



Fourth Quarter and Fiscal Year 2021 Earnings Prepared Remarks

We are providing a copy of our prepared remarks in connection with our earnings announcement. These remarks are offered to provide additional detail for analyzing our Q4 and fiscal year (FY) 2021 results in advance of our quarterly conference call. These prepared remarks will not be read on the call.

Conference call details:

February 24, 2022

8:30 a.m. Eastern Time

- To access the live broadcast, please visit the Investor Relations section of our website at <https://investors.ansys.com> and click on Events & Presentations, then Events Calendar.
 - The call can also be heard by dialing (855) 239-2942 (US) or (412) 542-4124 (CAN & INT'L) at least five minutes prior to the call and asking the operator to connect you to our conference call.
 - A replay will be available within two hours of the call's completion by dialing (877) 344-7529 (US), (855) 669-9658 (CAN) or (412) 317-0088 (INT'L) and referencing the access code 10162011 or at <https://investors.ansys.com/events-and-presentations/events-calendar>.
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/ Supplemental Information

In addition to our GAAP information, we have historically provided non-GAAP supplemental information. Our reasons for providing this information are described later in this document, as well as in our Q4 and FY 2021 earnings press release, which can be found on our website in the "Why Ansys - News Center" section. Reconciliations of GAAP to non-GAAP information are also provided later in this document.

Constant currency amounts exclude the effects of foreign currency fluctuations on the reported results. To present this information, the 2021 results for entities whose functional currency is a currency other than the U.S. Dollar were converted to U.S. Dollars at rates that were in effect for 2020, rather than the actual exchange rates in effect for 2021. The constant currency growth rates are calculated by adjusting the 2021 reported results to exclude the 2021 currency fluctuation impacts and comparing them to the 2020 reported results. We have provided this non-GAAP financial information to aid investors in better understanding our performance.

/ Fourth Quarter and Fiscal Year 2021 Overview

We reported fourth quarter annual contract value (ACV) of \$755.4 million, an increase of 14% and 16% in reported and constant currency, respectively, when compared to the fourth quarter of 2020. FY 2021 ACV was \$1,870.7 million, an increase of 16% in both reported and constant currency when compared to FY 2020.

Fourth quarter consolidated GAAP revenue was \$655.7 million, an increase of 5% and 8% in reported and constant currency, respectively, when compared to the fourth quarter of 2020. FY 2021 consolidated GAAP revenue was \$1,906.7 million, an increase of 13% in both reported and constant currency when compared to FY 2020. GAAP diluted EPS was \$2.30 and \$5.16 in the fourth quarter and FY 2021, respectively, compared to \$2.46 and \$4.97 for the fourth quarter and FY 2020, respectively. Operating cash flows were \$101.7 million for the fourth quarter and \$549.5 million for FY 2021, compared to \$173.8 million and \$547.3 million for the fourth quarter and FY 2020, respectively.

Fourth quarter consolidated non-GAAP revenue was \$661.4 million, an increase of 5% and 8% in reported and constant currency, respectively, when compared to the fourth quarter of 2020. FY 2021 consolidated non-GAAP revenue was \$1,931.5 million, an increase of 14% in both reported and constant currency when compared to FY 2020. Non-GAAP diluted EPS was \$2.81 and \$7.37 in the fourth quarter and FY 2021, respectively, compared to \$2.96 and \$6.70 for the fourth quarter and FY 2020, respectively.

Update on the Impact of COVID-19:

We continued to employ measures intended to mitigate the effects of COVID-19 on our business in the fourth quarter. The health and safety of our employees and their families, our partners and our broad Ansys community around the world remain a high priority. The following provides an update on the operational, financial and liquidity impacts of the pandemic on our business in the fourth quarter:

- Remote access continued to remain the primary means of work for much of our workforce. We previously announced our plans for post-pandemic work arrangements. These plans include options for our employees to work from home, in the office or on a flexible basis where they can alternate between the office and home. The adoption of the arrangements is subject to evolving local guidelines on precautions to be taken to mitigate COVID-19 risk to our employees and customers.
- Our direct and indirect sales and support teams continue to use collaborative technology to access both Ansys' data centers and the public cloud, and to meet virtually with customers to mitigate disruptions to our sales pipeline. Our sales team continues to engage with customers around the world in a mix of virtual and in-person meetings, depending on the location specific guidelines and customer preferences. They continue to deliver customer value and business momentum. Our R&D teams have also continued to be productive and meet our product release targets, as evidenced by the recent release of Ansys 2022 R1.
- Our liquidity remains strong with \$668.0 million of cash and short-term investments at December 31, 2021. Our cash and short-term investments balance, together with cash generated from operations and access to our \$500.0 million revolving credit facility, provide adequate liquidity to meet both ongoing operational requirements and our debt interest payments over the next twelve months.

The Q1 and full year 2022 guidance, and the related assumptions, are detailed later in this document.

Other Recent Highlights

- ***We continue to deliver innovation through new organic product releases.*** We released [Ansys 2022 R1](#), which delivers new customized workflows and automation to improve collaboration and increase productivity for experts and non-experts alike. The new products, technologies, and tools that make up Ansys 2022 R1 enable experts to go deep with custom workflows for industry-specific applications while also extending broad ease-of-use features that turbocharge collaboration across teams.
- ***We continue to work with our customers to sustainably improve their products:***
 - Our solutions are helping Synhelion steer toward cleaner transportation and net-zero emissions by helping to enable the development of solar fuels to replace fossil fuels. As a global pioneer in the field of sustainable solar fuels, Synhelion uses our multiphysics simulation solutions to help develop products that use high-temperature solar heat to convert carbon dioxide (CO₂) and water into synthetic fuels — such as solar gasoline, diesel, or jet fuel — that are compatible with conventional internal combustion engines and aircraft turbines.
 - We collaborated with 3M to launch a material modeling training program that is helping engineers refine product development processes, accelerate the design stage and reduce material waste. Engineers are leveraging the program to better generate and analyze simulations, enhance the design and sustainability of their products and speed to market next-generation products using tape and adhesive as part of their design.
 - We are supplying simulation solutions to LG Electronics to help strengthen its sustainability and digital transformation efforts by integrating virtual R&D simulations based on computer-aided engineering into the earliest stages of product development. The integration will help increase engineering and product efficiency while reducing development time, the need for physical prototyping, and the costs associated with it. The collaboration will be supported by a new five-year enterprise license agreement, which provides LG Electronics with continued access to our simulation solutions, building upon a longstanding relationship and previous agreement.
- ***We continue to be a leader in helping customers meet stringent industry standards:***
 - We were recognized by TSMC as a recipient of two 2021 OIP Partner of the Year awards for Joint Development of 4nm Design Infrastructure and Joint Development of 3DFabric™ Design Solution. The Partner of the Year award honors TSMC Open Innovation Platform® (OIP) ecosystem partners' pursuit of excellence in next-generation design enablement over the past year. Ansys and other OIP ecosystem partners' collaborative efforts effectively promote innovation in the semiconductor industry.
 - We achieved certification of our cutting-edge multiphysics signoff solutions for Samsung Foundry's advanced 3nm and 4nm process technologies. This enables joint customer designs to meet critical power, thermal, and reliability standards for highly sophisticated artificial intelligence/machine learning, high-performance computing, and networking chips, as well as low power 5G and mobile applications.
 - We announced our inaugural partnership to Intel Foundry Services (IFS) Accelerator - Electronic Design Automation (EDA) Alliance to provide best-in-class EDA tools and simulation solutions that will support customer innovation, including bespoke silicon for customizable three-dimensional integrated circuit designs. By leveraging our multiphysics solutions, IFS Accelerator will help make silicon technology available to customers to design innovative chips. Our EDA and simulation tools will help enable mutual customers to reduce design barriers, minimize design risk and cost, and accelerate time-to-market.

- EasyMile, an all-electric autonomous technology supplier headquartered in Toulouse, France, uses our software to help meet rigorous customer requirements and government safety regulations. They looked to our software for a single-source, turnkey solution to demonstrate the safety of their driverless vehicles. With CADFEM France, our software enabled engineers to work from a single model for all safety activities across platforms—significantly shortening development cycles, speeding time to market and reducing operational costs for the company's driverless shuttle and tow tractor solutions.
- We collaborated with Panasonic Automotive on a systematic, model-based approach across the safety lifecycle to optimize the practice of standards-based functional safety analysis throughout the development process. By leveraging our model-based engineering simulation solutions, Panasonic Automotive achieved ISO 26262 ASIL-D process certification.
- ***We continue to work with our partners to enhance customer experience, democratize access to simulation and accelerate innovation:***
 - Using our simulation solutions, Oculii is developing artificial intelligence software and hardware for radar systems that will allow autonomous vehicles to more accurately perceive their surroundings. Oculii relies on our solutions for its predictive accuracy, driving more refined design optimizations that shorten design cycles and help support Oculii's mission of enabling high-performance perception at lower cost.
 - Realtek has adopted a leading-edge and user-friendly electromagnetic (EM) simulation workflow we developed to accelerate complex radio frequency integrated circuit (RFIC) design and improve efficiency by shrinking silicon area. Realtek uses Ansys RaptorH's silicon-optimized modeling flow to decrease simulation time and reduce wasteful overdesign by predicting EM coupling in applications ranging from RFIC and high-speed IC to cutting-edge Internet of Things products.
 - SPEC Innovations, a leader in systems engineering, is applying our simulation solutions to develop a digital twin of a lunar rover to better enable Moon excavation in response to NASA's Break the Ice Lunar Challenge.
 - Innoviz Technologies is using our simulation solutions to drive the technology behind their unique automotive-grade LiDAR sensor and achieve autonomy for their customers — while reducing development time and costs. Our solutions enable Innoviz Technologies to meet their customers' objectives for durability, reliability, and affordability in a LiDAR design that is seamlessly integrable into Level 3-5 autonomous vehicles.
 - Wistron Corporation, a smart handheld device manufacturer, is using our simulation software to automate 5G cellular antenna power density analysis and optimize signal coverage. Ansys HFSS enables Wistron Corporation to simulate and measure antenna performance faster than more expensive, low-yield, instrument-driven alternatives.

DEFERRED REVENUE AND BACKLOG

<i>(in thousands)</i>	December 31, 2021	September 30, 2021	December 31, 2020	September 30, 2020
Current Deferred Revenue	\$ 391,528	\$ 318,032	\$ 372,061	\$ 326,491
Current Backlog	373,334	257,739	234,719	243,745
Total Current Deferred Revenue and Backlog	764,862	575,771	606,780	570,236
Long-Term Deferred Revenue	21,253	14,432	16,749	11,941
Long-Term Backlog	471,745	309,292	343,598	297,735
Total Long-Term Deferred Revenue and Backlog	492,998	323,724	360,347	309,676
Total Deferred Revenue and Backlog	\$ 1,257,860	\$ 899,495	\$ 967,127	\$ 879,912

The table above represents GAAP deferred revenue and backlog. As a result of the fair value provisions applicable to the accounting for business combinations, we typically record acquired deferred revenue at an amount that is lower than the historical carrying value. This results in expected reductions in reported revenue of \$3.4 million and \$7.4 million for the quarter ending March 31, 2022 and the year ending December 31, 2022, respectively.

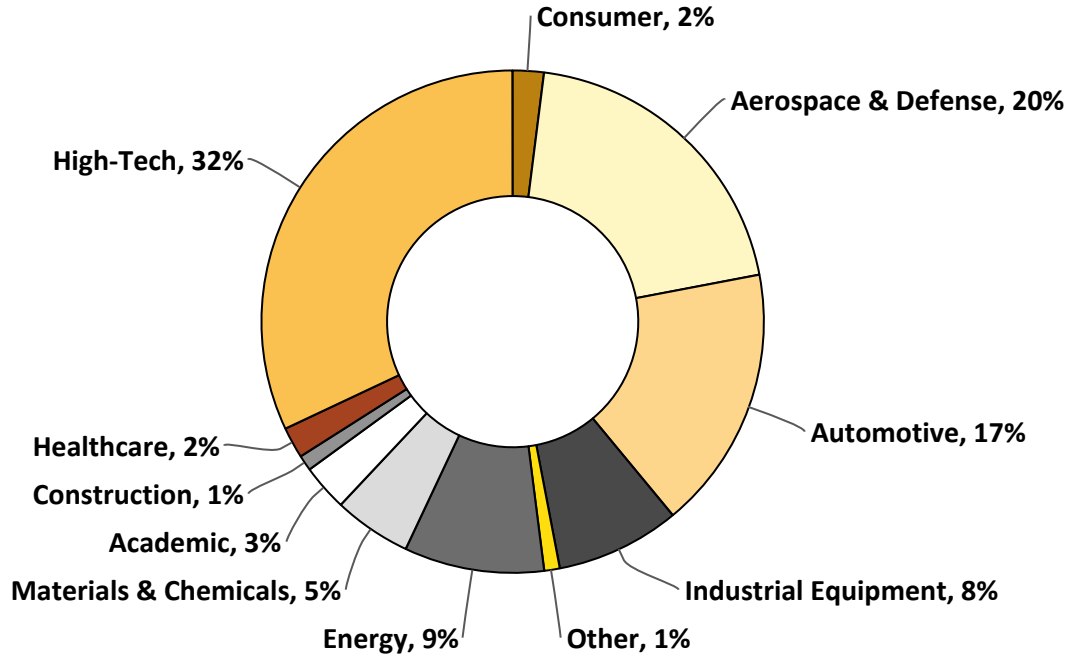
ACV

<i>(in thousands, except percentages)</i>	Q4 QTD 2021	Q4 QTD 2020	% Change	% Change in Constant Currency
ACV	\$ 755,355	\$ 665,511	13.5 %	16.4 %
Recurring ACV as a percentage of ACV	83.5 %	83.2 %		

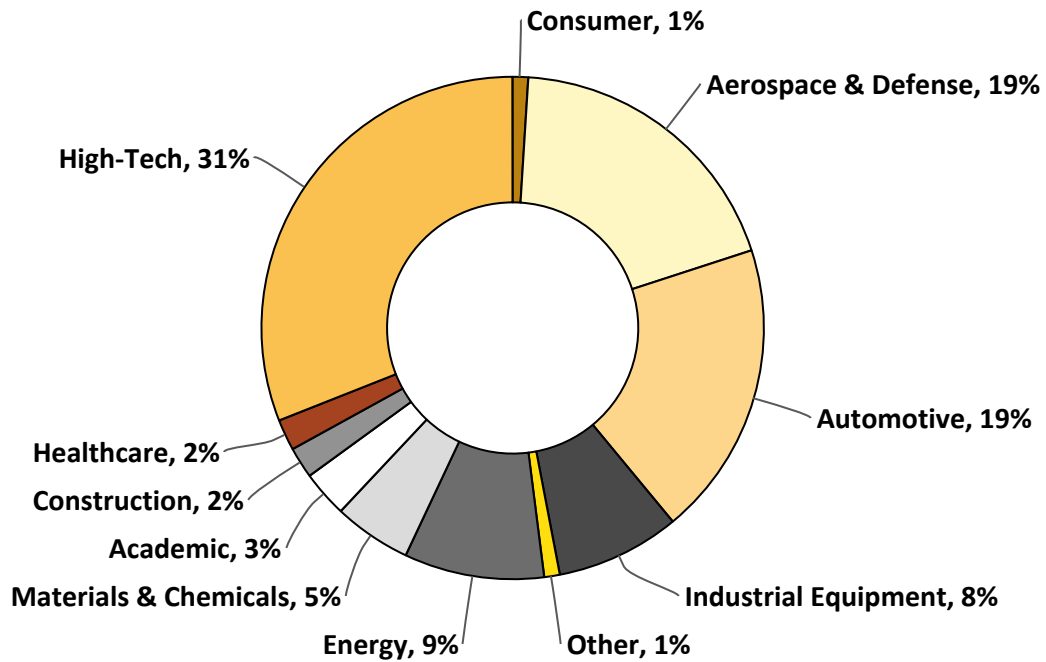
<i>(in thousands, except percentages)</i>	FY 2021	FY 2020	% Change	% Change in Constant Currency
ACV	\$1,870,720	\$1,616,301	15.7 %	15.8 %
Recurring ACV as a percentage of ACV	80.7 %	82.0 %		

Recurring ACV includes both lease licenses and maintenance contracts. The reduction as a percentage of total ACV in FY 2021 as compared to FY 2020 was driven by an increase in perpetual licensing due to relatively lower perpetual sales during the pandemic in FY 2020.

FY 2021 Trailing Twelve-Month ACV by Industry



FY 2020 Trailing Twelve-Month ACV by Industry



Regional and Industry Commentary

In the fourth quarter, we saw growth across all regions and core industries, as companies continued investing in simulation to reduce costs and development time. We remain well-positioned to help our customers overcome present and future engineering challenges stemming from increasingly complex, connected and automated products, and to achieve their sustainability and digital transformation initiatives.

- ***The high-tech and semiconductor industry experienced growth across all regions, fueled in part by 5G and connectivity, along with high-performance computing (HPC) demands spurred by remote work. The breadth of our portfolio and customizable workflows continued to allow us to meet customer needs.***
 - Multi-year, eight-figure sales to two North American semiconductor companies and a technology conglomerate highlighted the quarter. Demonstrating our ability to solve our customers' most challenging engineering problems and meet aggressive schedules helped secure executive buy-in.
 - Growth in Asia-Pacific was driven by a multi-year, eight-figure contract with a leading electronics manufacturer, along with other multi-year, multi-million-dollar sales.
 - Our growth in EMEA was bolstered by a multi-year, multi-million-dollar sale to an innovation and engineering consulting firm which saw value in using our broad solution portfolio to unlock diversified services.
- ***We continued to see sustained, strong performance in the aerospace and defense industry, particularly in North America and Europe.***
 - Multiple seven-figure sales contributed to our growth in North America. Increased demand for our core and new and emerging technology segments, including simulation data management, safety-critical embedded controls and mission planning, led to an expanded partnership with an aerospace and defense company.
 - Two multi-year, multi-million-dollar contracts supported strong growth in EMEA. The ability of our core technology—along with workflow improvements and HPC deployments—to reduce costs and time-to-market continued driving simulation investments.
- ***Automotive OEMs see the need for simulation with more clarity than ever, facing tighter budgets and competitors that are increasing investments in electrification, autonomous technology and connectivity. Our complete portfolio and ability to demonstrate value supported strong growth in North America and EMEA.***
 - The quarter was highlighted by a multi-year, eight-figure sale to a German automotive supplier, which included significant new business as our educational resources advanced the democratization of simulation among new user groups.
 - In North America, multi-year, multi-million-dollar contracts illustrated the value of simulation in reducing product development resources. One automotive supplier expects significant cost savings after partnering with Ansys to use legacy simulation data and machine learning to generate certain product designs.
- ***We are well positioned in the industrial and energy industries with many companies progressing with their engineering digitalization, electrification and sustainability initiatives. We experienced growth in both industries across all regions.***
 - We closed two multi-year, eight-figure contracts, including one with a North American industrial equipment manufacturer that reduced design cycles and costs by adopting simulation-led design and improved electrification workflows.
 - Several multi-year, seven-figure sales to EMEA-based energy companies contributed to significant growth in the region.

REVENUE

The difference between the GAAP and non-GAAP revenue values presented below is a result of the application of the fair value provisions applicable to the accounting for business combinations.

We continue to experience increased demand from our customers for contracts that often include longer-term, time-based licenses involving a larger number of our software products. These arrangements typically involve a higher overall transaction price. The upfront recognition of license revenue related to these larger, multi-year transactions can result in significant lease license revenue volatility. Software products, across a large variety of applications and industries, are increasingly distributed in software-as-a-service, cloud and other subscription environments in which the licensing approach is time-based rather than perpetual. This preference could result in a shift from perpetual licenses to time-based licenses, such as leases, over the long term.

The value and duration of multi-year lease contracts executed during the period significantly impact the recognition of revenue. As a result, revenue may fluctuate significantly, particularly on a quarterly basis, due to the timing of such contracts, relative differences in duration of long-term contracts from quarter to quarter and changes in the mix of license types sold compared to the prior year. Large swings in revenue growth rates are not necessarily indicative of customers' software usage changes or cash flows during the periods presented.

REVENUE BY LICENSE TYPE

GAAP

<i>(in thousands, except percentages)</i>	Q4 QTD 2021	% of Total	Q4 QTD 2020	% of Total	% Change	% Change in Constant Currency
Lease	\$ 302,256	46.1 %	\$ 263,105	42.2 %	14.9 %	18.4 %
Perpetual	95,721	14.6 %	118,952	19.1 %	(19.5)%	(17.5)%
Maintenance	240,194	36.6 %	224,988	36.1 %	6.8 %	8.9 %
Service	17,496	2.7 %	16,641	2.7 %	5.1 %	7.0 %
Total	\$ 655,667		\$ 623,686		5.1 %	7.8 %

<i>(in thousands, except percentages)</i>	FY 2021	% of Total	FY 2020	% of Total	% Change	% Change in Constant Currency
Lease	\$ 617,643	32.4 %	\$ 500,105	29.7 %	23.5 %	24.9 %
Perpetual	328,154	17.2 %	280,745	16.7 %	16.9 %	16.3 %
Maintenance	896,037	47.0 %	840,597	50.0 %	6.6 %	5.6 %
Service	64,881	3.4 %	59,850	3.6 %	8.4 %	7.4 %
Total	\$ 1,906,715		\$ 1,681,297		13.4 %	13.2 %

Non-GAAP

<i>(in thousands, except percentages)</i>	Q4 QTD 2021	% of Total	Q4 QTD 2020	% of Total	% Change	% Change in Constant Currency
Lease	\$ 302,363	45.7 %	\$ 263,328	41.9 %	14.8 %	18.4 %
Perpetual	95,722	14.5 %	118,958	18.9 %	(19.5)%	(17.5)%
Maintenance	245,783	37.2 %	228,842	36.5 %	7.4 %	9.5 %
Service	17,496	2.6 %	16,643	2.7 %	5.1 %	7.0 %
Total	\$ 661,364		\$ 627,771		5.4 %	8.0 %

<i>(in thousands, except percentages)</i>	FY 2021	% of Total	FY 2020	% of Total	% Change	% Change in Constant Currency
Lease	\$ 618,958	32.0 %	\$ 501,180	29.6 %	23.5 %	24.9 %
Perpetual	328,247	17.0 %	280,791	16.6 %	16.9 %	16.3 %
Maintenance	919,391	47.6 %	853,666	50.3 %	7.7 %	6.7 %
Service	64,891	3.4 %	59,861	3.5 %	8.4 %	7.4 %
Total	\$ 1,931,487		\$ 1,695,498		13.9 %	13.7 %

REVENUE BY GEOGRAPHY

GAAP

<i>(in thousands, except percentages)</i>	Q4 QTD 2021	% of Total	Q4 QTD 2020	% of Total	% Change	% Change in Constant Currency
Americas	\$ 306,677	46.8 %	\$ 318,573	51.1 %	(3.7)%	(3.7)%
Germany	68,760	10.5 %	75,723	12.1 %	(9.2)%	(3.6)%
Other EMEA	138,991	21.2 %	109,701	17.6 %	26.7 %	32.2 %
EMEA	207,751	31.7 %	185,424	29.7 %	12.0 %	17.5 %
Japan	45,585	7.0 %	49,344	7.9 %	(7.6)%	0.3 %
Other Asia-Pacific	95,654	14.6 %	70,345	11.3 %	36.0 %	39.6 %
Asia-Pacific	141,239	21.5 %	119,689	19.2 %	18.0 %	23.4 %
Total	\$ 655,667		\$ 623,686		5.1 %	7.8 %

<i>(in thousands, except percentages)</i>	FY 2021	% of Total	FY 2020	% of Total	% Change	% Change in Constant Currency
Americas	\$ 902,715	47.3 %	\$ 803,071	47.8 %	12.4 %	12.3 %
Germany	158,541	8.3 %	160,771	9.6 %	(1.4)%	(1.8)%
Other EMEA	359,074	18.8 %	307,933	18.3 %	16.6 %	14.9 %
EMEA	517,615	27.1 %	468,704	27.9 %	10.4 %	9.2 %
Japan	193,096	10.1 %	183,117	10.9 %	5.4 %	8.5 %
Other Asia-Pacific	293,289	15.4 %	226,405	13.5 %	29.5 %	28.5 %
Asia-Pacific	486,385	25.5 %	409,522	24.4 %	18.8 %	19.6 %
Total	\$ 1,906,715		\$ 1,681,297		13.4 %	13.2 %

Non-GAAP

<i>(in thousands, except percentages)</i>	Q4 QTD 2021	% of Total	Q4 QTD 2020	% of Total	% Change	% Change in Constant Currency
Americas	\$ 309,601	46.8 %	\$ 321,700	51.2 %	(3.8)%	(3.7)%
Germany	69,237	10.5 %	75,826	12.1 %	(8.7)%	(3.1)%
Other EMEA	139,925	21.2 %	109,983	17.5 %	27.2 %	32.7 %
EMEA	209,162	31.6 %	185,809	29.6 %	12.6 %	18.1 %
Japan	46,374	7.0 %	49,510	7.9 %	(6.3)%	1.7 %
Other Asia-Pacific	96,227	14.5 %	70,752	11.3 %	36.0 %	39.6 %
Asia-Pacific	142,601	21.6 %	120,262	19.2 %	18.6 %	24.0 %
Total	\$ 661,364		\$ 627,771		5.4 %	8.0 %

<i>(in thousands, except percentages)</i>	FY 2021	% of Total	FY 2020	% of Total	% Change	% Change in Constant Currency
Americas	\$ 921,414	47.7 %	\$ 810,553	47.8 %	13.7 %	13.6 %
Germany	159,285	8.2 %	161,517	9.5 %	(1.4)%	(1.8)%
Other EMEA	360,985	18.7 %	309,314	18.2 %	16.7 %	15.0 %
EMEA	520,270	26.9 %	470,831	27.8 %	10.5 %	9.2 %
Japan	194,838	10.1 %	185,011	10.9 %	5.3 %	8.4 %
Other Asia-Pacific	294,965	15.3 %	229,103	13.5 %	28.7 %	27.7 %
Asia-Pacific	489,803	25.4 %	414,114	24.4 %	18.3 %	19.1 %
Total	\$ 1,931,487		\$ 1,695,498		13.9 %	13.7 %

REVENUE BY CHANNEL

GAAP

	Q4 QTD 2021	Q4 QTD 2020	FY 2021	FY 2020
Direct revenue, as a percentage of total revenue	80.6 %	81.4 %	76.3 %	77.8 %
Indirect revenue, as a percentage of total revenue	19.4 %	18.6 %	23.7 %	22.2 %

Non-GAAP

	Q4 QTD 2021	Q4 QTD 2020	FY 2021	FY 2020
Direct revenue, as a percentage of total revenue	80.7 %	81.4 %	76.4 %	77.7 %
Indirect revenue, as a percentage of total revenue	19.3 %	18.6 %	23.6 %	22.3 %

INCOME STATEMENT HIGHLIGHTS

GAAP

	Q4 QTD 2021	Q4 QTD 2020	FY 2021	FY 2020
Gross margin	89.5 %	89.1 %	86.5 %	86.6 %
Operating margin	36.4 %	41.6 %	26.9 %	29.5 %
Effective tax rate	13.5 %	16.4 %	11.8 %	12.2 %

Non-GAAP

	Q4 QTD 2021	Q4 QTD 2020	FY 2021	FY 2020
Gross margin	92.3 %	91.6 %	90.5 %	90.0 %
Operating margin	46.8 %	51.6 %	41.4 %	43.0 %
Effective tax rate	19.0 %	19.5 %	19.0 %	19.5 %

BALANCE SHEET AND CASH FLOW HIGHLIGHTS

- Cash and short-term investments totaled \$668.0 million as of December 31, 2021, of which 55% was held domestically.
- Deferred revenue and backlog was \$1,257.9 million at December 31, 2021.
- Operating cash flows were \$101.7 million for the fourth quarter of 2021 as compared to \$173.8 million for the fourth quarter of 2020. Operating cash flows were \$549.5 million for FY 2021 as compared to \$547.3 million for FY 2020.
- Cash paid for acquisitions, net of cash acquired, totaled \$510.8 million for FY 2021 as compared to \$572.3 million for FY 2020.
- Capital expenditures totaled \$4.9 million and \$23.0 million for the fourth quarter and FY 2021, respectively. We are currently planning capital expenditures in the range of \$25.0 - \$35.0 million for FY 2022.

SHARE COUNT AND SHARE REPURCHASES

We had 88.2 million and 88.1 million fully diluted weighted average shares outstanding in Q4 and FY 2021, respectively. We repurchased 250,000 shares for \$98.7 million during the fourth quarter of 2021 and 346,800 shares for \$134.7 million during FY 2021. We repurchased 689,700 shares for \$161.0 million during the first quarter of 2020. No other share repurchases occurred in 2020. As of December 31, 2021, we had 2.5 million shares remaining available for repurchase under our authorized share repurchase program. Our authorized repurchase program does not have an expiration date, and the pace of the purchase activity will depend on factors such as working capital needs, cash requirements for acquisitions, our stock price, and economic and market conditions.

STOCK-BASED COMPENSATION EXPENSE

<i>(in thousands, except per share data)</i>	Q4 QTD 2021	Q4 QTD 2020	FY 2021	FY 2020
Cost of sales:				
Maintenance and service	\$ 2,556	\$ 3,670	\$ 12,390	\$ 13,626
Operating expenses:				
Selling, general and administrative	25,614	23,074	91,772	73,491
Research and development	16,020	15,615	62,176	58,498
Stock-based compensation expense before taxes	44,190	42,359	166,338	145,615
Related income tax benefits				
Stock-based compensation expense, net of taxes	\$ (13,090)	(9,636)	(75,241)	(56,485)
Net impact on earnings per share:				
Diluted earnings per share	\$ (0.35)	\$ (0.37)	\$ (1.03)	\$ (1.02)

CURRENCY

The fourth quarter and FY 2021 revenue and operating income, as compared to the fourth quarter and FY 2020, were impacted by fluctuations in the exchange rates of foreign currencies against the U.S. Dollar. The currency fluctuation impacts on GAAP and non-GAAP revenue and operating income are reflected in the tables below. Amounts in brackets indicate an adverse impact from currency fluctuations.

GAAP

<i>(in thousands)</i>	Q4 QTD 2021	FY 2021
Revenue	\$ (16,828)	\$ 3,431
Operating income	\$ (13,395)	\$ (10,689)

Non-GAAP

<i>(in thousands)</i>	Q4 QTD 2021	FY 2021
Revenue	\$ (16,866)	\$ 3,500
Operating income	\$ (13,562)	\$ (9,864)

The unfavorable net foreign exchange impacts on deferred revenue and backlog were \$3.8 million and \$20.5 million for the fourth quarter and FY 2021, respectively.

/ Outlook

Our first quarter and full year financial guidance estimates are provided below and are based on significant assumptions that may or may not be realized as we progress through 2022. Those assumptions, and certain related management actions, include the following, among others:

- We have not considered further impacts from additional waves or mutated variants of COVID-19 that result in renewed shutdowns that stop or regress economic recovery in our outlook.
- Ongoing trade restrictions limited our ability to deliver products and services to certain entities in China, and our guidance assumes that these restrictions will remain in place throughout 2022. Additional restrictions or a further deterioration in the trade environment in China or other parts of the world could have a material adverse impact on our business, as well as on our ability to achieve our financial guidance.
- The up-front recognition of revenue on perpetual licenses and the license component of multi-year lease contracts has a significant impact on our operating results. Our 2022 guidance assumes the ongoing ability to drive more multi-year lease deals across a broader set of customers and reflects the mix of license types that we see in our current pipeline.
- Our blended renewal rates have historically been approximately 90%. Our renewal rates have remained high, and our assumptions are that they will continue to remain so for the majority of our business.
- Our spending reflects our expectations for the pace at which economic recovery will occur and moderate expense impacts from inflation, and we continue to invest in long-term opportunities. We have also maintained and intend to maintain our commitment to invest in our acquisitions, research and development, and certain digital transformation projects, as those projects are critical to our ability to operate efficiently and scale the business for future growth.

We are currently forecasting the following:

Q1 2022 OUTLOOK

<i>(in millions, except percentages and per share data)</i>	GAAP	Non-GAAP
Revenue	\$391.6 - \$416.6	\$395.0 - \$420.0
Revenue Growth Rate	7.8 % - 14.7 %	6.1 % - 12.9 %
Revenue Growth Rate — Constant Currency	10.7 % - 17.6 %	8.9 % - 15.8 %
Operating margin	10.2 % - 15.5 %	29.1 % - 31.9 %
Effective tax rate	4.0 % - 6.0 %	18.0 %
Diluted earnings per share	\$0.42 - \$0.65	\$1.05 - \$1.22

We are currently expecting approximately 88.2 million fully diluted shares outstanding for Q1 2022.

In addition, we are currently forecasting the following for Q1 2022:

<i>(in millions, except percentages)</i>	Other Financial Metrics
ACV	\$328.0 - \$348.0
ACV Growth Rate	2.7 % - 9.0 %
ACV Growth Rate — Constant Currency	5.8 % - 12.2 %

FY 2022 OUTLOOK

<i>(in millions, except percentages and per share data)</i>	GAAP	Non-GAAP
Revenue	\$2,032.6 - \$2,102.6	\$2,040.0 - \$2,110.0
Revenue Growth Rate	6.6 % - 10.3 %	5.6 % - 9.2 %
Revenue Growth Rate — Constant Currency	8.5 % - 12.2 %	7.4 % - 11.1 %
Operating margin	27.2 % - 29.5 %	41.0 % - 42.0 %
Effective tax rate	15.0 % - 17.0 %	18.0 %
Diluted earnings per share	\$5.13 - \$5.74	\$7.64 - \$8.10

We are currently expecting approximately 88.4 million fully diluted shares outstanding for FY 2022.

In addition, we are currently forecasting the following for FY 2022:

<i>(in millions, except percentages)</i>	Other Financial Metrics
ACV	\$1,990.0 - \$2,050.0
ACV Growth Rate	6.4 % - 9.6 %
ACV Growth Rate — Constant Currency	8.3 % - 11.5 %
Operating cash flows*	\$580.0 - \$620.0
<i>*Operating cash flows guidance above includes additional income tax cash outflows related to timing impacts of research and experimental expenditure capitalization, effective January 1, 2022, of</i>	<i>(\$60.0) - (\$80.0)</i>

*Section 174 of the Internal Revenue Code was amended by the Tax Cuts and Jobs Act of 2017 to require research and experimental (R&E) expenditures to be capitalized and amortized starting in tax years on or after January 1, 2022. The requirement to capitalize the R&E expenditure results in a timing impact of cash flow by deferring the majority of the annual deduction to future periods. This has no bearing on our ability to operationally generate cash flow.

This change in the Internal Revenue Code will require us to capitalize our annual deduction for R&E, whereas in the past we elected to deduct R&E expenditures in the current year. This change results in an increase to tax payments of \$60.0 - \$80.0 million in 2022 based on a capitalized R&E deduction schedule, whereas in the past, we would have avoided the increase to tax payments with a full R&E expenditure deduction in the current year.

Illustrative Examples

If for the year ended December 31, 2022 a company had \$100 million of R&E expenditures in the U.S. and a 21% tax rate, the reduction in cash tax payments under the prior regulation (ability to elect to deduct R&E in current year) would be \$21.0 million and under the amended regulation (R&E capitalized and amortized) would be \$2.1 million, resulting in an increase to tax payments of \$18.9 million, as illustrated in the table below:

Illustrative Example A-1 (Compares year one impact of prior regulation to amended regulation)	R&E Expense Election (Prior Regulation)	R&E Capitalized and Amortized (Amended Regulation)	Net Decrease to Operating Cash Flow in Year 1
<i>(in millions)</i>			
R&E Expenditure	\$ 100.0	\$ 100.0	
R&E Income Tax Deduction	\$ 100.0	\$ 10.0	
Cash flow benefit from tax deduction	\$ 21.0	\$ 2.1	\$ (18.9)

Additionally, under the amended regulation, the amortization schedule of capitalized U.S. R&E expenditures would be 10% in year 1, 20% in years 2 - 5, and the remaining 10% in year 6, as illustrated in the table below:

Illustrative Example A-2 (Amortization impact in year one through year six under amended regulation)							
<i>(in millions)</i>	2022	2023	2024	2025	2026	2027	Total
R&E Expenditure	\$ 100.0						\$ 100.0
R&E Income Tax Deduction	\$ 10.0	\$ 20.0	\$ 20.0	\$ 20.0	\$ 20.0	\$ 10.0	\$ 100.0
Cash flow benefit from tax deduction	\$ 2.1	\$ 4.2	\$ 4.2	\$ 4.2	\$ 4.2	\$ 2.1	\$ 21.0

If the company also had \$100 million of R&E expenditures each year, the amended legislation is most impactful in the adoption year of 2022, and has a decreasing impact over a six year period, with the total deduction in 2027 and thereafter equal to prior regulation, as illustrated in the table below:

Illustrative Example B (Cumulative amortization impact in year one through year six under amended regulation if R&E expenditure is \$100.0M each year)							2027 and thereafter
<i>(in millions)</i>	2022	2023	2024	2025	2026		
R&E Expenditure	\$ 100.0	\$ 100.0	\$ 100.0	\$ 100.0	\$ 100.0	\$ 100.0	\$ 100.0
R&E Income Tax Deduction	\$ 10.0	\$ 30.0	\$ 50.0	\$ 70.0	\$ 90.0	\$ 100.0	\$ 100.0
Cash flow benefit from tax deduction	\$ 2.1	\$ 6.3	\$ 10.5	\$ 14.7	\$ 18.9	\$ 21.0	\$ 21.0
Cash flow benefit from previous regulation	\$ 21.0	\$ 21.0	\$ 21.0	\$ 21.0	\$ 21.0	\$ 21.0	\$ 21.0
Difference in cash flow benefit	\$ (18.9)	\$ (14.7)	\$ (10.5)	\$ (6.3)	\$ (2.1)	\$	—

CURRENCY OUTLOOK

Our results are impacted by currency fluctuations, particularly by rate movements in the Euro and Japanese Yen. Our currency rate assumptions are as follows:

	Euro	Japanese Yen
Q1 2022 and FY 2022	1.11 - 1.15	113 - 116

The outlook presented above factors in actual and planned increases in sales and channel capacity, our current visibility around major account activity, sales pipelines and forecasts. However, as we have said in the past, and will continue to reiterate, there are many factors over which we have no control, including the macro-economic environment, customer procurement patterns, government and tax policies, and currency rate volatility. We do, however, have the benefit of a solid, repeatable business base; a diversified geographic and industry footprint; and a world-class customer base that have helped us to succeed and to deliver on our commitments.

Please see the section entitled “Forward-Looking Statements and Risk Factors” for a discussion of risks, uncertainties and factors that could cause actual results to differ materially from those implied by forward-looking statements.

/ Glossary of Terms

Annual Contract Value (ACV): ACV is a metric we use to better understand the business. There is no GAAP measure comparable to ACV. ACV is composed of the following:

- the annualized value of maintenance and lease contracts with start dates or anniversary dates during the period, plus
- the value of perpetual license contracts with start dates during the period, plus
- the annualized value of fixed-term services contracts with start dates or anniversary dates during the period, plus
- the value of work performed during the period on fixed-deliverable services contracts.

Example 1: A \$300,000 lease or maintenance contract with a term of January 1, 2021 - December 31, 2023 would contribute \$100,000 to ACV in each of fiscal years 2021, 2022 and 2023.

Example 2: A perpetual license valued at \$200,000 with a contract start date of March 1, 2021 sold in connection with three years of annual maintenance valued at a total of \$120,000 would contribute to ACV as follows: fiscal year 2021: \$240,000 (\$200,000 + \$40,000); fiscal years 2022 and 2023: \$40,000 in each year.

Backlog: Installment billings for periods beyond the current quarterly billing cycle.

Deferred Revenue: Billings made or payments received in advance of revenue recognition.

Lease or Time-Based License: A license of a stated product of our software that is granted to a customer for use over a specified time period, which can be months or years in length. In addition to the use of the software, the customer is provided with access to maintenance (unspecified version upgrades and technical support) without additional charge. The revenue related to these contracts is recognized ratably over the contract period for the maintenance portion and up front for the license portion.

Perpetual / Paid-Up License: A license of a stated product and version of our software that is granted to a customer for use in perpetuity. The revenue related to this type of license is recognized up front.

Maintenance: A contract, typically one year in duration, that is purchased by the owner of a perpetual license and that provides access to unspecified version upgrades and technical support during the duration of the contract. The revenue from these contracts is recognized ratably over the contract period.

/ Forward-Looking Statements and Risk Factors

This document contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are statements that provide current expectations or forecasts of future events based on certain assumptions. Forward-looking statements are subject to risks, uncertainties, and factors relating to our business which could cause our actual results to differ materially from the expectations expressed in or implied by such forward-looking statements.

Forward-looking statements use words such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “forecast,” “intend,” “likely,” “may,” “outlook,” “plan,” “predict,” “project,” “should,” “target,” or other words of similar meaning. Forward-looking statements include those about market opportunity, including our total addressable market. We caution readers not to place undue reliance upon any such forward-looking statements, which speak only as of the date they are made. We undertake no obligation to update forward-looking statements, whether as a result of new information, future events or otherwise.

The risks associated with the following, among others, could cause actual results to differ materially from those described in any forward-looking statements:

- adverse conditions in the macroeconomic environment, including high inflation, constrained credit and liquidity, and volatility in equity and foreign exchange markets; political, economic, regulatory and public health and safety risks and uncertainties in the countries and regions in which we operate; and disruptions in the global economy and financial markets that may limit or delay availability of credit under our existing or new credit facilities, or that may limit our ability to obtain credit or financing on acceptable terms or at all;
- our ability to timely recruit and retain key personnel in a highly competitive labor market for skilled personnel, including as a result of wage inflation;
- impacts from tariffs, trade sanctions, export license requirements or other trade barriers;
- current and future impacts of a natural disaster or catastrophe, including the COVID-19 pandemic and actions taken to address the pandemic by our customers, suppliers, regulatory authorities, and our business, on the global economy and our business and consolidated financial statements; and government actions or mandates surrounding the COVID-19 pandemic;
- declines in our customers' businesses resulting in adverse changes in procurement patterns; disruptions in accounts receivable and cash flow due to customers' liquidity challenges and commercial deterioration; uncertainties regarding demand for our products and services in the future and our customers' acceptance of new products; delays or declines in anticipated sales due to reduced or altered sales and marketing interactions with customers; and potential variations in our sales forecast compared to actual sales;
- increased volatility in our revenue due to the timing, duration and value of multi-year lease contracts; and our reliance on high renewal rates for annual lease and maintenance contracts;
- our ability to protect our proprietary technology; cybersecurity threats or other security breaches, including in relation to an increased level of our activity that is occurring from remote global off-site locations; and disclosure and misuse of employee or customer data whether as a result of a cybersecurity incident or otherwise;
- the quality of our products, including the strength of features, functionality and integrated multi-physics capabilities; our ability to develop and market new products to address the industry's rapidly changing technology; failures or errors in our products and services; and increased pricing pressure as a result of the competitive environment in which we operate;
- investments in complementary companies, products, services and technologies; our ability to complete and successfully integrate our acquisitions and realize the financial and business benefits of the transactions; and the impact indebtedness incurred in connection with any acquisition could have on our operations;
- investments in global sales and marketing organizations and global business infrastructure; and dependence on our channel partners for the distribution of our products;
- operational disruptions generally or specifically in connection with transitions to and from remote work environments; and the failure of our technological infrastructure or those of the service providers upon whom we rely including for infrastructure and cloud services;
- our ability and our channel partners' ability to comply with laws and regulations in relevant jurisdictions; and the outcome of contingencies, including legal proceedings, government or regulatory investigations and service tax audit cases;
- our intention to repatriate previously taxed earnings in excess of working capital needs and to reinvest all other earnings of our non-U.S. subsidiaries;

- plans for future capital spending; the extent of corporate benefits from such spending including with respect to customer relationship management; and higher than anticipated costs for research and development or slowdown in our research and development activities;
- uncertainty regarding income tax estimates in the jurisdictions in which we operate; and the effect of changes in tax laws and regulations in the jurisdictions in which we operate; and
- other risks and uncertainties described in our reports filed from time to time with the Securities and Exchange Commission (the SEC).

/ Reconciliations of GAAP to Non-GAAP Measures (Unaudited)

<i>(in thousands, except percentages and per share data)</i>	Three Months Ended						
	December 31, 2021						
	Revenue	Gross Profit	%	Operating Income	%	Net Income	EPS - Diluted ¹
Total GAAP	\$ 655,667	\$ 586,690	89.5 %	\$ 238,848	36.4 %	\$ 203,171	\$ 2.30
Acquisition accounting for deferred revenue	5,697	5,697	0.1 %	5,697	0.5 %	5,697	0.06
Stock-based compensation expense	—	2,556	0.4 %	44,190	6.7 %	44,190	0.51
Excess payroll taxes related to stock-based awards	—	112	— %	1,103	0.2 %	1,103	0.01
Amortization of intangible assets from acquisitions	—	15,599	2.3 %	18,568	2.8 %	18,568	0.22
Transaction expenses related to business combinations	—	—	— %	1,034	0.2 %	1,034	0.01
Adjustment for income tax effect	—	—	— %	—	— %	(26,255)	(0.30)
Total non-GAAP	\$ 661,364	\$ 610,654	92.3 %	\$ 309,440	46.8 %	\$ 247,508	\$ 2.81

¹ Diluted weighted average shares were 88,201.

<i>(in thousands, except percentages and per share data)</i>	Three Months Ended						
	December 31, 2020						
	Revenue	Gross Profit	%	Operating Income	%	Net Income	EPS - Diluted ¹
Total GAAP	\$ 623,686	\$ 555,783	89.1 %	\$ 259,391	41.6 %	\$ 215,632	\$ 2.46
Acquisition accounting for deferred revenue	4,085	4,085	0.1 %	4,085	0.4 %	4,085	0.05
Stock-based compensation expense	—	3,670	0.6 %	42,359	6.7 %	42,359	0.47
Excess payroll taxes related to stock-based awards	—	39	— %	520	0.1 %	520	0.01
Amortization of intangible assets from acquisitions	—	11,415	1.8 %	15,452	2.4 %	15,452	0.18
Transaction expenses related to business combinations	—	—	— %	2,321	0.4 %	2,321	0.03
Rabbi trust (income) / expense	—	—	— %	—	— %	(1)	—
Adjustment for income tax effect	—	—	— %	—	— %	(20,668)	(0.24)
Total non-GAAP	\$ 627,771	\$ 574,992	91.6 %	\$ 324,128	51.6 %	\$ 259,700	\$ 2.96

¹ Diluted weighted average shares were 87,626.

<i>(in thousands, except percentages and per share data)</i>	Twelve Months Ended December 31, 2021						
	Revenue	Gross Profit	%	Operating Income	%	Net Income	EPS - Diluted ¹
Total GAAP	\$ 1,906,715	\$ 1,648,731	86.5 %	\$ 513,271	26.9 %	\$ 454,627	\$ 5.16
Acquisition accounting for deferred revenue	24,772	24,772	0.1 %	24,772	1.0 %	24,772	0.28
Stock-based compensation expense	—	12,390	0.6 %	166,338	8.6 %	166,338	1.89
Excess payroll taxes related to stock-based awards	—	1,197	— %	13,183	0.7 %	13,183	0.15
Amortization of intangible assets from acquisitions	—	60,762	3.3 %	75,975	3.9 %	75,975	0.86
Transaction expenses related to business combinations	—	—	— %	6,041	0.3 %	6,041	0.07
Adjustment for income tax effect	—	—	— %	—	— %	(91,589)	(1.04)
Total non-GAAP	\$ 1,931,487	\$ 1,747,852	90.5 %	\$ 799,580	41.4 %	\$ 649,347	\$ 7.37

¹ Diluted weighted average shares were 88,102.

<i>(in thousands, except percentages and per share data)</i>	Twelve Months Ended December 31, 2020						
	Revenue	Gross Profit	%	Operating Income	%	Net Income	EPS - Diluted ¹
Total GAAP	\$ 1,681,297	\$ 1,456,033	86.6 %	\$ 496,356	29.5 %	\$ 433,887	\$ 4.97
Acquisition accounting for deferred revenue	14,201	14,201	0.1 %	14,201	0.6 %	14,201	0.16
Stock-based compensation expense	—	13,626	0.8 %	145,615	8.6 %	145,615	1.66
Excess payroll taxes related to stock-based awards	—	813	0.1 %	10,111	0.6 %	10,111	0.12
Amortization of intangible assets from acquisitions	—	40,642	2.4 %	57,241	3.4 %	57,241	0.66
Transaction expenses related to business combinations	—	—	— %	5,129	0.3 %	5,129	0.06
Rabbi trust (income) / expense	—	—	— %	—	— %	(6)	—
Adjustment for income tax effect	—	—	— %	—	— %	(81,574)	(0.93)
Total non-GAAP	\$ 1,695,498	\$ 1,525,315	90.0 %	\$ 728,653	43.0 %	\$ 584,604	\$ 6.70

¹ Diluted weighted average shares were 87,288.

In the first quarter and fiscal year 2022 guidance, the expected impacts of non-GAAP adjustments to revenue associated with the acquisition accounting for deferred revenue are \$3.4 million and \$7.4 million, respectively. Over the same periods, the impacts of non-GAAP adjustments associated with stock-based compensation result in a higher non-GAAP normalized effective tax rate than the comparable GAAP annualized effective tax rate. See below for a reconciliation of GAAP to non-GAAP operating margins and diluted earnings per share:

ANSYS, INC. AND SUBSIDIARIES
Reconciliation of Forward-Looking Guidance
Quarter Ending March 31, 2022

	Operating Margin	Earnings Per Share - Diluted
U.S. GAAP expectation	10.2 % - 15.5 %	\$0.42 - \$0.65
Exclusions before tax:		
Acquisition adjustments to deferred revenue	0.7 % - 0.8 %	\$0.04
Acquisition-related amortization	5.0 % - 5.5 %	\$0.24 - \$0.25
Stock-based compensation and related excess payroll tax	10.7 % - 12.6 %	\$0.50 - \$0.57
Adjustment for income tax effect	N/A	(\$0.21) - (\$0.23)
Non-GAAP expectation	29.1 % - 31.9 %	\$1.05 - \$1.22

ANSYS, INC. AND SUBSIDIARIES
Reconciliation of Forward-Looking Guidance
Year Ending December 31, 2022

	Operating Margin	Earnings Per Share - Diluted
U.S. GAAP expectation	27.2 % - 29.5 %	\$5.13 - \$5.74
Exclusions before tax:		
Acquisition adjustments to deferred revenue	0.2 %	\$0.08
Acquisition-related amortization	3.9 % - 4.2 %	\$0.94 - \$0.97
Stock-based compensation and related excess payroll tax	8.4 % - 9.4 %	\$2.00 - \$2.17
Adjustment for income tax effect	N/A	(\$0.66) - (\$0.71)
Non-GAAP expectation	41.0 % - 42.0 %	\$7.64 - \$8.10

/ Non-GAAP Measures

We provide non-GAAP revenue, non-GAAP gross profit, non-GAAP gross profit margin, non-GAAP operating income, non-GAAP operating profit margin, non-GAAP net income and non-GAAP diluted earnings per share as supplemental measures to GAAP regarding our operational performance. These financial measures exclude the impact of certain items and, therefore, have not been calculated in accordance with GAAP. A detailed explanation of each of the adjustments to such financial measures is described below. These prepared remarks also contain a reconciliation of each of these non-GAAP financial measures to its most comparable GAAP financial measure.

We use non-GAAP financial measures (a) to evaluate our historical and prospective financial performance as well as our performance relative to our competitors, (b) to set internal sales targets and spending budgets, (c) to allocate resources, (d) to measure operational profitability and the accuracy of forecasting, (e) to assess financial discipline over operational expenditures and (f) as an important factor in determining variable compensation for management and employees. In addition, many financial analysts that follow us focus on and publish both historical results and future projections based on non-GAAP financial measures. We believe that it is in the best interest of our investors to provide this information to analysts so that they accurately report the non-GAAP

financial information. Moreover, investors have historically requested, and we have historically reported, these non-GAAP financial measures as a means of providing consistent and comparable information with past reports of financial results.

While we believe that these non-GAAP financial measures provide useful supplemental information to investors, there are limitations associated with the use of these non-GAAP financial measures. These non-GAAP financial measures are not prepared in accordance with GAAP, are not reported by all our competitors and may not be directly comparable to similarly titled measures of our competitors due to potential differences in the exact method of calculation. We compensate for these limitations by using these non-GAAP financial measures as supplements to GAAP financial measures and by reviewing the reconciliations of the non-GAAP financial measures to their most comparable GAAP financial measures.

The adjustments to these non-GAAP financial measures, and the basis for such adjustments, are outlined below:

Acquisition accounting for deferred revenue. Historically, we have consummated acquisitions in order to support our strategic and other business objectives. In accordance with the fair value provisions applicable to the accounting for business combinations, acquired deferred revenue is often recorded on the opening balance sheet at an amount that is lower than the historical carrying value. Although this acquisition accounting requirement has no impact on our business or cash flow, it adversely impacts our reported GAAP revenue in the reporting periods following an acquisition. In order to provide investors with financial information that facilitates comparison of both historical and future results, we provide non-GAAP financial measures which exclude the impact of the acquisition accounting adjustment. We believe that this non-GAAP financial adjustment is useful to investors because it allows investors to (a) evaluate the effectiveness of the methodology and information used by us in our financial and operational decision-making, and (b) compare our past and future reports of financial results as the revenue reduction related to acquired deferred revenue will not recur when related lease licenses and software maintenance contracts are renewed in future periods.

Amortization of intangible assets from acquisitions. We incur amortization of intangible assets, included in our GAAP presentation of amortization expense, related to various acquisitions we have made. We exclude these expenses for the purpose of calculating non-GAAP gross profit, non-GAAP gross profit margin, non-GAAP operating income, non-GAAP operating profit margin, non-GAAP net income and non-GAAP diluted earnings per share when we evaluate our continuing operational performance because these costs are fixed at the time of an acquisition, are then amortized over a period of several years after the acquisition and generally cannot be changed or influenced by us after the acquisition. Accordingly, we do not consider these expenses for purposes of evaluating our performance during the applicable time period after the acquisition, and we exclude such expenses when making decisions to allocate resources. We believe that these non-GAAP financial measures are useful to investors because they allow investors to (a) evaluate the effectiveness of the methodology and information used by us in our financial and operational decision-making, and (b) compare our past reports of financial results as we have historically reported these non-GAAP financial measures.

Stock-based compensation expense. We incur expense related to stock-based compensation included in our GAAP presentation of cost of maintenance and service; research and development expense; and selling, general and administrative expense. This non-GAAP adjustment also includes excess payroll tax expense related to stock-based compensation. Stock-based compensation expense (benefit) incurred in connection with our deferred compensation plan held in a rabbi trust includes an offsetting benefit (charge) recorded in other income (expense). Although stock-based compensation is an expense and viewed as a form of compensation, we exclude these expenses for the purpose of calculating non-GAAP gross profit, non-GAAP gross profit margin, non-GAAP operating income, non-GAAP operating profit margin, non-GAAP net income and non-GAAP diluted earnings per share when we evaluate our continuing operational performance. We similarly exclude income (expense) related to assets held in a rabbi trust in connection with our deferred compensation plan. Specifically, we exclude stock-based compensation and income (expense) related to assets held in the deferred compensation plan rabbi trust during our annual budgeting process and our quarterly and annual assessments of our performance. The annual budgeting process is the primary mechanism whereby we allocate resources to various initiatives and operational requirements. Additionally, the annual review by our board of directors during which it compares our historical business model and profitability to the planned business model and profitability for the forthcoming year excludes

the impact of stock-based compensation. In evaluating the performance of our senior management and department managers, charges related to stock-based compensation are excluded from expenditure and profitability results. In fact, we record stock-based compensation expense into a stand-alone cost center for which no single operational manager is responsible or accountable. In this way, we can review, on a period-to-period basis, each manager's performance and assess financial discipline over operational expenditures without the effect of stock-based compensation. We believe that these non-GAAP financial measures are useful to investors because they allow investors to (a) evaluate our operating results and the effectiveness of the methodology used by us to review our operating results, and (b) review historical comparability in our financial reporting as well as comparability with competitors' operating results.

Transaction expenses related to business combinations. We incur expenses for professional services rendered in connection with business combinations, which are included in our GAAP presentation of selling, general and administrative expense. These expenses are generally not tax-deductible. We exclude these acquisition-related transaction expenses, derived from announced acquisitions, for the purpose of calculating non-GAAP operating income, non-GAAP operating profit margin, non-GAAP net income and non-GAAP diluted earnings per share when we evaluate our continuing operational performance, as we generally would not have otherwise incurred these expenses in the periods presented as a part of our operations. We believe that these non-GAAP financial measures are useful to investors because they allow investors to (a) evaluate our operating results and the effectiveness of the methodology used by us to review our operating results, and (b) review historical comparability in our financial reporting as well as comparability with competitors' operating results.

Non-GAAP tax provision. We utilize a normalized non-GAAP annual effective tax rate (AETR) to calculate non-GAAP measures. This methodology provides better consistency across interim reporting periods by eliminating the effects of non-recurring items and aligning the non-GAAP tax rate with our expected geographic earnings mix. To project this rate, we analyzed our historic and projected non-GAAP earnings mix by geography along with other factors such as our current tax structure, recurring tax credits and incentives, and expected tax positions. On an annual basis we will re-evaluate this rate for significant items that may materially affect our projections.

Non-GAAP financial measures are not in accordance with, or an alternative for, GAAP. Our non-GAAP financial measures are not meant to be considered in isolation or as a substitute for comparable GAAP financial measures and should be read only in conjunction with our consolidated financial statements prepared in accordance with GAAP.

We have provided a reconciliation of the non-GAAP financial measures to the most directly comparable GAAP financial measures as listed below:

<u>GAAP Reporting Measure</u>	<u>Non-GAAP Reporting Measure</u>
Revenue	Non-GAAP Revenue
Gross Profit	Non-GAAP Gross Profit
Gross Profit Margin	Non-GAAP Gross Profit Margin
Operating Income	Non-GAAP Operating Income
Operating Profit Margin	Non-GAAP Operating Profit Margin
Net Income	Non-GAAP Net Income
Diluted Earnings Per Share	Non-GAAP Diluted Earnings Per Share

Constant currency. In addition to the non-GAAP financial measures detailed above, we use constant currency results for financial and operational decision-making and as a means to evaluate period-to-period comparisons by excluding the effects of foreign currency fluctuations on the reported results. To present this information, the 2021 results for entities whose functional currency is a currency other than the U.S. Dollar were converted to U.S. Dollars at rates that were in effect for the 2020 comparable period, rather than the actual exchange rates in effect for 2021. Constant currency growth rates are calculated by adjusting the 2021 reported amounts by the 2021 currency fluctuation impacts and comparing the adjusted amounts to the 2020 comparable period reported amounts. We believe that these non-GAAP financial measures are useful to investors because they allow investors to (a) evaluate the effectiveness of the methodology and information used by us in our financial and operational

decision-making, and (b) compare our reported results to our past reports of financial results without the effects of foreign currency fluctuations.

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