amended		10-K	March 16, 2010	000-21174
#10.5	Amendment No #2 to Second Amended and Restated 1996 Employee Stock Purchase Plan, as amended		10-K	September 12, 2014	001-36254
#10.6	1997 Stock Option Plan		10-K	March 27, 1998	000-21174
#10.7	1997 Stock Incentive Plan, as amended		10-Q	May 14, 1997	000-21174
#10.8	Second Amended and Restated Non-Qualified Deferred Compensation Plan		10-K	February 29, 2008	000-21174
#10.9	1998 Stock Option Plan		10-K	March 16, 2005	000-21174
#10.10	Amended and Restated 1999 Stock Option Plan		10-K	March 16, 2005	000-21174
#10.11	Amended and Restated 2005 Stock Incentive Plan		10-Q	August 7, 2008	000-21174
#10.12	Amendment No. 1 to Amended and Restated 2005 Stock Incentive Plan		10-K	September 12, 2014	001-36254
#10.13	Form of Incentive Stock Option Agreement under the Registrant's Amended and Restated 2005 Stock Incentive Plan		10-K	September 12, 2014	001-36254
#10.14	Form of Nonstatutory Stock Option Agreement under the Registrant's Amended and Restated 2005 Stock Incentive Plan		10-K	September 12, 2014	001-36254

#10.15	Form of Nonstatutory Stock Option Agreement for Outside Directors under the Registrant's Amended and Restated 2005 Stock Incentive Plan	8-K	July 8, 2008	000-21174
#10.16	Form of Restricted Stock Unit Agreement under the Registrant's Amended and Restated 2005 Stock Incentive Plan	8-K	July 8, 2008	000-21174
#10.17	Form of Restricted Stock Unit Agreement for Outside Directors under the Registrant's Amended and Restated 2005 Stock Incentive Plan	8-K	July 8, 2008	000-21174
#10.18	Form of Stock Option Agreement for UK Employees under the HM Revenue and Customs Approved Sub-Plan for UK Employees under the Registrant's Amended and Restated 2005 Stock Incentive Plan	8-K	July 8, 2008	000-21174
#10.19	Form of Nonstatutory Stock Option Grant Terms and Conditions (under the 1997 Stock Incentive Plan)	8-K	February 21, 2007	000-21174
#10.20	Form of Incentive Stock Option Grant Terms and Conditions (under the 1997 Stock Incentive Plan)	8-K	February 21, 2007	000-21174
#10.21	2014 Stock Incentive Plan	10-K	March 16, 2015	001-36254
#10.22	Form of Restricted Stock Unit Agreement under the Registrant's Amended and Restated 2014 Stock Incentive Plan	10-K	March 16, 2015	001-36254
#10.23	Form of NSO Agreement under the Registrant's 2014 Stock Incentive Plan	10-K	March 16, 2015	001-36254
#10.24	Form of ISO/NSO Agreement under the Registrant's 2014 Stock Incentive Plan	10-K	March 16, 2015	001-36254
#10.25	Form of Executive Officer Employment Letter as of January 1, 2012	10-K	February 29, 2012	000-21174
#10.26	Summary of 2013 Annual Executive Incentive Program	10-K	September 12, 2014	001-36254
#10.27	2013 Remediation Bonus Plan	8-K	July 25, 2013	000-21174
#10.28	Summary of 2014 Annual Executive Incentive Program	10-Q	September 23, 2014	001-36254
10.29	Agreement and Plan of Merger, dated as of April 12, 2015, by and among Orad Hi-Tech Solutions	8-K	April 13, 2015	001-36254
10.30	Form of Voting and Support Agreement between Avid Technology, Inc. and certain shareholders of Orad Hi-Tech Solutions Ltd.	8-K	April 13, 2015	001-36254
#10.31	Summary of Avid Technology, Inc.'s 2015 Executive Bonus Plan	10-Q	May 8, 2015	001-36254
10.32	Indenture, dated as of June 15, 2015, between Avid Technology, Inc. and Wells Fargo Bank, National Association (including the form of 2.00% Convertible Senior Notes due 2020)	8-K/A	June 16, 2015	001-36254
10.33	Base capped call transaction confirmation, dated as of June 9, 2015, by and between Jefferies International Limited and Avid Technology, Inc., in reference to the 2.00% Convertible Senior Notes due 2020	8-K/A	June 16, 2015	001-36254
#10.34	Second Amended and Restated 1996 Employee Stock Purchase Plan, as amended July 2015	10-Q	November 6, 2015	001-36254

10.35	Financing Agreement, dated February 26, 2016, among Avid Technology, Inc., the Lenders named therein	10-K	March 15, 2016	001-36254
10.36	Amendment No. 1 to Financing Agreement, dated February 26, 2016, among Avid Technology, Inc., the Lenders named therein	8-K	March 20, 2017	001-36254
10.37	Standstill Agreement, dated February 16, 2018, among Avid Technology, Inc., and Cove Street Capital, LLC	8-K	February 21, 2018	001-36254
10.38	Amendment No. 2 to Financing Agreement, dated February 26, 2016, among Avid Technology, Inc., the Lenders named therein	10-K	March 16, 2018	001-36254
10.39	Amendment No. 3 to Financing Agreement, dated February 26, 2016, among Avid Technology, Inc., the Lender named therein	10-K	March 16, 2018	001-36254
10.40	Amendment No. 4 to Financing Agreement, dated February 26, 2016, among Avid Technology, Inc., the Lender named therein	8-K	May 15, 2018	001-36254
10.41	Amendment No. 1 to Network Drive at Northwest Park Office Lease, dated as of December 3, 2018 between Avid Technology Inc. and Network Drive Owner LLC (for premises at 75 Network Drive, Burlington, Massachusetts)	8-K	December 7, 2018	001-36254
10.42	Amendment No. 1 to Network Drive at Northwest Park Office Lease, dated as of December 3, 2018 between Avid Technology Inc. and Network Drive Owner LLC (for premises at 65 Network Drive, Burlington, Massachusetts)	8-K	December 7, 2018	001-36254
10.43	Amendment No. 5 to Financing Agreement, dated April 8, 2019, among Avid Technology, Inc., the Lender named therein	8-K	April 11, 2019	001-36254
10.44	Paycheck Protection Note, dated May 7, 2020, in favor of Citizens Bank N.A.	8-K	May 7, 2020	001-35254
10.45	Amendment #1 to Employment Agreement between Avid Technology, Inc. and Jeff Rosica, Dated April 1, 2020	10-Q	May 7, 2020	001-35254
10.46	Amendment #1 to Employment Agreement between Avid Technology, Inc. and Kenneth Gayron, Dated April 1, 2020	10-Q	May 7, 2020	001-35254
10.47	Amendment #1 to Employment Agreement between Avid Technology, Inc. and Jason Duva, Dated April 1, 2020	10-Q	May 7, 2020	001-35254
10.48	Amendment to Contract of Employment between Avid Technology Europe Limited and Tom Cordiner Dated April 1, 2020	10-Q	May 7, 2020	001-35254
10.49	Amendment No. 7 to Financing Agreement, dated February 26, 2016, among Avid Technology, Inc. and the Lenders named therein.	8-K	May 19, 2020	001-36254
10.50	Credit Agreement, dated as of January 5, 2021, among Avid Technology, Inc., each of the lenders and financial institutions party thereto, and JPMorgan Chase Bank, N.A., as administrative agent.	8-K	January 5, 2021	001-36254

21	Subsidiaries of the Registrant	X
23.1	Consent of BDO USA, LLP	X
31.1	Certification of Principal Executive Officer pursuant to Rules 13a-14 and 15d-14 under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X
31.2	Certification of Principal Financial Officer pursuant to Rules 13a-14 and 15d-14 under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X
32.1	Certifications pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X
**101.INS	XBRL Instance Document	X
**101.SCH	XBRL Taxonomy Extension Schema Document	X
**101.CAL	XBRL Taxonomy Calculation Linkbase Document	X
**101.DEF	XBRL Taxonomy Definition Linkbase Document	X
**101.LAB	XBRL Taxonomy Label Linkbase Document	X
**101.PRE	XBRL Taxonomy Presentation Linkbase Document	X

Management contract or compensatory plan identified pursuant to Item 15(a)3.

* Effective date of Form S-1.

** Pursuant to Rule 406T of Regulation S-T, XBRL (Extensible Business Reporting Language) information is deemed not filed or a part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934 and otherwise is not subject to liability under these sections.

SIGNATURES

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

By: /s/ Jeff Rosica
Jeff Rosica
President and Chief Executive Officer
(Principal Executive Officer)

Date: March 9, 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.

By:	/s/ Jeff Rosica Jeff Rosica President and Chief Executive Officer (Principal Executive Officer)	By:	/s/ Kenneth Gayron Kenneth Gayron Executive Vice President and Chief Financial Officer (Principal Financial Officer)	By:	/s/ Garrard Brown Garrard Brown Vice President and Chief Accounting Officer (Principal Accounting Officer)
Date:	March 9, 2021	Date:	March 9, 2021	Date:	March 9, 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.

NAME	TITLE	DATE
/s/ Peter Westley Peter Westley	Chairman of the Board of Directors	March 9, 2021
/s/ Jeff Rosica Jeff Rosica	President and Chief Executive Officer	March 9, 2021
/s/ Christian A. Asmar Christian A. Asmar	Director	March 9, 2021
/s/ Robert M. Bakish Robert M. Bakish	Director	March 9, 2021
/s/ Paula E. Boggs Paula E. Boggs	Director	March 9, 2021
/s/ Elizabeth M. Daley Elizabeth M. Daley	Director	March 9, 2021
/s/ Nancy Hawthorne Nancy Hawthorne	Director	March 9, 2021
/s/ Michelle Munson Michelle Munson	Director	March 9, 2021
/s/ Daniel B. Silvers Daniel B. Silvers	Director	March 9, 2021
/s/ John P. Wallace John P. Wallace	Director	March 9, 2021

EXHIBIT 21

SUBSIDIARIES OF THE REGISTRANT AS OF DECEMBER 31, 2020

AVID SYSTEMS, INC. (California)

AVID CV LLC (Delaware)

AVID TECHNOLOGY WORLDWIDE, INC. (Delaware)

AVID TECHNOLOGY (AUSTRALIA) PTY LTD (Australia)

AVID TECHNOLOGY CANADA CORP. (Canada)

AVID TECHNOLOGY (BEIJING) CO., LTD (China)

AVID TECHNOLOGY EUROPE LIMITED (England)

INTEGRATED BROADCAST SERVICES LIMITED (IBIS) (England)

IVSM LIMITED (England)

AVID TECHNOLOGY S.A.R.L. (France)

GETRIS SAS (France)

AVID TECHNOLOGY GMBH (Germany)

AVID TECHNOLOGY HOLDING GMBH (Germany)

AVID NORTH ASIA LIMITED (Hong Kong)

ORAD HI-TEC SYSTEMS (NORTH ASIA) LIMITED (Hong Kong)

AVID TECHNOLOGY (INDIA) PRIVATE LIMITED (India)

JIM LTD. (Israel)

ORAD HI-TEC SYSTEMS LTD. (Israel)

ORADNET LTD. (Israel)

AVID TECHNOLOGY K.K. (Japan)

AVID TECHNOLOGY MEXICO, S. DE R.L. DE C.V. (Mexico)

AVID GENERAL PARTNER B.V. (Netherlands)

AVID TECHNOLOGY C.V. (Netherlands)

AVID TECHNOLOGY HOLDING B.V. (Netherlands)

AVID TECHNOLOGY INTERNATIONAL B.V. (Netherlands)

ORAD NETHERLANDS B.V. (Netherlands)

AVID TECHNOLOGY POLAND SP. Z.O.O (Poland)

AVID TECHNOLOGY (S.E. ASIA) PTE LTD (Singapore)

AVID TECHNOLOGY S.L. (Spain)

ORAD HI-TEC SYSTEMS IBERIA SL (Spain)

AVID NORDIC A.B. (Sweden)

AVID TECHNOLOGY SERVICES TAIWAN CO., LTD (Taiwan)

EXHIBIT 23.1

<u>CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM</u>

Avid Technology, Inc.
Burlington, Massachusetts

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-42569, 333-56631, 333-60181, 333-73321, 333-87539, 333-33674, 333-37952, 333-48338, 333-48340, 333-64016, 333-75470, 333-151202, 333-200139, 333-218677, 333-225279) of Avid Technology, Inc. of our reports dated March 9, 2021, relating to the consolidated financial statements, and the effectiveness of Avid Technology, Inc.'s internal control over financial reporting, which appear in this Annual Report on Form 10-K.

/s/ BDO USA, LLP
Boston, Massachusetts

March 9, 2021

EXHIBIT 31.1

CERTIFICATION

I, Jeff Rosica, certify that:

1. I have reviewed this Annual Report on Form 10-K of Avid Technology, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 9, 2021

/s/ Jeff Rosica
Jeff Rosica
President and Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION

I, Kenneth Gayron, certify that:

1. I have reviewed this Annual Report on Form 10-K of Avid Technology, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 9, 2021

/s/ Kenneth Gayron
Kenneth Gayron
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

EXHIBIT 32.1

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

In connection with the Annual Report on Form 10-K of Avid Technology, Inc. (the "Company") for the year ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Jeff Rosica, President and Chief Executive Officer of the Company, and Kenneth Gayron, Executive Vice President and Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date:	March 9, 2021	/s/ Jeff Rosica
		Jeff Rosica President and Chief Executive Officer *(Principal Executive Officer)*
Date:	March 9, 2021	/s/ Kenneth Gayron
		Kenneth Gayron Executive Vice President and Chief Financial Officer *(Principal Financial Officer)*

A certification furnished pursuant to this item will not be deemed "filed" for purposes of Section 18 of the Exchange Act (15 U.S.C. 78r), or otherwise subject to the liability of that section. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act, except to the extent that the registrant specifically incorporates it by reference.