

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

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2021

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: 0-20853

ANSYS, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

2600 ANSYS Drive, Canonsburg, PA

(Address of Principal Executive Offices)

04-3219960

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

15317

(Zip Code)

844-462-6797

(Registrant's telephone number, including area code)

N/A

(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading Symbol(s)	Name of exchange on which registered
Common Stock, \$0.01 par value per share	ANSS	Nasdaq Stock Market LLC (Nasdaq Global Select Market)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes No

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

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

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

The number of shares of the Registrant's Common Stock, \$0.01 par value per share, outstanding as of July 31, 2021 was 87,252,523 shares.

ANSYS, INC. AND SUBSIDIARIES

INDEX

	<u>Page No.</u>
<u>PART I</u>	
<u>FINANCIAL INFORMATION</u>	
<u>Item 1.</u>	
<u>Financial Statements</u>	
<u>Condensed Consolidated Balance Sheets – June 30, 2021 and December 31, 2020</u>	<u>3</u>
<u>Condensed Consolidated Statements of Income – Three and Six Months Ended June 30, 2021 and 2020</u>	<u>4</u>
<u>Condensed Consolidated Statements of Comprehensive Income – Three and Six Months Ended June 30, 2021 and 2020</u>	<u>5</u>
<u>Condensed Consolidated Statements of Cash Flows – Six Months Ended June 30, 2021 and 2020</u>	<u>6</u>
<u>Condensed Consolidated Statements of Stockholders' Equity – Three and Six Months Ended June 30, 2021 and 2020</u>	<u>7</u>
<u>Notes to Condensed Consolidated Financial Statements</u>	<u>8</u>
<u>Report of Independent Registered Public Accounting Firm</u>	<u>19</u>
<u>Item 2.</u>	
<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>20</u>
<u>Item 3.</u>	
<u>Quantitative and Qualitative Disclosures About Market Risk</u>	<u>41</u>
<u>Item 4.</u>	
<u>Controls and Procedures</u>	<u>42</u>
<u>PART II</u>	
<u>OTHER INFORMATION</u>	
<u>Item 1.</u>	
<u>Legal Proceedings</u>	<u>43</u>
<u>Item 1A.</u>	
<u>Risk Factors</u>	<u>43</u>
<u>Item 2.</u>	
<u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	<u>43</u>
<u>Item 3.</u>	
<u>Defaults Upon Senior Securities</u>	<u>43</u>
<u>Item 4.</u>	
<u>Mine Safety Disclosures</u>	<u>43</u>
<u>Item 5.</u>	
<u>Other Information</u>	<u>43</u>
<u>Item 6.</u>	
<u>Exhibits</u>	<u>44</u>
<u>SIGNATURES</u>	<u>45</u>

PART I – FINANCIAL INFORMATION

Item 1. Financial Statements:

**ANSYS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)**

<i>(in thousands, except share and per share data)</i>	June 30, 2021	December 31, 2020
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 957,704	\$ 912,672
Short-term investments	504	479
Accounts receivable, less allowance for doubtful accounts of \$14,600 and \$14,000, respectively	449,664	537,564
Other receivables and current assets	214,492	268,522
Total current assets	<u>1,622,364</u>	<u>1,719,237</u>
Long-term assets:		
Property and equipment, net	91,872	96,503
Operating lease right-of-use assets	125,323	137,730
Goodwill	3,110,736	3,038,306
Other intangible assets, net	689,398	694,865
Other long-term assets	228,207	225,119
Deferred income taxes	22,872	28,830
Total long-term assets	<u>4,268,408</u>	<u>4,221,353</u>
Total assets	<u>\$ 5,890,772</u>	<u>\$ 5,940,590</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 9,608	\$ 18,691
Accrued bonuses and commissions	51,856	112,491
Accrued income taxes	8,980	26,116
Other accrued expenses and liabilities	186,545	199,466
Deferred revenue	338,396	372,061
Total current liabilities	<u>595,385</u>	<u>728,825</u>
Long-term liabilities:		
Deferred income taxes	103,649	110,321
Long-term operating lease liabilities	108,207	120,940
Long-term debt	753,327	798,118
Other long-term liabilities	79,986	84,514
Total long-term liabilities	<u>1,045,169</u>	<u>1,113,893</u>
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.01 par value; 2,000,000 shares authorized; zero shares issued or outstanding	—	—
Common stock, \$0.01 par value; 300,000,000 shares authorized; 95,267,307 and 95,266,320 shares issued, respectively	953	953
Additional paid-in capital	1,381,590	1,434,203
Retained earnings	3,970,707	3,804,593
Treasury stock, at cost: 8,066,350 and 8,693,809 shares, respectively	(1,070,210)	(1,124,102)
Accumulated other comprehensive loss	(32,822)	(17,775)
Total stockholders' equity	<u>4,250,218</u>	<u>4,097,872</u>
Total liabilities and stockholders' equity	<u>\$ 5,890,772</u>	<u>\$ 5,940,590</u>

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

ANSYS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
(Unaudited)

<i>(in thousands, except per share data)</i>	Three Months Ended		Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
Revenue:				
Software licenses	\$ 214,822	\$ 169,341	\$ 347,426	\$ 257,171
Maintenance and service	231,832	216,320	462,454	433,475
Total revenue	<u>446,654</u>	<u>385,661</u>	<u>809,880</u>	<u>690,646</u>
Cost of sales:				
Software licenses	8,065	8,511	15,671	13,437
Amortization	15,025	9,764	29,974	19,316
Maintenance and service	41,068	35,585	80,616	71,223
Total cost of sales	<u>64,158</u>	<u>53,860</u>	<u>126,261</u>	<u>103,976</u>
Gross profit	<u>382,496</u>	<u>331,801</u>	<u>683,619</u>	<u>586,670</u>
Operating expenses:				
Selling, general and administrative	160,410	128,698	306,625	259,220
Research and development	100,879	86,133	201,358	172,245
Amortization	4,434	4,163	8,841	8,325
Total operating expenses	<u>265,723</u>	<u>218,994</u>	<u>516,824</u>	<u>439,790</u>
Operating income	<u>116,773</u>	<u>112,807</u>	<u>166,795</u>	<u>146,880</u>
Interest income	486	934	1,003	3,709
Interest expense	(3,336)	(3,040)	(6,651)	(6,691)
Other income, net	14,937	1,884	15,336	2,011
Income before income tax provision	<u>128,860</u>	<u>112,585</u>	<u>176,483</u>	<u>145,909</u>
Income tax provision	<u>35,144</u>	<u>16,021</u>	<u>10,369</u>	<u>3,281</u>
Net income	<u>\$ 93,716</u>	<u>\$ 96,564</u>	<u>\$ 166,114</u>	<u>\$ 142,628</u>
Earnings per share – basic:				
Earnings per share	<u>\$ 1.08</u>	<u>\$ 1.13</u>	<u>\$ 1.91</u>	<u>\$ 1.66</u>
Weighted average shares	<u>87,168</u>	<u>85,651</u>	<u>86,988</u>	<u>85,724</u>
Earnings per share – diluted:				
Earnings per share	<u>\$ 1.06</u>	<u>\$ 1.11</u>	<u>\$ 1.89</u>	<u>\$ 1.64</u>
Weighted average shares	<u>88,053</u>	<u>86,934</u>	<u>88,019</u>	<u>87,152</u>

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

ANSYS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited)

<i>(in thousands)</i>	Three Months Ended		Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
Net income	\$ 93,716	\$ 96,564	\$ 166,114	\$ 142,628
Other comprehensive income (loss):				
Foreign currency translation adjustments	4,217	10,288	(15,047)	(14,004)
Comprehensive income	<u>\$ 97,933</u>	<u>\$ 106,852</u>	<u>\$ 151,067</u>	<u>\$ 128,624</u>

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

ANSYS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

<i>(in thousands)</i>	Six Months Ended	
	June 30, 2021	June 30, 2020
Cash flows from operating activities:		
Net income	\$ 166,114	\$ 142,628
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and intangible assets amortization	54,146	41,356
Operating lease right-of-use assets expense	11,100	10,216
Deferred income tax benefit	(9,110)	(15,684)
Provision for bad debts	660	5,672
Stock-based compensation expense	78,004	65,071
Gain on equity investment	(15,139)	—
Other	1,212	2,099
Changes in operating assets and liabilities:		
Accounts receivable	92,170	79,444
Other receivables and current assets	54,554	44,377
Other long-term assets	(1,743)	(9,280)
Accounts payable, accrued expenses and current liabilities	(86,276)	(88,099)
Accrued income taxes	(17,947)	19,576
Deferred revenue	(28,792)	(25,678)
Other long-term liabilities	(8,969)	7,306
Net cash provided by operating activities	289,984	279,004
Cash flows from investing activities:		
Acquisitions, net of cash acquired	(105,192)	(100,194)
Capital expenditures	(10,835)	(16,967)
Other investing activities	(297)	(2,405)
Net cash used in investing activities	(116,324)	(119,566)
Cash flows from financing activities:		
Principal payments on long-term debt	(45,000)	(75,000)
Purchase of treasury stock	—	(161,029)
Restricted stock withholding taxes paid in lieu of issued shares	(90,697)	(65,396)
Proceeds from shares issued for stock-based compensation	13,644	15,874
Other financing activities	(50)	—
Net cash used in financing activities	(122,103)	(285,551)
Effect of exchange rate fluctuations on cash and cash equivalents	(6,525)	(1,435)
Net increase (decrease) in cash and cash equivalents	45,032	(127,548)
Cash and cash equivalents, beginning of period	912,672	872,094
Cash and cash equivalents, end of period	\$ 957,704	\$ 744,546
Supplemental disclosure of cash flow information:		
Income taxes paid	\$ 39,325	\$ 13,483
Interest paid	\$ 6,024	\$ 8,412

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

ANSYS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)

<i>(in thousands)</i>	Common Stock		Additional Paid-In Capital	Retained Earnings	Treasury Stock		Accumulated Other Comprehensive (Loss)/Income	Total Stockholders' Equity
	Shares	Amount			Shares	Amount		
Balance, January 1, 2021	95,266	\$ 953	\$ 1,434,203	\$ 3,804,593	8,694	\$ (1,124,102)	\$ (17,775)	\$ 4,097,872
Stock-based compensation activity			(87,602)		(565)	48,565		(39,037)
Other comprehensive loss							(19,264)	(19,264)
Net income				72,398				72,398
Balance, March 31, 2021	95,266	\$ 953	\$ 1,346,601	\$ 3,876,991	8,129	\$ (1,075,537)	\$ (37,039)	\$ 4,111,969
Acquisition of Analytical Graphics, Inc.	1		328					328
Stock-based compensation activity			34,661		(63)	5,327		39,988
Other comprehensive income							4,217	4,217
Net income				93,716				93,716
Balance, June 30, 2021	95,267	\$ 953	\$ 1,381,590	\$ 3,970,707	8,066	\$ (1,070,210)	\$ (32,822)	\$ 4,250,218

<i>(in thousands)</i>	Common Stock		Additional Paid-In Capital	Retained Earnings	Treasury Stock		Accumulated Other Comprehensive (Loss)/Income	Total Stockholders' Equity
	Shares	Amount			Shares	Amount		
Balance, January 1, 2020	94,628	\$ 946	\$ 1,188,939	\$ 3,370,706	8,893	\$ (1,041,831)	\$ (65,381)	\$ 3,453,379
Treasury shares acquired					690	(161,029)		(161,029)
Stock-based compensation activity			(70,769)		(541)	48,997		(21,772)
Other comprehensive loss							(24,292)	(24,292)
Net income				46,064				46,064
Balance, March 31, 2020	94,628	\$ 946	\$ 1,118,170	\$ 3,416,770	9,042	\$ (1,153,863)	\$ (89,673)	\$ 3,292,350
Acquisition of Livermore Software Technology, LLC			1,030		(6)	501		1,531
Stock-based compensation activity			24,993		(146)	12,322		37,315
Other comprehensive income							10,288	10,288
Net income				96,564				96,564
Balance, June 30, 2020	94,628	\$ 946	\$ 1,144,193	\$ 3,513,334	8,890	\$ (1,141,040)	\$ (79,385)	\$ 3,438,048

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

ANSYS, INC. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2021
(Unaudited)

1. Organization

ANSYS, Inc. (Ansys, we, us, our) develops and globally markets engineering simulation software and services widely used by engineers, designers, researchers and students across a broad spectrum of industries and academia, including aerospace and defense, automotive, electronics, semiconductors, energy, turbomachinery, consumer products, and healthcare.

As defined by the accounting guidance for segment reporting, we operate as one segment.

Given the integrated approach to the multi-discipline problem-solving needs of our customers, a single sale of software may contain components from multiple product areas and include combined technologies. We also have a multi-year product and integration strategy that will result in new, combined products or changes to the historical product offerings. As a result, it is impracticable for us to provide accurate historical or current reporting among our various product lines.

The COVID-19 pandemic has had, and may continue to have, an impact on our business and employees, particularly as new variants emerge.

2. Accounting Policies**Basis of Presentation**

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States for interim financial information for commercial and industrial companies, the instructions to Form 10-Q and Rule 10-01 of Regulation S-X. Accordingly, the accompanying unaudited condensed consolidated financial statements do not include all of the information and footnotes required by accounting principles generally accepted in the United States for complete financial statements. The accompanying unaudited condensed consolidated financial statements should be read in conjunction with our audited consolidated financial statements (and notes thereto) included in our Annual Report on Form 10-K for the year ended December 31, 2020 (2020 Form 10-K). The condensed consolidated December 31, 2020 balance sheet presented is derived from the audited December 31, 2020 balance sheet included in the 2020 Form 10-K. In our opinion, all adjustments considered necessary for a fair presentation of the financial statements have been included, and all adjustments are of a normal and recurring nature. Operating results for the three and six months ended June 30, 2021 are not necessarily indicative of the results that may be expected for any future period.

Recently Adopted Accounting Guidance

Income taxes: In December 2019, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* (ASU 2019-12), as part of its initiative to reduce complexity in the accounting standards. The amendments in ASU 2019-12 eliminated certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. ASU 2019-12 also clarified and simplified other aspects of the accounting for income taxes. We adopted ASU 2019-12 on January 1, 2021 with no material impact to our condensed consolidated financial statements.

Cash and Cash Equivalents

Cash and cash equivalents consist primarily of highly liquid investments such as deposits held at major banks and money market funds. Cash equivalents are carried at cost, which approximates fair value. Our cash and cash equivalents balances comprise the following:

<i>(in thousands, except percentages)</i>	June 30, 2021		December 31, 2020	
	Amount	% of Total	Amount	% of Total
Cash accounts	\$ 556,074	58.1	\$ 571,587	62.6
Money market funds	401,630	41.9	341,085	37.4
Total	\$ 957,704		\$ 912,672	

Our money market fund balances are held in various funds of two issuers.

3. Revenue from Contracts with Customers

Disaggregation of Revenue

The following table summarizes revenue:

<i>(in thousands, except percentages)</i>	Three Months Ended		Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
Revenue:				
Lease licenses	\$ 129,794	\$ 113,209	\$ 194,871	\$ 158,083
Perpetual licenses	85,028	56,132	152,555	99,088
Software licenses	214,822	169,341	347,426	257,171
Maintenance	218,297	203,179	431,971	403,667
Service	13,535	13,141	30,483	29,808
Maintenance and service	231,832	216,320	462,454	433,475
Total revenue	\$ 446,654	\$ 385,661	\$ 809,880	\$ 690,646
Direct revenue, as a percentage of total revenue	75.4 %	78.1 %	73.8 %	76.2 %
Indirect revenue, as a percentage of total revenue	24.6 %	21.9 %	26.2 %	23.8 %

Our software licenses revenue is recognized up front, while maintenance and service revenue is generally recognized over the term of the contract.

Deferred Revenue

Deferred revenue consists of billings made or payments received in advance of revenue recognition from customer agreements. The timing of revenue recognition may differ from the timing of billings to customers. Payment terms vary by the type and location of customer and the products or services offered. The time between invoicing and when payment is due is not significant.

The changes in deferred revenue, inclusive of both current and long-term deferred revenue, during the six months ended June 30, 2021 and 2020 were as follows:

<i>(in thousands)</i>	2021	2020
Beginning balance – January 1	\$ 388,810	\$ 365,274
Acquired deferred revenue	746	1,405
Deferral of revenue	777,714	661,790
Recognition of revenue	(809,880)	(690,646)
Currency translation	(5,792)	(1,635)
Ending balance – June 30	\$ 351,598	\$ 336,188

Total revenue allocated to remaining performance obligations as of June 30, 2021 will be recognized as revenue as follows:

<i>(in thousands)</i>	
Next 12 months	\$ 597,173
Months 13-24	177,100
Months 25-36	83,608
Thereafter	69,218
Total revenue allocated to remaining performance obligations	\$ 927,099

Revenue allocated to remaining performance obligations represents contracted revenue that has not yet been recognized, which includes both deferred revenue and backlog. Our backlog represents installment billings for periods beyond the current

quarterly billing cycle. Revenue recognized during the six months ended June 30, 2021 and 2020 included amounts in deferred revenue and backlog at the beginning of the period of \$373.7 million and \$343.9 million, respectively.

4. Acquisitions

During the six months ended June 30, 2021 we completed several acquisitions to expand our solution offerings and enhance our customers' experience. The effects of the acquisitions were not material to our condensed consolidated results of operations individually or in the aggregate. The combined purchase price of the acquisitions during the six months ended June 30, 2021 was approximately \$110.8 million, which was paid in cash.

The assets and liabilities of the acquisitions have been recorded based upon management's estimates of their fair market values as of each respective date of acquisition. The following tables summarize the fair value of consideration transferred and the fair values of identified assets acquired and liabilities assumed for the combined acquisitions at each respective date of acquisition:

Fair Value of Consideration Transferred:

(in thousands)

Cash	\$	110,790
------	----	---------

Recognized Amounts of Identifiable Assets Acquired and Liabilities Assumed:

(in thousands)

Cash	\$	4,320
Accounts receivable and other tangible assets		2,854
Developed software and core technologies (12 year weighted-average life)		32,200
Customer lists (9 year weighted-average life)		2,300
Trade names (10 year weighted-average life)		1,000
Accounts payable and other liabilities		(2,834)
Deferred revenue		(746)
Net deferred tax liabilities		(7,311)
Total identifiable net assets	\$	31,783
Goodwill	\$	79,007

The goodwill, which is not tax-deductible, is attributed to intangible assets that do not qualify for separate recognition, including the assembled workforces of the acquired businesses and the synergies expected to arise as a result of the acquisitions.

The fair values of the assets acquired and liabilities assumed are based on preliminary calculations. The estimates and assumptions for these items are subject to change as additional information about what was known and knowable at each respective acquisition date is obtained during the measurement period (up to one year from the acquisition date).

On December 1, 2020, we acquired 100% of the shares of Analytical Graphics, Inc. (AGI), a premier provider of mission-simulation, modeling, testing and analysis software for aerospace, defense and intelligence applications. The acquisition expands the scope of our offerings, empowering users to solve challenges by simulating from the chip level all the way to a customer's entire mission. The purchase price was approximately \$720.6 million, inclusive of net working capital adjustments.

On April 1, 2020, we acquired 100% of the shares of Lumerical Inc. (Lumerical), a leading developer of photonic design and simulation tools, for a purchase price of approximately \$107.5 million, which was paid in cash. The acquisition adds best-in-class photonic products to our multiphysics portfolio, providing customers with a full set of solutions to solve their next-generation product challenges.

The operating results of each acquisition have been included in our condensed consolidated financial statements since each respective date of acquisition.

5. Other Receivables and Current Assets and Other Accrued Expenses and Liabilities

Our other receivables and current assets and other accrued expenses and liabilities comprise the following balances:

<i>(in thousands)</i>	June 30, 2021	December 31, 2020
Receivables related to unrecognized revenue	\$ 113,354	\$ 192,154
Income taxes receivable, including overpayments and refunds	45,879	31,628
Prepaid expenses and other current assets	55,259	44,740
Total other receivables and current assets	<u>\$ 214,492</u>	<u>\$ 268,522</u>
Accrued vacation	41,656	34,132
Consumption, VAT and sales tax liabilities	25,321	45,156
Accrued expenses and other current liabilities	119,568	120,178
Total other accrued expenses and liabilities	<u>\$ 186,545</u>	<u>\$ 199,466</u>

Receivables related to unrecognized revenue represent the current portion of billings made for customer contracts that have not yet been recognized as revenue.

6. Earnings Per Share

Basic earnings per share (EPS) amounts are computed by dividing earnings by the weighted average number of common shares outstanding during the period. Diluted EPS amounts assume the issuance of common stock for all potentially dilutive equivalents outstanding. To the extent stock awards are anti-dilutive, they are excluded from the calculation of diluted EPS.

The details of basic and diluted EPS are as follows:

<i>(in thousands, except per share data)</i>	Three Months Ended		Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
Net income	\$ 93,716	\$ 96,564	\$ 166,114	\$ 142,628
Weighted average shares outstanding – basic	87,168	85,651	86,988	85,724
Dilutive effect of stock plans	885	1,283	1,031	1,428
Weighted average shares outstanding – diluted	88,053	86,934	88,019	87,152
Basic earnings per share	\$ 1.08	\$ 1.13	\$ 1.91	\$ 1.66
Diluted earnings per share	\$ 1.06	\$ 1.11	\$ 1.89	\$ 1.64
Anti-dilutive shares	31	26	29	27

7. Goodwill and Intangible Assets

Intangible assets are classified as follows:

<i>(in thousands)</i>	June 30, 2021		December 31, 2020	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Finite-lived intangible assets:				
Developed software and core technologies	\$ 890,397	\$ (396,417)	\$ 859,620	\$ (370,338)
Customer lists and contract backlog	286,732	(142,392)	288,085	(136,093)
Trade names	176,262	(125,541)	175,626	(122,392)
Total	\$ 1,353,391	\$ (664,350)	\$ 1,323,331	\$ (628,823)
Indefinite-lived intangible asset:				
Trade name	\$ 357		\$ 357	

Finite-lived intangible assets are amortized over their estimated useful lives of two years to seventeen years. Amortization expense for the intangible assets reflected above was \$19.5 million and \$13.9 million for the three months ended June 30, 2021 and 2020, respectively. Amortization expense for the intangible assets reflected above was \$38.8 million and \$27.6 million for the six months ended June 30, 2021 and 2020, respectively

As of June 30, 2021, estimated future amortization expense for the intangible assets reflected above was as follows:

<i>(in thousands)</i>	
Remainder of 2021	\$ 36,684
2022	78,527
2023	80,665
2024	80,069
2025	77,767
2026	75,567
Thereafter	259,762
Total intangible assets subject to amortization	689,041
Indefinite-lived trade name	357
Other intangible assets, net	\$ 689,398

The changes in goodwill during the six months ended June 30, 2021 and 2020 were as follows:

<i>(in thousands)</i>	2021	2020
Beginning balance – January 1	\$ 3,038,306	\$ 2,413,280
Acquisitions and adjustments ⁽¹⁾	78,610	69,330
Currency translation	(6,180)	(8,311)
Ending balance – June 30	\$ 3,110,736	\$ 2,474,299

⁽¹⁾ In accordance with the accounting for business combinations, we recorded adjustments to goodwill for the effect of changes in the provisional fair values of the assets acquired and liabilities assumed during the measurement period (up to one year from the acquisition date) as we obtained new information about facts and circumstances that existed as of the acquisition date that, if known, would have affected the measurement of the amounts recognized as of that date.

During the first quarter of 2021, we completed the annual impairment test for goodwill and the indefinite-lived intangible asset and determined that these assets had not been impaired as of the test date, January 1, 2021. No other events or circumstances changed during the six months ended June 30, 2021 that would indicate that the fair values of our reporting unit and indefinite-lived intangible asset are below their carrying amounts.

8. Fair Value Measurement

The valuation hierarchy for disclosure of assets and liabilities reported at fair value prioritizes the inputs for such valuations into three broad levels:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument; or
- Level 3: unobservable inputs based on our own assumptions used to measure assets and liabilities at fair value.

A financial asset's or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

Our long-term debt is classified within Level 2 of the fair value hierarchy because these borrowings are not actively traded and have a variable interest rate structure based upon market rates. The carrying amount of our long-term debt approximates the estimated fair value. See Note 10, "Debt", for additional information on our borrowings.

The following tables provide the assets carried at fair value and measured on a recurring basis:

(in thousands)	June 30, 2021	Fair Value Measurements at Reporting Date Using:		
		Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Cash equivalents	\$ 401,630	\$ 401,630	\$ —	\$ —
Short-term investments	\$ 504	\$ —	\$ 504	\$ —
Deferred compensation plan investments	\$ 1,602	\$ 1,602	\$ —	\$ —
Equity securities	\$ 3,078	\$ 3,078	\$ —	\$ —

(in thousands)	December 31, 2020	Fair Value Measurements at Reporting Date Using:		
		Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Cash equivalents	\$ 341,085	\$ 341,085	\$ —	\$ —
Short-term investments	\$ 479	\$ —	\$ 479	\$ —
Deferred compensation plan investments	\$ 1,602	\$ 1,602	\$ —	\$ —

The cash equivalents in the preceding tables represent money market funds, valued at net asset value, with carrying values which approximate their fair values because of their short-term nature.

The short-term investments in the preceding tables represent deposits held by certain foreign subsidiaries. The deposits have fixed interest rates with original maturities ranging from three months to one year.

The deferred compensation plan investments in the preceding tables represent trading securities held in a rabbi trust for the benefit of non-employee directors. These securities consist of mutual funds traded in an active market with quoted prices. As a result, the plan assets are classified as Level 1 in the fair value hierarchy. The plan assets are recorded within other long-term assets on our condensed consolidated balance sheets.

The equity securities represent our investment in a publicly traded company. These securities are traded in an active market with quoted prices. As a result, the securities are classified as Level 1 in the fair value hierarchy. The securities are recorded within other long-term assets on our condensed consolidated balance sheets.

9. Leases

Our right-of-use (ROU) assets and lease liabilities primarily include operating leases for office space. Our executive offices and those related to certain domestic product development, marketing, production and administration are located in a 186,000 square foot office facility in Canonsburg, Pennsylvania. The term of the lease is 183 months, which began on October 1, 2014 and expires on December 31, 2029. The lease agreement includes options to renew the contract through August 2044, an option to lease additional space in January 2025 and an option to terminate the lease in December 2025. No options are included in the lease liability as renewal is not reasonably certain. In addition, we are reasonably certain we will not terminate the lease agreement. Absent the exercise of options in the lease, our remaining base rent (inclusive of property taxes and certain operating costs) is \$4.5 million per annum through 2024 and \$4.7 million per annum for 2025 - 2029.

The components of our global lease cost reflected in the condensed consolidated statements of income are as follows:

<i>(in thousands)</i>	Three Months Ended		Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
Lease liability cost	\$ 7,138	\$ 6,280	\$ 14,139	\$ 12,498
Variable lease cost not included in the lease liability ⁽¹⁾	904	1,224	2,186	2,321
Total lease cost	\$ 8,042	\$ 7,504	\$ 16,325	\$ 14,819

⁽¹⁾ Variable lease cost includes common area maintenance, property taxes, utilities and fluctuations in rent due to a change in an index or rate.

Other information related to operating leases is as follows:

<i>(in thousands)</i>	Three Months Ended		Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
Cash paid for amounts included in the measurement of the lease liability:				
Operating cash flows from operating leases	\$ (7,139)	\$ (5,668)	\$ (13,966)	\$ (11,401)
Right-of-use assets obtained in exchange for new operating lease liabilities	5,007	642	5,594	20,243

	As of June 30,	
	2021	2020
Weighted-average remaining lease term of operating leases	6.9 years	7.7 years
Weighted-average discount rate of operating leases	3.0 %	3.3 %

The maturity schedule of the operating lease liabilities as of June 30, 2021 is as follows:

<i>(in thousands)</i>	
Remainder of 2021	\$ 14,238
2022	25,593
2023	20,018
2024	18,734
2025	17,708
Thereafter	50,813
Total future lease payments	147,104
Less: Present value adjustment	(14,934)
Present value of future lease payments ⁽¹⁾	\$ 132,170

⁽¹⁾ Includes the current portion of operating lease liabilities of \$24.0 million, which is reflected in other accrued expenses and liabilities in the condensed consolidated balance sheets.

There were no material leases that have been signed but not yet commenced as of June 30, 2021.

10. Debt

In February 2019, we entered into a credit agreement for a \$500.0 million unsecured revolving credit facility, which includes a \$50.0 million sublimit for the issuance of letters of credit (Revolving Credit Facility), with Bank of America, N.A. as the Administrative Agent. The Revolving Credit Facility becomes payable in full on February 22, 2024 and is available for general corporate purposes, including, among others, to finance acquisitions and capital expenditures. The Revolving Credit Facility had not been utilized as of June 30, 2021.

We amended our credit agreement (Amended Credit Agreement) on October 16, 2019. The amendment provided for a new \$500.0 million unsecured term loan facility to finance our acquisition of Livermore Software Technology (LST) in the fourth quarter of 2019. The term loan was funded on November 1, 2019 and matures on November 1, 2024. Principal on the term loan will be payable on the last business day of each fiscal quarter commencing with the ninth full fiscal quarter after the funding date at a rate of 1.25% per quarter, increasing to 2.50% per quarter after the next four fiscal quarters. We repaid \$75.0 million of the unsecured term loan balance in January 2020 prior to the scheduled maturity dates in 2022 (\$25.0 million) and 2023 (\$50.0 million). In June 2021, we repaid \$26.0 million of the unsecured term loan balance prior to the scheduled maturity date in 2024.

In connection with the acquisition of AGI, we entered into a credit agreement (AGI Credit Agreement) on November 9, 2020, with Bank of America, N.A. as the Administrative Agent. The AGI Credit Agreement provided for a new \$375.0 million unsecured term loan facility to finance a portion of the cash consideration for the acquisition. The term loan was funded on December 1, 2020 and matures on November 1, 2024. Principal on the term loan will be payable on the last business day of each fiscal quarter commencing with the fifth full fiscal quarter after the funding date at a rate of 1.25% per quarter, increasing to 2.50% per quarter after the next four fiscal quarters. We repaid \$19.0 million of the unsecured term loan balance in June 2021 prior to the scheduled maturity dates in 2022 (\$18.8 million) and 2023 (\$0.2 million).

Borrowings under the Amended Credit Agreement and the AGI Credit Agreement (collectively, the Credit Agreements) accrue interest at the Eurodollar rate plus an applicable margin or at the base rate, at our election. For the quarter ended June 30, 2021, we elected to apply the Eurodollar rate. The base rate is the applicable margin plus the highest of (i) the federal funds rate plus 0.500%, (ii) the Bank of America prime rate and (iii) the Eurodollar rate plus 1.000%. The applicable margin for these borrowings is a percentage per annum based on the lower of (1) a pricing level determined by our then-current consolidated leverage ratio and (2) a pricing level determined by our debt ratings (if such debt ratings exist). This results in a margin ranging from 1.125% to 1.750% and 0.125% to 0.750% for the Eurodollar rate and base rate, respectively.

The weighted average interest rate in effect during each of the three and six months ended June 30, 2021 was 1.45%. As of June 30, 2021, the rate in effect for the Credit Agreements was 1.40%.

The Credit Agreements contain language in the event the Eurodollar rate is not available due to LIBOR changes. If this occurs, the base rate will be used for borrowings. However, we may work with the Administrative Agent to amend the Credit Agreements to replace the Eurodollar rate with (i) one or more rates based on the Secured Overnight Financing Rate (SOFR); or (ii) another alternative benchmark rate, subject to the lenders' approval.

The Credit Agreements contain customary representations and warranties, affirmative and negative covenants and events of default. The Credit Agreements also each contain a financial covenant requiring us to maintain a consolidated leverage ratio of indebtedness to earnings before interest, taxes, depreciation and amortization not exceeding 3.50 to 1.00 as of the end of any fiscal quarter (for the four-quarter period ending on such date) with an opportunity for a temporary increase in such consolidated leverage ratio to 4.00 to 1.00 upon the consummation of certain qualified acquisitions for which the aggregate consideration is at least \$250.0 million.

As of June 30, 2021 and December 31, 2020, the carrying values of the term loans were \$753.3 million, which is net of \$1.7 million of unamortized debt issuance costs, and \$798.1 million, which is net of \$1.9 million of unamortized debt issuance costs, respectively. We were in compliance with all covenants as of June 30, 2021 and December 31, 2020.

11. Income Taxes

Our income before income tax provision, income tax provision and effective tax rates were as follows:

<i>(in thousands, except percentages)</i>	Three Months Ended		Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
Income before income tax provision	\$ 128,860	\$ 112,585	\$ 176,483	\$ 145,909
Income tax provision	35,144	16,021	10,369	3,281
Effective tax rate	27.3 %	14.2 %	5.9 %	2.2 %

Tax expense for the first half of 2021 and 2020 benefited due to increased stock compensation benefits, many of which were recognized discretely in the first quarter of each year. These benefits were partially offset by an increase in non-deductible compensation in 2021.

12. Stock Repurchase Program

Under our stock repurchase program, we repurchased shares as follows:

<i>(in thousands, except per share data)</i>	Six Months Ended	
	June 30, 2021	June 30, 2020
Number of shares repurchased	—	690
Average price paid per share	\$ —	\$ 233.48
Total cost	\$ —	\$ 161,029

As of June 30, 2021, 2.8 million shares remained available for repurchase under the program.

13. Stock-Based Compensation

On May 14, 2021, our stockholders approved the ANSYS, Inc. 2021 Equity and Incentive Compensation Plan (the 2021 Plan). The 2021 Plan is a long-term incentive plan pursuant to which awards may be granted to directors, officers, other employees and certain consultants of Ansys and its subsidiaries. These awards include stock option rights, stock appreciation rights, restricted stock, restricted stock units, cash incentives, performance shares, performance units and other awards. The 2021 Plan authorizes 4.4 million shares of common stock for issuance, plus 1.6 million shares that remained available for issuance under the Fifth Amended and Restated ANSYS, Inc. 1996 Stock Option and Grant Plan (the Predecessor Plan) as of the effective date of the 2021 Plan plus any shares relating to the outstanding awards under the Predecessor Plan or the 2021 Plan that are subsequently forfeited. As of the effective date of the 2021 Plan, grants are no longer made under the Predecessor Plan.

Total stock-based compensation expense and its net impact on basic and diluted earnings per share are as follows:

<i>(in thousands, except per share data)</i>	Three Months Ended		Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
Cost of sales:				
Maintenance and service	\$ 3,519	\$ 3,464	\$ 7,081	\$ 6,330
Operating expenses:				
Selling, general and administrative	23,515	16,319	40,738	31,463
Research and development	15,851	14,347	30,185	27,278
Stock-based compensation expense before taxes	42,885	34,130	78,004	65,071
Related income tax benefits	(8,783)	(10,883)	(51,408)	(36,789)
Stock-based compensation expense, net of taxes	\$ 34,102	\$ 23,247	\$ 26,596	\$ 28,282
Net impact on earnings per share:				
Basic earnings per share	\$ (0.39)	\$ (0.27)	\$ (0.31)	\$ (0.33)
Diluted earnings per share	\$ (0.39)	\$ (0.27)	\$ (0.30)	\$ (0.32)

14. Geographic Information

Revenue to external customers is attributed to individual countries based upon the location of the customer. Revenue by geographic area is as follows:

<i>(in thousands)</i>	Three Months Ended		Six Months Ended	
	June 30, 2021	June 30, 2020	June 30, 2021	June 30, 2020
United States	\$ 208,402	\$ 184,143	\$ 361,103	\$ 309,256
Japan	60,198	55,849	102,213	93,208
Germany	30,609	27,274	61,955	57,371
South Korea	23,091	17,461	45,489	33,022
Other Europe, Middle East and Africa (EMEA)	74,348	60,083	146,277	119,393
Other international	50,006	40,851	92,843	78,396
Total revenue	\$ 446,654	\$ 385,661	\$ 809,880	\$ 690,646

Property and equipment by geographic area is as follows:

<i>(in thousands)</i>	June 30, 2021	December 31, 2020
United States	\$ 63,494	\$ 65,633
India	6,437	7,408
Germany	5,369	5,277
France	5,003	5,749
Other EMEA	5,252	5,847
Other international	6,317	6,589
Total property and equipment, net	\$ 91,872	\$ 96,503

15. Contingencies and Commitments

We are subject to various investigations, claims and legal proceedings that arise in the ordinary course of business, including commercial disputes, labor and employment matters, tax audits, alleged infringement of third party's intellectual property rights and other matters. In our opinion, the resolution of pending matters is not expected to have a material adverse effect on our consolidated results of operations, cash flows or financial position. However, each of these matters is subject to various uncertainties and it is possible that an unfavorable resolution of one or more of these proceedings could materially affect our results of operations, cash flows or financial position.

Our Indian subsidiary has several service tax audits pending that have resulted in formal inquiries being received on transactions through mid-2012. We could incur tax charges and related liabilities of approximately \$7.3 million. As such charges are not probable at this time, a reserve has not been recorded on the condensed consolidated balance sheet as of June 30, 2021. The service tax issues raised in our notices and inquiries are very similar to the case, M/s Microsoft Corporation (I) (P) Ltd. Vs. Commissioner of Service Tax, New Delhi, wherein the Delhi Customs, Excise and Service Tax Appellate Tribunal (CESTAT) issued a favorable ruling to Microsoft. The Microsoft ruling was subsequently challenged in the Supreme Court by the Indian tax authority and a decision is still pending. We can provide no assurances on the impact that the present Microsoft case's decision will have on our cases, however, an unfavorable ruling in the Microsoft case may impact our assessment of probability and result in the recording of a \$7.3 million reserve. We are uncertain as to when these service tax matters will be concluded.

We sell software licenses and services to our customers under contractual agreements. Such agreements generally include certain provisions indemnifying the customer against claims of intellectual property infringement or non-compliance to contractual terms and conditions by third parties arising from such customer's usage of our products or services. To date, payments related to these indemnification provisions have been immaterial. For several reasons, including the lack of prior material indemnification claims, we cannot determine the maximum amount of potential future payments, if any, related to such indemnification provisions.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of ANSYS, Inc.

Results of Review of Interim Financial Information

We have reviewed the accompanying condensed consolidated balance sheet of ANSYS, Inc. and subsidiaries (the "Company") as of June 30, 2021, the related condensed consolidated statements of income, comprehensive income, and stockholders' equity for the three-month and six-month periods ended June 30, 2021 and 2020, and of cash flows for the six-month periods ended June 30, 2021 and 2020, and the related notes (collectively referred to as the "interim financial information"). Based on our reviews, we are not aware of any material modifications that should be made to the accompanying interim financial information for it to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheet of the Company as of December 31, 2020, and the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for the year then ended (not presented herein); and in our report dated February 24, 2021, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying condensed consolidated balance sheet as of December 31, 2020, is fairly stated, in all material respects, in relation to the consolidated balance sheet from which it has been derived.

Basis for Review Results

This interim financial information is the responsibility of the Company's management. 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 reviews in accordance with standards of the PCAOB. A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the PCAOB, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

/s/ Deloitte & Touche LLP

Pittsburgh, Pennsylvania
August 4, 2021

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with the accompanying unaudited condensed consolidated financial statements and notes thereto for the six months ended June 30, 2021, and with our audited consolidated financial statements and notes thereto for the year ended December 31, 2020 included in the 2020 Form 10-K filed with the Securities and Exchange Commission. The discussion and analysis of our financial condition and results of operations are based upon our condensed consolidated financial statements, which have been prepared in accordance with generally accepted accounting principles (GAAP).

Business:

Ansys, a corporation formed in 1994, develops and globally markets engineering simulation software and services widely used by engineers, designers, researchers and students across a broad spectrum of industries and academia, including aerospace and defense, automotive, electronics, semiconductors, energy, turbomachinery, consumer products, and healthcare. Headquartered south of Pittsburgh, Pennsylvania, we employed approximately 4,900 people as of June 30, 2021. We focus on the development of open and flexible solutions that enable users to analyze designs directly on the desktop, which can be delivered both on-premises and in the cloud. We provide a common platform for fast, efficient and cost-conscious product development, from design concept to final-stage testing and validation. We distribute our suite of simulation technologies through direct sales offices in strategic, global locations and a global network of independent resellers and distributors (collectively, channel partners). It is our intention to continue to maintain this hybrid sales and distribution model.

Our strategy of Pervasive Engineering Simulation seeks to deepen the use of simulation in our core, to amplify usage of simulation throughout the product lifecycle and to embed simulation into our partners' ecosystems. The engineering software simulation market is strong and growing. The market growth is driven by customers' needs for rapid, quality innovation in a cost-efficient manner, enabling faster time to market of new products and lower warranty costs. While the transition away from physical prototyping toward simulation is prevalent across all industries, simulation demand is heightened by investments in high-growth solutions, including 5G, electrification, autonomous and the Industrial Internet of Things. Our strategy of Pervasive Engineering Simulation is aligned with this market growth.

We license our technology to businesses, educational institutions and governmental agencies. Growth in our revenue is affected by the strength of global economies, general business conditions, currency exchange rate fluctuations, customer budgetary constraints and the competitive position of our products. We believe that the features, functionality and integrated multiphysics capabilities of our software products are as strong as they have ever been. However, the software business is generally characterized by long sales cycles. These long sales cycles increase the difficulty of predicting sales for any particular quarter. We make many operational and strategic decisions based upon short- and long-term sales forecasts that are impacted not only by these long sales cycles, but also by current global economic conditions, including the impact of the current COVID-19 pandemic. As a result, we believe that our overall performance is best measured by fiscal year results rather than by quarterly results.

Management considers the competition and price pressure that it faces in the short- and long-term by focusing on expanding the breadth, depth, ease of use and quality of the technologies, features, functionality and integrated multiphysics capabilities of our software products as compared to our competitors; investing in research and development to develop new and innovative products and increase the capabilities of our existing products; supplying new products and services; focusing on customer needs, training, consulting and support; and enhancing our distribution channels. We also consider acquisitions to supplement our global engineering talent, product offerings and distribution channels.

Overview:

Update on the Impact of the COVID-19 Pandemic

During the first half of 2021, we have continued to work to mitigate the effects of the COVID-19 pandemic on our business by adapting our local guidelines based on the severity of the virus in the countries in which we operate. The health and safety of our employees and their families, our partners and our broad Ansys community around the world remain a high priority. Remote access remains the primary means of work for much of our workforce. During the second quarter, we 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. These arrangements will start to be adopted in the fourth quarter and will be subject to evolving local guidelines on precautions to be taken to mitigate COVID-19 risk to our employees and customers. Remote work arrangements have not adversely affected our ability to maintain effective financial operations, including our financial reporting systems, internal controls over financial reporting and disclosure controls and procedures. We expect to maintain these effective controls as we continue to work remotely during and after the COVID-19 pandemic. The spread of the virus and its variants and economic deterioration caused by them could have an impact on our business, as well as on our ability to achieve our financial guidance.

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. Additionally, in-person meetings are starting to resume as well as planning for live attendance at trade events. Our research and development teams have also continued to be productive and we continue to meet our product release targets, as evidenced by the recent release of Ansys 2021 R2 in July.

Our spending reflects our expectations for the pace at which economic recovery will occur, 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, in particular our Customer Relationship Management (CRM) system and human resources information system (HRIS) projects, as those projects are critical to our ability to operate efficiently and scale the business for future growth.

Please see "Risk Factors," "Quantitative and Qualitative Disclosures about Market Risk," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of our Forms 10-K and 10-Q for discussion on additional business risks, including those associated with the COVID-19 pandemic.

Overall GAAP and Non-GAAP Results

This section includes a discussion of GAAP and non-GAAP results. For reconciliations of non-GAAP results to GAAP results, see the section titled "Non-GAAP Results" herein.

Our GAAP and non-GAAP results for the three and six months ended June 30, 2021 as compared to the three and six months ended June 30, 2020 reflected the following variances:

	Three Months Ended June 30, 2021		Six Months Ended June 30, 2021	
	GAAP	Non-GAAP	GAAP	Non-GAAP
Revenue	15.8 %	16.1 %	17.3 %	18.1 %
Operating income	3.5 %	12.9 %	13.6 %	21.5 %
Diluted earnings per share	(4.5) %	19.4 %	15.2 %	25.3 %

Our results reflect an increase in revenue during the three and six months ended June 30, 2021 due to growth in perpetual and lease licenses, maintenance and service driven by strong execution, acquisitions and by the improving global economic environment in 2021 as compared to 2020. We also experienced increased operating expenses during the three and six months ended June 30, 2021, primarily due to increased personnel costs, additional operating expenses related to acquisitions, increased costs related to foreign exchange translation due to a weaker U.S. Dollar and higher stock-based compensation. The COVID-19 pandemic did not have a material impact on our operating expenses during the three and six months ended June 30, 2021.

The non-GAAP results exclude the income statement effects of the acquisition accounting adjustments to deferred revenue, stock-based compensation, amortization of acquired intangible assets, and transaction expenses related to business combinations.

Impact of Foreign Currency

Our comparative financial results were impacted by fluctuations in the U.S. Dollar during the three and six months ended June 30, 2021 as compared to the three and six months ended June 30, 2020. The net favorable impacts on our GAAP and non-GAAP revenue and operating income as a result of the weakened U.S. Dollar when measured against our primary foreign currencies are reflected in the table below.

(in thousands)	Three Months Ended June 30, 2021		Six Months Ended June 30, 2021	
	GAAP	Non-GAAP	GAAP	Non-GAAP
Revenue	\$ 9,199	\$ 9,248	\$ 19,111	\$ 19,196
Operating income	\$ 1,412	\$ 1,877	\$ 3,458	\$ 4,350

In constant currency, our increases were as follows:

	Three Months Ended June 30, 2021		Six Months Ended June 30, 2021	
	GAAP	Non-GAAP	GAAP	Non-GAAP
Revenue	13.4 %	13.8 %	14.5 %	15.3 %
Operating income	2.3 %	11.8 %	11.2 %	19.9 %

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 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 revenue and operating income amounts by the 2021 currency fluctuation impacts and comparing the adjusted amounts to the 2020 comparable period reported revenue and operating income amounts.

Other Key Business Metric

Annual Contract Value (ACV) is one of our key performance metrics and is useful to investors in assessing the strength and trajectory of our business. Given that revenue is more volatile due to the upfront revenue recognition of perpetual licenses and multi-year lease license sales, we provide ACV as a supplemental metric to help evaluate the annual performance of the business. Summed over the long term, ACV and revenue are equal. However, there will be years in which ACV growth lags revenue growth and other years in which ACV growth leads revenue growth. It is used by management in financial and operational decision-making and in setting sales targets used for compensation. ACV should be viewed independently of revenue and deferred revenue as ACV is a performance metric and is not intended to be combined with any of these items. 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.

Our ACV was as follows:

<i>(in thousands, except percentages)</i>	Three Months Ended June 30,		Change		Constant Currency %
	2021	2020	Amount	%	
ACV	\$ 430,539	\$ 344,406	\$ 86,133	25.0	22.7
Recurring ACV as a percentage of ACV	82.1 %	83.2 %			

<i>(in thousands, except percentages)</i>	Six Months Ended June 30,		Change		Constant Currency %
	2021	2020	Amount	%	
ACV	\$ 749,921	\$ 645,456	\$ 104,465	16.2	13.5
Recurring ACV as a percentage of ACV	80.2 %	82.7 %			

Recurring ACV includes both lease licenses and maintenance contracts. The reduction as a percentage of total ACV in 2021 as compared to 2020 was driven by an increase in perpetual licensing coming off a weak comparable in 2020.

Industry Commentary:

High-tech, aerospace and defense, and automotive continue to drive our growth as customers continued to invest in innovation with a focus on simulation to replace physical testing. The high-tech industry growth was strengthened by the megatrend of 5G and the increasingly pervasive use of more complex electronics systems. While the commercial aviation sector continues its recovery from the impact of the global pandemic, the defense segment has remained strong and buoyed our overall performance in the aerospace and defense industry. As electrification, advanced driver-assistance systems and autonomous technologies shape the future of transportation and mobility, the automotive industry continues to invest in simulation to simultaneously accelerate the development of these new innovations and improve the productivity of existing technologies and processes.

Other Financial Information

Our financial position includes \$958.2 million in cash and short-term investments, and working capital of \$1,027.0 million as of June 30, 2021.

There were no share repurchases during the first half of 2021 as compared to the 0.7 million shares repurchased during the first half of 2020 for \$161.0 million. As of June 30, 2021, we had 2.8 million shares remaining available for repurchase under our authorized share repurchase program.

Geographic Trends:

The following table presents our geographic constant currency GAAP revenue growth during the three and six months ended June 30, 2021 as compared to the three and six months ended June 30, 2020:

	Three Months Ended June 30, 2021	Six Months Ended June 30, 2021
Americas	12.8 %	16.2 %
EMEA	11.6 %	9.6 %
Asia-Pacific	16.1 %	16.2 %
Total	13.4 %	14.5 %

The mix of perpetual license sales as well as the value and duration of multi-year lease contracts executed during the period significantly impact revenue recognition. As a result, regional revenues may fluctuate significantly on a quarterly basis and are not necessarily indicative of customer usage changes or our cash flows for such regions during the periods presented.

To drive growth, we continue to focus on a number of sales improvement activities across the geographic regions, including sales hiring, pipeline building, productivity initiatives and customer engagement activities.

Continued trade tensions between the U.S. and China have had an impact on, and in the future may further restrict, our ability to sell and distribute our products to certain customers. As a result, this has had, and in the future could continue to have, an adverse effect on our business, results of operations or financial condition. Refer to additional details in Part I, "Item 1A. Risk Factors" in our 2020 Form 10-K.

Use of Estimates:

The preparation of our financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates, including those related to fair values of stock awards, bad debts, contract revenue, acquired deferred revenue, the standalone selling prices of our products and services, the valuation of goodwill and other intangible assets, deferred compensation, income taxes, uncertain tax positions, tax valuation reserves, operating lease assets and liabilities, useful lives for depreciation and amortization, and contingencies and litigation. We base our estimates on historical experience, market experience, estimated future cash flows and various other assumptions that management believes are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

Note About Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 (the Exchange Act), including, but not limited to, the following statements, as well as statements that contain such words as "anticipates," "intends," "believes," "plans" and other similar expressions:

- Our expectations regarding the impacts of the COVID-19 pandemic and variants of the virus as well as trade tensions between the U.S. and China.
- Our expectations regarding integrating acquired companies to realize the benefits of incremental ACV and revenue synergies as well as cost reductions.
- Our assessment of the ultimate liabilities arising from various investigations, claims and legal proceedings.
- Our expectations regarding the outcome of our service tax audit cases.
- Our expectations regarding future claims related to indemnification obligations.
- Our intentions regarding our hybrid sales and distribution model.
- Our statements regarding the strength of the features, functionality and integrated multiphysics capabilities of our software products.
- Our belief that our overall performance is best measured by fiscal year results rather than by quarterly results.

- Our expectations regarding the accelerated development of new and innovative products to the marketplace while lowering design and engineering costs for customers as a result of our acquisitions.
- Our intentions related to investments in research and development, particularly as it relates to expanding the ease of use and capabilities of our broad portfolio of simulation software products.
- Our expectations regarding increased license volatility due to an increased customer preference for time-based licenses rather than perpetual licenses.
- Our statements regarding the impact of global economic conditions.
- Our estimates regarding the expected impact on reported revenue related to the acquisition accounting treatment of deferred revenue.
- Our expectation that we will continue to make targeted investments in our global sales and marketing organizations and our global business infrastructure to enhance and support our revenue-generating activities.
- 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.
- Our plans related to future capital spending.
- The sufficiency of existing cash and cash equivalent balances to meet future working capital and capital expenditure requirements.
- Our belief that the best uses of our excess cash are to invest in the business, acquire or make investments in complementary companies, products, services and technologies, make payments on outstanding debt balances and repurchase stock in order to both offset dilution and return capital, in excess of our requirements, to stockholders with the goal of increasing stockholder value.
- Our expectation that changes in currency exchange rates will affect our financial position, results of operations and cash flows.

Forward-looking statements should not be unduly relied upon because they involve known and unknown risks, uncertainties and other factors, some of which are beyond our control. We describe such risks, uncertainties, and factors in the "Risk Factors," "Quantitative and Qualitative Disclosures about Market Risk," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of our Forms 10-K and 10-Q. Many of these risks, uncertainties, and factors are currently amplified by, and may continue to be amplified by, the COVID-19 pandemic. Forward-looking statements speak only as of the date they are made and we undertake no obligation to update them. Our actual results could differ materially from those set forth in forward-looking statements.

Results of Operations

The three and six months results of operations discussed below are on a GAAP basis.

Three Months Ended June 30, 2021 Compared to Three Months Ended June 30, 2020

Revenue:

<i>(in thousands, except percentages)</i>	Three Months Ended June 30,		Amount	Change	
	2021	2020		%	Constant Currency %
Revenue:					
Lease licenses	\$ 129,794	\$ 113,209	\$ 16,585	14.6	13.9
Perpetual licenses	85,028	56,132	28,896	51.5	48.1
Software licenses	214,822	169,341	45,481	26.9	25.2
Maintenance	218,297	203,179	15,118	7.4	4.5
Service	13,535	13,141	394	3.0	(0.1)
Maintenance and service	231,832	216,320	15,512	7.2	4.2
Total revenue	\$ 446,654	\$ 385,661	\$ 60,993	15.8	13.4

Revenue for the quarter ended June 30, 2021 increased 15.8% compared to the quarter ended June 30, 2020, or 13.4% in constant currency. The growth rate was favorably impacted by our continued investment in our global sales, support and marketing organizations, strong perpetual license sales, the timing and duration of our multi-year lease contracts, momentum sales to our small- and medium-sized businesses, and our recent acquisitions. Lease license revenue increased 14.6%, or 13.9% in constant currency, as compared to the prior-year quarter. Perpetual license revenue, which is derived from new sales during the quarter, increased 51.5%, or 48.1% in constant currency, as compared to the prior-year quarter. Annual maintenance contracts that were sold with new perpetual licenses, maintenance contracts for new perpetual licenses sold in previous quarters, maintenance renewals and the maintenance portion of lease license contracts collectively contributed to maintenance revenue growth of 7.4%, or 4.5% in constant currency.

We continue to experience interest by some of our larger customers in enterprise agreements that often include longer-term, time-based licenses involving a larger number of our software products. While 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. As this preference increases, it will continue to result in a shift from perpetual licenses to time-based licenses.

In relation to the COVID-19 pandemic and our revenue, we continue to expect a recovery in the business environment during the second half of the year as vaccine distribution becomes more widespread and a larger percentage of the population is inoculated. Globally, businesses have not resumed full operations. Additional waves or mutated variants of COVID-19 could result in renewed shutdowns that stop or regress economic recovery.

With respect to revenue, on average for the quarter ended June 30, 2021, the U.S. Dollar was approximately 5.4% weaker, when measured against our primary foreign currencies, than for the quarter ended June 30, 2020. The table below presents the net impacts of currency fluctuations on revenue for the quarter ended June 30, 2021. The overall impact was favorable.

<i>(in thousands)</i>	Three Months Ended June 30, 2021
Euro	\$ 6,095
South Korean Won	1,695
British Pound	1,224
Other	185
Total	\$ 9,199

The impacts from currency fluctuations resulted in increased operating income of \$1.4 million for the quarter ended June 30, 2021 as compared to the quarter ended June 30, 2020.

As a percentage of revenue, our international and domestic revenues, and our direct and indirect revenues, were as follows:

	Three Months Ended June 30,	
	2021	2020
International	53.3 %	52.3 %
Domestic	46.7 %	47.7 %
Direct	75.4 %	78.1 %
Indirect	24.6 %	21.9 %

In valuing deferred revenue on the balance sheets of our recent acquisitions as of their respective acquisition dates, we applied the fair value provisions applicable to the accounting for business combinations, resulting in a reduction of deferred revenue as compared to the historical carrying amount. As a result, our post-acquisition revenue will be less than the sum of what would have otherwise been reported by us and each acquiree absent the acquisitions. The impacts on reported revenue were \$5.9 million and \$4.0 million for the quarters ended June 30, 2021 and 2020, respectively. The expected impacts on reported revenue are \$4.2 million and \$21.1 million for the quarter ending September 30, 2021 and the year ending December 31, 2021, respectively.

Deferred Revenue and Backlog:

Deferred revenue consists of billings made or payments received in advance of revenue recognition from customer agreements. The deferred revenue on our condensed consolidated balance sheets does not represent the total value of annual or multi-year, noncancellable agreements. Our backlog represents installment billings for periods beyond the current quarterly billing cycle. Our deferred revenue and backlog as of June 30, 2021 and December 31, 2020 consisted of the following:

(in thousands)	Balance at June 30, 2021		
	Total	Current	Long-Term
Deferred revenue	\$ 351,598	\$ 338,396	\$ 13,202
Backlog	575,501	258,777	316,724
Total	\$ 927,099	\$ 597,173	\$ 329,926

(in thousands)	Balance at December 31, 2020		
	Total	Current	Long-Term
Deferred revenue	\$ 388,810	\$ 372,061	\$ 16,749
Backlog	578,317	234,719	343,598
Total	\$ 967,127	\$ 606,780	\$ 360,347

Revenue associated with deferred revenue and backlog that will be recognized in the subsequent twelve months is classified as current in the tables above.

Cost of Sales and Operating Expenses:

The tables below reflect our operating results as presented on the condensed consolidated statements of income, which are inclusive of foreign currency translation impacts. Amounts included in the discussions that follow each table are provided in constant currency and are inclusive of costs related to our acquisitions. The impact of foreign exchange translation is discussed separately, where material.

<i>(in thousands, except percentages)</i>	Three Months Ended June 30,				Change	
	2021		2020		Amount	%
	Amount	% of Revenue	Amount	% of Revenue		
Cost of sales:						
Software licenses	\$ 8,065	1.8	\$ 8,511	2.2	\$ (446)	(5.2)
Amortization	15,025	3.4	9,764	2.5	5,261	53.9
Maintenance and service	41,068	9.2	35,585	9.2	5,483	15.4
Total cost of sales	64,158	14.4	53,860	14.0	10,298	19.1
Gross profit	\$ 382,496	85.6	\$ 331,801	86.0	\$ 50,695	15.3

Amortization: The increase in amortization expense was due to the amortization of intangible assets acquired within the last year.

Maintenance and Service: The increase in maintenance and service costs was primarily due to the following:

- Increased salaries and incentive compensation of \$1.9 million.
- Increased costs related to foreign exchange translation of \$1.3 million due to a weaker U.S. Dollar.
- Increased consulting costs of \$0.4 million.
- Increased IT maintenance and software hosting costs of \$0.4 million.

The improvement in gross profit was a result of the increase in revenue, partially offset by the increase in the cost of sales.

<i>(in thousands, except percentages)</i>	Three Months Ended June 30,				Change	
	2021		2020		Amount	%
	Amount	% of Revenue	Amount	% of Revenue		
Operating expenses:						
Selling, general and administrative	\$ 160,410	35.9	\$ 128,698	33.4	\$ 31,712	24.6
Research and development	100,879	22.6	86,133	22.3	14,746	17.1
Amortization	4,434	1.0	4,163	1.1	271	6.5
Total operating expenses	\$ 265,723	59.5	\$ 218,994	56.8	\$ 46,729	21.3

Selling, General and Administrative: The net increase in selling, general and administrative costs was primarily due to the following:

- Increased salaries and incentive compensation of \$15.4 million.
- Increased stock-based compensation of \$7.2 million.
- Increased costs related to foreign exchange translation of \$3.7 million due to a weaker U.S. Dollar.
- Increased consulting and professional fees of \$2.2 million.
- Increased IT maintenance and software hosting costs of \$1.5 million.
- Increased marketing expenses of \$1.2 million.
- Decreased bad debt expense of \$1.9 million.

We anticipate that we will continue to make targeted investments in our global sales and marketing organizations and our global business infrastructure to enhance and support our revenue-generating activities.

Research and Development: The increase in research and development costs was primarily due to the following:

- Increased salaries and incentive compensation of \$8.7 million.
- Increased costs related to foreign exchange translation of \$2.3 million due to a weaker U.S. Dollar.
- Increased stock-based compensation of \$1.5 million.
- Increased IT maintenance and software hosting costs of \$1.4 million.

We have traditionally invested significant resources in research and development activities and intend to continue to make investments in expanding the ease of use and capabilities of our broad portfolio of simulation software products.

Interest Income: Interest income for the quarter ended June 30, 2021 was \$0.5 million as compared to \$0.9 million for the quarter ended June 30, 2020. Interest income decreased as a result of a lower interest rate environment and the related decrease in the average rate of return on invested cash balances.

Interest Expense: Interest expense for the quarter ended June 30, 2021 was \$3.3 million as compared to \$3.0 million for the quarter ended June 30, 2020. Interest expense increased as a result of interest incurred on debt financing obtained in connection with the acquisition of AGI in the fourth quarter of 2020, partially offset by a lower interest rate environment.

Other Income, net: Other income for the quarter ended June 30, 2021 was \$14.9 million as compared to \$1.9 million for the quarter ended June 30, 2020. Other income consisted primarily of net investment gains.

Income Tax Provision: Our income before income tax provision, income tax provision and effective tax rates were as follows:

<i>(in thousands, except percentages)</i>	Three Months Ended June 30,	
	2021	2020
Income before income tax provision	\$ 128,860	\$ 112,585
Income tax provision	\$ 35,144	\$ 16,021
Effective tax rate	27.3 %	14.2 %

The increase in the effective tax rate from the second quarter of 2020 was primarily due to an increase in non-deductible compensation in 2021 and a tax structuring benefit recognized in the second quarter of 2020 that did not recur in 2021. These tax increases were partially offset by a 2021 benefit related to tax planning in a foreign jurisdiction.

When compared to the federal and state combined statutory rate for each respective period, the effective tax rates for the quarters ended June 30, 2021 and 2020 were favorably impacted by the foreign-derived intangible income (FDII) deduction and research and development credits. Additionally, tax expense/benefits related to stock-based compensation impacted the rate in each period.

Net Income: Our net income, diluted earnings per share and weighted average shares used in computing diluted earnings per share were as follows:

<i>(in thousands, except per share data)</i>	Three Months Ended June 30,	
	2021	2020
Net income	\$ 93,716	\$ 96,564
Diluted earnings per share	\$ 1.06	\$ 1.11
Weighted average shares outstanding - diluted	88,053	86,934

Six Months Ended June 30, 2021 Compared to Six Months Ended June 30, 2020
Revenue:

<i>(in thousands, except percentages)</i>	Six Months Ended June 30,		Change		
	2021	2020	Amount	%	Constant Currency %
Revenue:					
Lease licenses	\$ 194,871	\$ 158,083	\$ 36,788	23.3	22.0
Perpetual licenses	152,555	99,088	53,467	54.0	50.1
Software licenses	347,426	257,171	90,255	35.1	32.9
Maintenance	431,971	403,667	28,304	7.0	3.9
Service	30,483	29,808	675	2.3	(0.6)
Maintenance and service	462,454	433,475	28,979	6.7	3.6
Total revenue	\$ 809,880	\$ 690,646	\$ 119,234	17.3	14.5

Revenue for the six months ended June 30, 2021 increased 17.3% compared to the six months ended June 30, 2020, or 14.5% in constant currency. The growth rate was favorably impacted by our continued investment in our global sales, support and marketing organizations, strong perpetual license sales, the timing and duration of our multi-year lease contracts, momentum sales to our small- and medium-sized businesses, and our recent acquisitions. Lease license revenue increased 23.3%, or 22.0% in constant currency, as compared to the six months ended June 30, 2020. Perpetual license revenue, which is derived from new sales during the six months ended June 30, 2021, increased 54.0% or 50.1% in constant currency, as compared to the six months ended June 30, 2020. Annual maintenance contracts that were sold with new perpetual licenses, maintenance renewals and the maintenance portion of lease license contracts collectively contributed to maintenance revenue growth of 7.0% or 3.9% in constant currency. Service revenue increased 2.3% or decreased 0.6% in constant currency, as compared to the six months ended June 30, 2020.

With respect to revenue, on average for the six months ended June 30, 2021, the U.S. Dollar was approximately 5.9% weaker, when measured against our primary foreign currencies, than for the six months ended June 30, 2020. The table below presents the net impacts of currency fluctuations on revenue for the six months ended June 30, 2021. The overall impact was favorable.

<i>(in thousands)</i>	Six Months Ended June 30, 2021
Euro	\$ 12,215
South Korean Won	3,064
British Pound	2,044
Other	1,788
Total	\$ 19,111

The impacts from currency fluctuations resulted in increased operating income of \$3.5 million for the six months ended June 30, 2021 as compared to the six months ended June 30, 2020.

As a percentage of revenue, our international and domestic revenues, and our direct and indirect revenues, were as follows:

	Six Months Ended June 30,	
	2021	2020
International	55.4 %	55.2 %
Domestic	44.6 %	44.8 %
Direct	73.8 %	76.2 %
Indirect	26.2 %	23.8 %

In valuing deferred revenue on the balance sheets of our recent acquisitions as of their respective acquisition dates, we applied the fair value provisions applicable to the accounting for business combinations, resulting in a reduction of deferred revenue as compared to the historical carrying amount. As a result, our post-acquisition revenue will be less than the sum of what would have otherwise been reported by us and each acquiree absent the acquisitions. The impacts on reported revenue were \$14.8 million and \$8.0 million for the six months ended June 30, 2021 and 2020, respectively.

Cost of Sales and Operating Expenses:

The tables below reflect our operating results as presented on the condensed consolidated statements of income, which are inclusive of foreign currency translation impacts. Amounts included in the discussions that follow each table are provided in constant currency and are inclusive of costs related to our acquisitions. The impact of foreign exchange translation is discussed separately, where material.

(in thousands, except percentages)	Six Months Ended June 30,				Change	
	2021		2020			
	Amount	% of Revenue	Amount	% of Revenue	Amount	%
Cost of sales:						
Software licenses	\$ 15,671	1.9	\$ 13,437	1.9	\$ 2,234	16.6
Amortization	29,974	3.7	19,316	2.8	10,658	55.2
Maintenance and service	80,616	10.0	71,223	10.3	9,393	13.2
Total cost of sales	126,261	15.6	103,976	15.1	22,285	21.4
Gross profit	\$ 683,619	84.4	\$ 586,670	84.9	\$ 96,949	16.5

Software Licenses: The increase in the cost of software licenses was primarily due to increased third-party royalties of \$2.2 million.

Amortization: The increase in amortization expense was due to the amortization of intangible assets acquired within the last year.

Maintenance and Service: The increase in maintenance and service costs was primarily due to the following:

- Increased salaries, incentive compensation and other headcount-related costs of \$5.0 million.
- Increased costs related to foreign exchange translation of \$2.5 million due to a weaker U.S. Dollar.

The improvement in gross profit was a result of the increase in revenue, partially offset by the increase in the cost of sales.

(in thousands, except percentages)	Six Months Ended June 30,				Change	
	2021		2020			
	Amount	% of Revenue	Amount	% of Revenue	Amount	%
Operating expenses:						
Selling, general and administrative	\$ 306,625	37.9	\$ 259,220	37.5	\$ 47,405	18.3
Research and development	201,358	24.9	172,245	24.9	29,113	16.9
Amortization	8,841	1.1	8,325	1.2	516	6.2
Total operating expenses	\$ 516,824	63.8	\$ 439,790	63.7	\$ 77,034	17.5

Selling, General and Administrative: The net increase in selling, general and administrative costs was primarily due to the following:

- Increased salaries, incentive compensation and other headcount-related costs of \$30.3 million.
- Increased stock-based compensation of \$9.3 million.
- Increased costs related to foreign exchange translation of \$7.5 million due to a weaker U.S. Dollar.
- Increased IT maintenance and software hosting costs of \$2.9 million.
- Increased professional fees of \$2.3 million.
- Decreased bad debt expense of \$5.0 million.
- Decreased business travel of \$3.9 million due to the COVID-19 pandemic.

Research and Development: The increase in research and development costs was primarily due to the following:

- Increased salaries, incentive compensation and other headcount-related costs of \$17.9 million.
- Increased costs related to foreign exchange translation of \$4.7 million due to a weaker U.S. Dollar.
- Increased stock-based compensation of \$2.9 million.
- Increased IT maintenance and software hosting costs of \$2.4 million.

Interest Income: Interest income for the six months ended June 30, 2021 was \$1.0 million as compared to \$3.7 million for the six months ended June 30, 2020. Interest income decreased as a result of a lower interest rate environment and the related decrease in the average rate of return on invested cash balances.

Interest Expense: Interest expense was \$6.7 million for the six months ended June 30, 2021 and 2020. The lower interest rate environment in 2021 was offset by the interest incurred on debt financing obtained in connection with the acquisition of AGI in the fourth quarter of 2020.

Other Income, net: Other income for the six months ended June 30, 2021 was \$15.3 million as compared to \$2.0 million for the quarter ended June 30, 2020. Other income consisted primarily of net investment gains.

Income Tax Provision: Our income before income tax provision, income tax provision and effective tax rates were as follows:

(in thousands, except percentages)	Six Months Ended June 30,	
	2021	2020
Income before income tax provision	\$ 176,483	\$ 145,909
Income tax provision	\$ 10,369	\$ 3,281
Effective tax rate	5.9 %	2.2 %

The increase in the effective tax rate from the prior year was primarily due to an increase in non-deductible compensation as well as a tax structuring benefit recognized in the second quarter of 2020 that did not recur in 2021. These tax increases were partially offset by a 2021 benefit related to tax planning in a foreign jurisdiction as well as increased benefits from stock-based compensation.

When compared to the federal and state combined statutory rate for each respective period, the effective tax rates for the six months ended June 30, 2021 and 2020 were favorably impacted by tax benefits from stock-based compensation, the FDII deduction, and research and development credits, partially offset by the impact of non-deductible compensation.

Net Income: Our net income, diluted earnings per share and weighted average shares used in computing diluted earnings per share were as follows:

<i>(in thousands, except per share data)</i>	Six Months Ended June 30,	
	2021	2020
Net income	\$ 166,114	\$ 142,628
Diluted earnings per share	\$ 1.89	\$ 1.64
Weighted average shares outstanding - diluted	88,019	87,152

Non-GAAP Results

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 and a reconciliation of each non-GAAP financial measure to its most comparable GAAP financial measure are included below.

ANSYS, INC. AND SUBSIDIARIES
Reconciliations of GAAP to Non-GAAP Measures
(Unaudited)

<i>(in thousands, except percentages and per share data)</i>	Three Months Ended June 30, 2021						
	Revenue	Gross Profit	%	Operating Income	%	Net Income	EPS - Diluted ¹
Total GAAP	\$ 446,654	\$ 382,496	85.6 %	\$ 116,773	26.1 %	\$ 93,716	\$ 1.06
Acquisition accounting for deferred revenue	5,896	5,896	0.2 %	5,896	0.9 %	5,896	0.07
Stock-based compensation expense	—	3,519	0.8 %	42,885	9.5 %	42,885	0.48
Excess payroll taxes related to stock-based awards	—	182	0.1 %	2,319	0.6 %	2,319	0.03
Amortization of intangible assets from acquisitions	—	15,025	3.3 %	19,459	4.3 %	19,459	0.22
Transaction expenses related to business combinations	—	—	— %	1,321	0.3 %	1,321	0.02
Adjustment for income tax effect	—	—	— %	—	— %	(2,997)	(0.03)
Total non-GAAP	<u>\$ 452,550</u>	<u>\$ 407,118</u>	<u>90.0 %</u>	<u>\$ 188,653</u>	<u>41.7 %</u>	<u>\$ 162,599</u>	<u>\$ 1.85</u>

¹ Diluted weighted average shares were 88,053.

<i>(in thousands, except percentages and per share data)</i>	Three Months Ended June 30, 2020						
	Revenue	Gross Profit	%	Operating Income	%	Net Income	EPS - Diluted ¹
Total GAAP	\$ 385,661	\$ 331,801	86.0 %	\$ 112,807	29.3 %	\$ 96,564	\$ 1.11
Acquisition accounting for deferred revenue	4,040	4,040	0.2 %	4,040	0.7 %	4,040	0.05
Stock-based compensation expense	—	3,464	0.8 %	34,130	8.9 %	34,130	0.40
Excess payroll taxes related to stock-based awards	—	166	0.1 %	1,876	0.4 %	1,876	0.02
Amortization of intangible assets from acquisitions	—	9,764	2.5 %	13,927	3.6 %	13,927	0.16
Transaction expenses related to business combinations	—	—	— %	309	— %	309	—
Rabbi trust (income) / expense	—	—	— %	—	— %	(1)	—
Adjustment for income tax effect	—	—	— %	—	— %	(16,518)	(0.19)
Total non-GAAP	<u>\$ 389,701</u>	<u>\$ 349,235</u>	<u>89.6 %</u>	<u>\$ 167,089</u>	<u>42.9 %</u>	<u>\$ 134,327</u>	<u>\$ 1.55</u>

¹ Diluted weighted average shares were 86,934.

ANSYS, INC. AND SUBSIDIARIES
Reconciliations of GAAP to Non-GAAP Measures
(Unaudited)

Six Months Ended
June 30, 2021

<i>(in thousands, except percentages and per share data)</i>	Revenue	Gross Profit	%	Operating Income	%	Net Income	EPS - Diluted ¹
Total GAAP	\$ 809,880	\$ 683,619	84.4 %	\$ 166,795	20.6 %	\$ 166,114	\$ 1.89
Acquisition accounting for deferred revenue	14,819	14,819	0.3 %	14,819	1.4 %	14,819	0.17
Stock-based compensation expense	—	7,081	0.9 %	78,004	9.5 %	78,004	0.88
Excess payroll taxes related to stock-based awards	—	1,047	0.1 %	11,454	1.4 %	11,454	0.13
Amortization of intangible assets from acquisitions	—	29,974	3.6 %	38,815	4.7 %	38,815	0.44
Transaction expenses related to business combinations	—	—	— %	3,291	0.4 %	3,291	0.04
Adjustment for income tax effect	—	—	— %	—	— %	(50,976)	(0.58)
Total non-GAAP	<u>\$ 824,699</u>	<u>\$ 736,540</u>	<u>89.3 %</u>	<u>\$ 313,178</u>	<u>38.0 %</u>	<u>\$ 261,521</u>	<u>\$ 2.97</u>

¹ Diluted weighted average shares were 88,019.

Six Months Ended
June 30, 2020

<i>(in thousands, except percentages and per share data)</i>	Revenue	Gross Profit	%	Operating Income	%	Net Income	EPS - Diluted ¹
Total GAAP	\$ 690,646	\$ 586,670	84.9 %	\$ 146,880	21.3 %	\$ 142,628	\$ 1.64
Acquisition accounting for deferred revenue	7,952	7,952	0.2 %	7,952	0.9 %	7,952	0.09
Stock-based compensation expense	—	6,330	1.0 %	65,071	9.4 %	65,071	0.75
Excess payroll taxes related to stock-based awards	—	689	0.1 %	8,859	1.2 %	8,859	0.10
Amortization of intangible assets from acquisitions	—	19,316	2.7 %	27,641	4.0 %	27,641	0.32
Transaction expenses related to business combinations	—	—	— %	1,259	0.1 %	1,259	0.01
Rabbi trust (income) / expense	—	—	— %	—	— %	(5)	—
Adjustment for income tax effect	—	—	— %	—	— %	(46,773)	(0.54)
Total non-GAAP	<u>\$ 698,598</u>	<u>\$ 620,957</u>	<u>88.9 %</u>	<u>\$ 257,662</u>	<u>36.9 %</u>	<u>\$ 206,632</u>	<u>\$ 2.37</u>

¹ Diluted weighted average shares were 87,152.

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

Liquidity and Capital Resources

<i>(in thousands)</i>	June 30, 2021	December 31, 2020	Change
Cash, cash equivalents and short-term investments	\$ 958,208	\$ 913,151	\$ 45,057
Working capital	\$ 1,026,979	\$ 990,412	\$ 36,567

Cash, Cash Equivalents and Short-Term Investments

Cash and cash equivalents consist primarily of highly liquid investments such as money market funds and deposits held at major banks. Short-term investments consist primarily of deposits held by certain of our foreign subsidiaries with original maturities of three months to one year. The following table presents our foreign and domestic holdings of cash, cash equivalents and short-term investments as of June 30, 2021 and December 31, 2020:

<i>(in thousands, except percentages)</i>	June 30, 2021	% of Total	December 31, 2020	% of Total
Domestic	\$ 629,055	65.6	\$ 582,882	63.8
Foreign	329,153	34.4	330,269	36.2
Total	\$ 958,208		\$ 913,151	

In general, it is our intention to permanently reinvest all earnings in excess of previously taxed amounts. Substantially all of the pre-2018 earnings of our non-U.S. subsidiaries were taxed through the transition tax imposed as part of the Tax Cuts and Jobs Act of 2017 and post-2018 current earnings are taxed as part of global intangible low-taxed income tax expense. These taxes increase our previously taxed earnings and allow for the repatriation of the majority of our foreign earnings without any residual U.S. federal tax. While we believe that the financial reporting bases may be greater than the tax bases of investments in foreign subsidiaries for any earnings in excess of previously taxed amounts, such amounts are considered permanently reinvested. The cumulative temporary difference related to such permanently reinvested earnings is approximately \$115.6 million, and we would anticipate the tax effect on those earnings to be immaterial.

The amount of cash, cash equivalents and short-term investments held by foreign subsidiaries is subject to translation adjustments caused by changes in foreign currency exchange rates as of the end of each respective reporting period, the offset to which is recorded in accumulated other comprehensive loss on our condensed consolidated balance sheet.

Cash Flows from Operating Activities

<i>(in thousands)</i>	Six Months Ended June 30,		Change
	2021	2020	
Net cash provided by operating activities	\$ 289,984	\$ 279,004	\$ 10,980

Net cash provided by operating activities increased during the six months ended June 30, 2021 compared to the six months ended June 30, 2020 due to increased net income (net of non-cash operating adjustments) of \$35.6 million, partially offset by decreased net cash flows from operating assets and liabilities of \$24.6 million. The growth in net cash provided by operating activities was impacted by a meaningful increase in customer receipts driven primarily by ACV growth and stronger collections in 2021, partially offset by increased outflows related to operational payments and income taxes.

Cash Flows from Investing Activities

<i>(in thousands)</i>	Six Months Ended June 30,		Change
	2021	2020	
Net cash used in investing activities	\$ (116,324)	\$ (119,566)	\$ 3,242

Net cash used in investing activities decreased during the six months ended June 30, 2021 compared to the six months ended June 30, 2020 due to decreased capital expenditures of \$6.1 million, partially offset by increased acquisition-related net cash outlays of \$5.0 million. We currently plan capital spending of \$30.0 million to \$40.0 million during fiscal year 2021 as compared to the \$35.4 million that was spent in fiscal year 2020. The level of spending will depend on various factors, including the growth of the business and general economic conditions.

Cash Flows from Financing Activities

(in thousands)	Six Months Ended June 30,		Change
	2021	2020	
Net cash used in financing activities	\$ (122,103)	\$ (285,551)	\$ 163,448

Net cash used in financing activities decreased during the six months ended June 30, 2021 compared to the six months ended June 30, 2020 due to decreased stock repurchases of \$161.0 million and decreased principal payments on long-term debt of \$30.0 million, partially offset by increased restricted stock withholding taxes paid in lieu of issued shares of \$25.3 million.

Other Cash Flow Information

As of June 30, 2021, the carrying value of our term loans was \$753.3 million, with no principal payments due in the next twelve months. Borrowings under the term loans accrue interest at the Eurodollar rate plus an applicable margin or at the base rate, at our election. The base rate is the applicable margin plus the highest of (i) the federal funds rate plus 0.500%, (ii) the Bank of America prime rate and (iii) the Eurodollar rate plus 1.000%. The applicable margin for these borrowings is a percentage per annum based on the lower of (1) a pricing level determined by our then-current consolidated leverage ratio and (2) a pricing level determined by our debt ratings (if such debt ratings exist).

We previously entered into noncancellable operating lease commitments, primarily for our domestic and international offices. The commitments related to these operating leases is \$147.1 million, of which \$27.4 million is due in the next twelve months.

We believe that existing cash and cash equivalent balances of \$957.7 million, together with cash generated from operations and access to the \$500.0 million Revolving Credit Facility, will be sufficient to meet our working capital and capital expenditure requirements through the next twelve months. Our cash requirements in the future may also be financed through additional equity or debt financings. However, future disruptions in the capital markets could make financing more challenging, and there can be no assurance that such financing can be obtained on commercially reasonable terms, or at all.

Under our stock repurchase program, we repurchased shares as follows:

(in thousands, except per share data)	Six Months Ended	
	June 30, 2021	June 30, 2020
Number of shares repurchased	—	690
Average price paid per share	\$ —	\$ 233.48
Total cost	\$ —	\$ 161,029

As of June 30, 2021, 2.8 million shares remained available for repurchase under the program.

The authorized repurchase program does not have an expiration date, and the pace of the repurchase activity will depend on factors such as working capital needs, cash requirements for acquisitions, our stock price, and economic and market conditions. Our stock repurchases may be effected from time to time through open market purchases or pursuant to a Rule 10b5-1 plan.

We continue to generate positive cash flows from operating activities and believe that the best uses of our excess cash are to invest in the business; acquire or make investments in complementary companies, products, services and technologies; and make payments on our outstanding debt balances. Any future acquisitions may be funded by available cash and investments, cash generated from operations, debt financing, or the issuance of additional securities. Additionally, we have in the past, and expect in the future, to repurchase stock in order to both offset dilution and return capital, in excess of our requirements, to stockholders with the goal of increasing stockholder value.

Off-Balance-Sheet Arrangements

We do not have any special-purpose entities or off-balance-sheet arrangements.

Contractual Obligations

There were no material changes to our significant contractual obligations during the six months ended June 30, 2021 as compared to those previously reported within "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our 2020 Form 10-K.

Critical Accounting Policies and Estimates

During the first quarter of 2021, we completed the annual impairment test for goodwill and the indefinite-lived intangible asset and determined that these assets had not been impaired as of the test date, January 1, 2021. No other events or circumstances changed during the six months ended June 30, 2021 that would indicate that the fair values of our reporting unit and indefinite-lived intangible asset are below their carrying amounts.

No significant changes have occurred to our critical accounting policies and estimates as previously reported within "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our 2020 Form 10-K.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk. Changes in the overall level of interest rates affect the interest income that is generated from our cash, cash equivalents and short-term investments and the interest expense that is generated from our outstanding borrowings. For the three and six months ended June 30, 2021, interest income was \$0.5 million and \$1.0 million, respectively, and interest expense was \$3.3 million and \$6.7 million, respectively. Cash and cash equivalents consist primarily of highly liquid investments such as money market funds and deposits held at major banks. Short-term investments consist primarily of deposits held by certain foreign subsidiaries with original maturities of three months to one year.

Foreign Currency Transaction Risk. As we operate in international regions, a portion of our revenue, expenses, cash, accounts receivable and payment obligations are denominated in foreign currencies. As a result, changes in currency exchange rates will affect our financial position, results of operations and cash flows.

With respect to revenue, on average for the quarter ended June 30, 2021, the U.S. Dollar was approximately 5.4% weaker, when measured against our primary foreign currencies, than for the quarter ended June 30, 2020. With respect to revenue, on average for the six months ended June 30, 2021, the U.S. Dollar was approximately 5.9% weaker, when measured against our primary foreign currencies, than for the six months ended June 30, 2020. The table below presents the net impacts of currency fluctuations on revenue for the three and six months ended June 30, 2021. The overall impacts were favorable for the three and six months ended June 30, 2021.

<i>(in thousands)</i>	Three Months Ended June 30, 2021	Six Months Ended June 30, 2021
Euro	\$ 6,095	\$ 12,215
South Korean Won	1,695	3,064
British Pound	1,224	2,044
Other	185	1,788
Total	\$ 9,199	\$ 19,111

The impacts from currency fluctuations resulted in increased operating income of \$1.4 million and \$3.5 million for the three and six months ended June 30, 2021 as compared to the three and six months ended June 30, 2020.

The most significant currency impacts on revenue and operating income are typically attributable to U.S. Dollar exchange rate changes against the Euro and Japanese Yen. Historical exchange rates for these currency pairs are reflected in the charts below:

As of	Period-End Exchange Rates	
	EUR/USD	USD/JPY
June 30, 2021	1.19	111.12
December 31, 2020	1.22	103.27
June 30, 2020	1.12	107.94
	Average Exchange Rates	
	EUR/USD	USD/JPY
Three Months Ended		
June 30, 2021	1.21	109.45
June 30, 2020	1.10	107.55
	Average Exchange Rates	
	EUR/USD	USD/JPY
Six Months Ended		
June 30, 2021	1.21	107.65
June 30, 2020	1.10	108.27

No other material change has occurred in our market risk subsequent to December 31, 2020.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures. As required by Rules 13a-15 and 15d-15 of the Exchange Act, we have evaluated, with the participation of management, including the Chief Executive Officer and the Chief Financial Officer, the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this report. Based on such evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that such disclosure controls and procedures are effective, as defined in Rule 13a-15(e) and Rule 15d-15(e) of the Exchange Act.

We believe, based on our knowledge, that the financial statements and other financial information included in this report fairly present, in all material respects, our financial condition, results of operations and cash flows as of and for the periods presented in this report. We are committed to both a sound internal control environment and to good corporate governance.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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 policies or procedures may deteriorate.

From time to time, we review the disclosure controls and procedures, and may periodically make changes to enhance their effectiveness and to ensure that our systems evolve with our business.

Changes in Internal Control. There were no changes in our internal control over financial reporting that occurred during the three months ended June 30, 2021 that materially affected, or that are reasonably likely to materially affect, our internal control over financial reporting. Although the majority of our employee base worked remotely, the remote work arrangements did not adversely affect our ability to maintain financial operations, including our financial reporting systems, internal controls over financial reporting and disclosure controls and procedures.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

We are subject to various investigations, claims and legal proceedings that arise in the ordinary course of business, including commercial disputes, labor and employment matters, tax audits and litigations, alleged infringement of third party's intellectual property rights and other matters. Use or distribution of our products could generate product liability, regulatory infraction, or similar claims by our customers, end users, channel partners, government entities or other third parties. Sales and marketing activities that impact processing of personal data, as well as measures taken to ensure license compliance against pirated or unauthorized usage of our commercial product, may also result in claims by customers and individual employees of customers. Each of these matters is subject to various uncertainties, and it is possible that an unfavorable resolution of one or more of these matters could have a significant adverse effect on our condensed consolidated financial statements as well as cause reputational damage.

Item 1A. Risk Factors

We face a number of risks that could materially and adversely affect our business, financial position, results of operations and cash flows. A discussion of our risk factors can be found in Part I, Item 1A "Risk Factors" in our 2020 Form 10-K. No material changes have occurred to such risk factors after the filing of our 2020 Form 10-K.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

On June 20, 2021, in connection with our previously completed acquisition of AGI, we issued 987 shares of common stock with an aggregate value of \$0.3 million to the former stockholders of AGI as part of the consideration for the acquisition. The shares were initially withheld by us and delivered to the former stockholders of AGI following satisfaction of certain indemnification and other obligations of AGI and the stockholders under the merger agreement. The shares were issued in reliance upon an exemption from the registration requirements of the Securities Act of 1933, as amended (the Securities Act), provided by Section 4(a)(2) of the Securities Act and Regulation D promulgated thereunder for an issuance not involving a public offering.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit No.	Exhibit
10.27	ANSYS, Inc. 2021 Equity and Incentive Compensation Plan (incorporated by reference to Exhibit 99.1 to the Registrant's Current Report on Form 8-K, filed May 18, 2021 (File No. 000-20853)).*
10.28	Form of Notice of Grant of Performance-Based Restricted Stock Units and Agreement (Total Shareholder Return) under the ANSYS, Inc. 2021 Equity and Incentive Compensation Plan.*
10.29	Form of Notice of Grant of Performance-Based Restricted Stock Units and Agreement (Operating Metrics) under the ANSYS, Inc. 2021 Equity and Incentive Compensation Plan.*
10.30	Form of Notice of Grant of Restricted Stock Units and Agreement (Non-Employee Director) under the ANSYS, Inc. 2021 Equity and Incentive Compensation Plan.*
10.31	Form of Notice of Grant of Restricted Stock Units and Award Notice and Agreement (Employee) under the ANSYS, Inc. 2021 Equity and Incentive Compensation Plan.*
15	Independent Registered Public Accountant's Letter Regarding Unaudited Financial Information.
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	Inline XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document)
101.SCH	Inline XBRL Taxonomy Extension Schema
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Indicates management contract or compensatory plan, contract or arrangement.

SIGNATURES

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

ANSYS, Inc.

Date: August 4, 2021

By: /s/ Ajei S. Gopal
Ajei S. Gopal
President and Chief Executive Officer
(Principal Executive Officer)

Date: August 4, 2021

By: /s/ Nicole Anasenes
Nicole Anasenes
Chief Financial Officer and Senior Vice President, Finance
(Principal Financial Officer and Principal Accounting Officer)

ANSYS, INC.
NOTICE OF GRANT OF PERFORMANCE-BASED RESTRICTED STOCK UNITS

ANSYS, Inc. (the “Company”) hereby grants to the Participant the target number of performance-based Restricted Stock Units (“PRSUs”) set forth below under the ANSYS, Inc. 2021 Equity and Incentive Compensation Plan (the “Plan”). The PRSUs are subject to all of the terms and conditions in this Notice of Grant of Performance-Based Restricted Stock Units (this “Grant Notice”), in the Performance-Based Restricted Stock Units Agreement attached hereto (the “Agreement”) and in the Plan. Capitalized terms used, but not otherwise defined, in this Grant Notice will have the meanings given to such terms in the Plan or Agreement, as applicable, and the Plan and Agreement are hereby incorporated by reference into this Grant Notice. If there are any inconsistencies between this Grant Notice or Agreement and the Plan, the terms of the Plan shall govern.

Participant:	_____
Type of Grant:	Performance-based Restricted Stock Units
Date of Grant:	_____, 20__
Total Target Number of PRSUs:	_____ PRSUs
Performance Period:	January 1, 20__ through December 31, 20__
Potential Payout %:	From 0% to 200%
Vesting Terms:	Subject to the terms and conditions set forth in the Agreement and in the Statement of Performance Goals, the PRSUs shall become earned (“ <u>Earned PRSUs</u> ”) to the extent that the performance goals for the PRSUs are achieved, as set forth or contemplated in the Statement of Performance Goals, provided (except as otherwise provided in the Agreement) that the Participant has remained in continuous employment with the Company or a Subsidiary through the last day of the Performance Period.

ANSYS, INC.

Performance-Based Restricted Stock Units Agreement

ANSYS, Inc. (the “Company”) has granted, pursuant to the ANSYS, Inc. 2021 Equity and Incentive Compensation Plan (the “Plan”), to the Participant named in the Notice of Grant of Performance-Based Restricted Stock Units (the “Grant Notice”) to which this Performance-Based Restricted Stock Units Agreement is attached (together with the Grant Notice, the “Agreement”) an award of performance-based Restricted Stock Units as set forth in such Grant Notice, subject to the terms and conditions set forth in this Agreement.

1. **Certain Definitions**. Capitalized terms used, but not otherwise defined, in this Agreement will have the meanings given to such terms in the Grant Notice, or, if not defined therein, then in the Plan.

2. **Grant of PRSUs**. Subject to and upon the terms, conditions and restrictions set forth in this Agreement, including any additional terms and conditions for the Participant’s country (for Participants outside the United States only) set forth in any attached Appendix that would form part of this Agreement, and in the Plan, the Company has granted to the Participant, as of the Date of Grant, the target number of performance-based Restricted Stock Units set forth in the Grant Notice (the “PRSUs”). Each earned and vested PRSU shall represent the right of the Participant to receive one share of Common Stock subject to and upon the terms and conditions of this Agreement, the Plan and the achievement of the Performance Objectives approved by the Committee.

3. **Restrictions on Transfer of PRSUs**. Subject to Section 15 of the Plan, neither the PRSUs evidenced hereby nor any interest therein or in the shares of Common Stock underlying such PRSUs shall be transferable prior to payment to the Participant pursuant to **Section 5** hereof other than by will or pursuant to the laws of descent and distribution.

4. **Vesting of PRSUs**.

(a) **General Rule**. The PRSUs shall be subject to the terms of the Statement of Performance Goals provided to the Participant with respect to the PRSUs and approved by the Committee. As set forth in the Grant Notice, Earned PRSUs will be determined for the PRSUs in accordance with the Statement of Performance Goals on the date on which the Committee determines the level of attainment of the performance goals for the PRSUs (the “Determination Date”). The Determination Date for the PRSUs shall occur no later than 2 ½ months after the end of the Performance Period. Provided that the Participant remains continuously employed with the Company or a Subsidiary through the last day of the Performance Period (the period from the Date of Grant through the last day of the Performance Period, the “Service Period”), the total Earned PRSUs shall vest on the Determination Date. Any PRSUs that do not so become vested will be forfeited, including, except as provided in **Section 4(b)** below, if the Participant

ceases to be continuously employed by the Company or a Subsidiary prior to the end of the Service Period. For purposes of this Agreement, “continuously employed” (or substantially similar terms) means the absence of any interruption or termination of the Participant’s employment with the Company or a Subsidiary. Continuous employment shall not be considered interrupted or terminated in the case of transfers between locations of the Company and its Subsidiaries.

- (b) Special Circumstances. Notwithstanding **Section 4(a)** above and except as otherwise provided in an agreement between the Company and the Participant or in any plan or arrangement in which the Participant is a participant, if a Change in Control occurs and/or the Participant ceases to be employed by the Company or a Subsidiary prior to the end of the Service Period under certain circumstances, the PRSUs shall be forfeited or become vested, nonforfeitable and payable to the Participant, as applicable, pursuant to the terms of Section 12 of the Plan. For purposes of Section 12 of the Plan, the PRSUs will be treated in the same manner as Performance Shares.

5. **Form and Time of Payment of PRSUs.**

- (a) Payment for the PRSUs, after and to the extent they have become vested and nonforfeitable, shall be made in the form of shares of Common Stock.
- (b) Except as otherwise provided in **Section 5(c)**, payment of the PRSUs shall be made between January 1 and March 15 of the calendar year following the calendar year in which the Performance Period ends.
- (c) To the extent the PRSUs become vested pursuant to Section 12(e)(i) or 12(e)(iii) of the Plan, payment of the PRSUs shall be made within 30 days following the date of such vesting.
- (d) In all events, payment for the PRSUs (to the extent vested) shall be made within the short-term deferral period for purposes of Section 409A of the Code.
- (e) The Company’s obligations to the Participant with respect to the PRSUs will be satisfied in full upon the issuance of shares of Common Stock corresponding to such PRSUs.

6. **Dividend Equivalents; Voting and Other Rights.**

- (a) The Participant shall have no rights of ownership in the shares of Common Stock underlying the PRSUs and no right to vote the shares of Common Stock underlying the PRSUs until the date on which the shares of Common Stock underlying the PRSUs are issued or transferred to the Participant pursuant to **Section 5** above.

- (b) From and after the Date of Grant and until the earlier of (i) the time when the PRSUs become vested and nonforfeitable and are paid in accordance with **Section 5** hereof or (ii) the time when the Participant's right to receive shares of Common Stock in payment of the PRSUs is forfeited in accordance with **Section 4** hereof, on the date that the Company pays a cash dividend (if any) to holders of shares of Common Stock generally, the Participant shall be credited with cash per PRSU equal to the amount of such dividend. Any amounts credited pursuant to the immediately preceding sentence shall be subject to the same applicable terms and conditions (including vesting, payment and forfeitability) as apply to the PRSUs based on which the dividend equivalents were credited, and such amounts shall be paid in cash at the same time as the PRSUs to which they relate are settled.
- (c) The obligations of the Company under this Agreement will be merely that of an unfunded and unsecured promise of the Company to deliver shares of Common Stock in the future, and the rights of the Participant will be no greater than that of an unsecured general creditor. No assets of the Company will be held or set aside as security for the obligations of the Company under this Agreement.

7. **Adjustments.** The PRSUs and the number of shares of Common Stock issuable for each PRSU and the other terms and conditions of the grant evidenced by this Agreement are subject to adjustment, including as provided in Section 11 of the Plan.

8. **Withholding Taxes.** To the extent that the Company is required to withhold federal, state, local or foreign taxes or other amounts in connection with the delivery to the Participant of Common Stock or any other payment to the Participant or any other payment or vesting event under this Agreement, the Participant agrees that the Company will withhold any taxes required to be withheld by the Company under federal, state, local or foreign law as a result of the settlement of the PRSUs in an amount sufficient to satisfy the minimum statutory withholding amount permissible. To the extent that the amounts available to the Company for such withholding are insufficient, it shall be a condition to the obligation of the Company to make any such delivery or payment that the Participant make arrangements satisfactory to the Company for payment of the balance of such taxes or other amounts required to be withheld. The shares so retained shall be credited against any such withholding requirement at the market value of such shares of Common Stock on the date of such deemed delivery (and, if not a business day, on the business day immediately preceding such day). In no event will the market value of the Common Stock to be withheld and/or delivered pursuant to this **Section 8** to satisfy applicable withholding taxes exceed the minimum amount of taxes or other amounts required to be withheld. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding the Participant's participation in the Plan, or the Participant's acquisition or sale of the underlying shares of Common Stock. The Participant is hereby advised to consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

9. **Compliance with Law.** The Company shall make reasonable efforts to comply with all applicable federal and state securities laws; provided, however, notwithstanding any

other provision of the Plan and this Agreement, the Company shall not be obligated to issue any shares of Common Stock pursuant to this Agreement if the issuance thereof would result in a violation of any such law.

10. **Non-Competition; Non-Solicitation; Company Information.** As additional consideration for the PRSUs granted to the Participant, the Participant hereby agrees that if he or she engages for any reason, directly or indirectly, whether as owner, part-owner, stockholder, member, partner, director, officer, trustee, employee, agent or consultant, or in any other capacity, on behalf of himself or herself or any firm, corporation or other business organization other than the Company and its Subsidiaries in any one or more of the following activities:

- (a) at any time during his or her employment with the Company or any Subsidiary (the “Employment Period”) and for a period of one year after the termination of his or her employment with the Company or any Subsidiary no matter what the cause of that termination (the “Post-Employment Period”), the development, marketing, solicitation, or selling of any product or service that is competitive with the products or services of the Company, or products or services that the Company has under development or that are subject to active planning at any time during the Employment Period, as evidenced by the books and records of the Company, and which take place in the United States; provided that the restrictions set forth in this **Section 10(a)** for the Post-Employment Period shall not apply to any Participant who is a California-based employee;
- (b) at any time during the Employment Period or thereafter, the use of any of the Company’s or its subsidiaries’ Confidential Information or trade secrets, as defined by law, knowledge of which was acquired by the Participant as an employee of the Company and its Subsidiaries; or
- (c) during the Employment Period and/or Post-Employment Period, any activity for the purpose of inducing, soliciting, encouraging, or arranging for the employment or engagement by anyone other than the Company and its Subsidiaries of any employee, officer, director, agent, consultant, Customer, or sales representative of the Company and its Subsidiaries or attempt to engage any of them in a manner which would deprive the Company and its Subsidiaries of their services or place them in a conflict of interest with the Company and its Subsidiaries;

then (i) the PRSUs shall be forfeited effective on the date on which he or she first engages in such activity, unless terminated sooner by operation of any other term or condition of this Agreement or the Plan, and (ii) all shares of Common Stock issued or transferred to the Participant pursuant to this Agreement shall become immediately due and payable by the Participant to the Company and if such shares of Common Stock have been sold by the Participant, an amount equal to the proceeds from such sale shall become immediately due and payable by the Participant to the Company. The Participant acknowledges and agrees that the activities set forth in this **Section 10 (a), (b) and (c)** are adverse to the Company’s interests, and that it would be inequitable for the Participant to benefit from the PRSUs should the Participant engage in any such activities during or within one year after termination of his or her

employment with the Company. The Participant acknowledges and agrees that the rights and remedies set forth in this **Section 10** are in addition to and are not intended to limit any other rights or remedies the Company may have available to it, both during and at any time after the termination of the Participant's employment with the Company, including without limitation, any rights or remedies the Company may have under the ANSYS Intellectual Property Protection Agreement or other similar agreements.

The Participant may be released from his or her obligations as stated above only if the Committee (or its duly appointed agent) determines in its sole discretion that such action is in the best interests of the Company and its Subsidiaries.

The restrictions in this **Section 10** do not supersede, and are in addition to, restrictive covenants contained in any other form of agreement, such as an employment agreement, between the Company and the Participant, to the extent enforceable pursuant to the terms of the other agreement.

Notwithstanding anything in this Agreement to the contrary, nothing in this Agreement prevents the Participant from providing, without prior notice to the Company, information to governmental authorities regarding possible legal violations or otherwise testifying or participating in any investigation or proceeding by any governmental authorities regarding possible legal violations, and for purpose of clarity the Participant is not prohibited from providing information voluntarily to the Securities and Exchange Commission pursuant to Section 21F of the Exchange Act. Furthermore, the U.S. Defend Trade Secrets Act of 2016 ("DTSA") provides that an individual shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (A) is made (1) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney; and (2) solely for the purpose of reporting or investigating a suspected violation of law or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. In addition, the DTSA provides that an individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the attorney of the individual and use the trade secret information in the court proceeding, if the individual (x) files any document containing the trade secret under seal and (y) does not disclose the trade secret, except pursuant to court order.

11. **Mandatory Arbitration.** The Participant and the Company agree that any dispute or claim arising out of or in any way related to (a) the Participant's employment with the Company, and/or (b) this Agreement or any breach hereof, the PRSUs, the Plan and/or any actions taken under the Plan, to the fullest extent permitted by law, shall be submitted to and resolved by confidential, binding arbitration by a single, neutral arbitrator. The arbitration shall be held in the county where the Company has an office at which the Participant provides services (for remote Participants, the nearest county where the Company has an office) or any other locale to which the parties jointly agree. The arbitration shall be administered by and under the auspices of JAMS in accordance with the then-current Employment Arbitration Rules & Procedures of JAMS (which are available at www.jamsadr.com/rules-employment). Arbitrator selection and discovery shall be conducted pursuant to the JAMS Rules. The arbitrator shall

issue a written award setting forth the essential findings and conclusions on which the award is based, which shall be final and binding and judgment thereon may be entered in any court of competent jurisdiction. Other than an amount equal to the fee for filing such an action in the local state court, which amount the Participant shall pay toward the costs of the arbitration, the Company shall bear the administrative, filing and forum costs of the arbitration, including the JAMS administrative fees and the arbitrator's fees. Except as otherwise provided by law or in the arbitrator's ruling, each party shall otherwise bear its own respective attorneys' fees and costs of the arbitration. The Participant and the Company agree that each may bring claims against the other only in an individual capacity, and not as a plaintiff, claimant or class member in any purported class action, collective action or other representative proceeding, or otherwise seeking to represent the interests of any other person. This agreement to arbitrate shall survive any separation of the Participant's employment. Notwithstanding the foregoing, nothing herein or otherwise shall preclude the Company from pursuing a court action for the purpose of obtaining a temporary restraining order or other injunctive relief to enforce any restrictive covenants the Participant has with or for the benefit of the Company. This mandatory arbitration provision does not apply to residents of California.

12. **General Release of Claims by the Participant.**

- (a) As a condition of and in consideration for the promises made by the Company herein, including without limitation to provide the award hereunder, the Participant hereby knowingly and voluntarily releases and discharges to the fullest extent permitted by law the Company and its past, present and future parents, subsidiaries, affiliates, and related entities, any and all of its or their past, present or future directors, stockholders, officers, executives, employees, and/or agents, and/or its and their respective predecessors, successors, and assigns (individually and collectively, the "Company Releasees"), from and with respect to any and all claims and causes of action whatsoever, in law or in equity, known or unknown, which the Participant ever had, has or may have against the Company and/or any or all of the other Company Releasees for, upon, or by reason of any matter whatsoever up to the date on which the Participant accepts this Agreement (individually and collectively, "Claims"). The parties intend the foregoing to be a general release of any and all Claims to the fullest extent permissible by law. Notwithstanding the foregoing, nothing herein is a release by the Participant of (A) any rights or Claims with respect to accrued and vested benefits and/or previously awarded equity interests, subject in each instance to the terms and conditions of any applicable plan, grant, and/or agreement pertaining to such benefits, awards or interests and applicable law, (B) any rights or Claims arising under or to enforce this Agreement, or (C) any rights or Claims that, under applicable law, cannot lawfully be released by private agreement or otherwise.
- (b) **FOR CALIFORNIA RESIDENTS ONLY:** In granting the foregoing release, the Participant acknowledges that he/she has been advised to consult with legal counsel and is familiar with the provision of California Civil Code Section 1542,

a statute that otherwise prohibits the release of unknown claims, which provides as follows:

“A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM MUST HAVE MATERIALLY AFFECTED HIS SETTLEMENT WITH THE DEBTOR.”

Being aware of said California Civil Code section, the Participant hereby expressly waives any rights the Participant may have thereunder, as well as under any other state or federal statutes or common law principles of similar effect.

- (c) Nothing contained in this Agreement (including the foregoing general release) limits the Participant’s ability to file a charge or complaint with any federal, state or local governmental agency, commission or regulatory entity (a “Government Agency”). If the Participant files any charge or complaint with any Government Agency, if any Government Agency pursues any charge or claim on the Participant’s behalf, or if any other third party pursues any claim or charge on the Participant’s behalf, the Participant waives any right to monetary or other individualized relief (either individually, or as part of any collective or class action); provided, however, that nothing in this Agreement limits any right the Participant may have to receive a whistleblower award or bounty for information provided to the Securities and Exchange Commission. The Participant represents that he/she is not aware of any unlawful conduct or violations of any federal, state or local law, rule or regulation by the Company and/or any other Company Releasees or any basis to bring a charge or complaint to any Government Agency.
- (d) The Participant is advised by the Company to consult with an attorney in connection with this Agreement. The Participant understands that as part of his/her agreement to release Claims against the Company and the other Company Releasees, the Participant is releasing Claims for age discrimination under the federal Age Discrimination in Employment Act (the “ADEA”). **ACCORDINGLY, THE PARTICIPANT HAS THE RIGHT, AND ACKNOWLEDGES THAT HE/SHE HAS BEEN GIVEN THE OPPORTUNITY, TO REVIEW AND CONSIDER THIS AGREEMENT FOR A PERIOD OF TWENTY-ONE (21) DAYS FROM THE PARTICIPANT’S RECEIPT OF THIS AGREEMENT BEFORE SIGNING IT (THE “REVIEW PERIOD”).** To accept this Agreement and the award granted hereunder, the Participant must accept the agreement online via his/her E*TRADE employee stock plan account at any time before the end of the Review Period. If the Participant accepts this Agreement before the end of the Review Period, the Participant acknowledges that such decision was voluntary and that he/she had the opportunity to consider this Agreement for the full Review Period. For the period of seven (7) days from the date when the Participant accepts this

Agreement, the Participant has the right to revoke this Agreement by written notice via email to human-resources@ansys.com and addressing stock administration, provided such notice is delivered so that it is received at or before the expiration of the 7-day revocation period. This Agreement shall not become effective or enforceable during the revocation period. If timely accepted and not revoked by the Participant prior to the end of the revocation period, this Agreement shall become effective on the first business day following the expiration of the revocation period. If not timely accepted or if (after timely acceptance) the Participant revokes prior to the expiration of the revocation period, this Agreement shall not become effective and the Participant will not be entitled to or receive the award granted hereunder and/or such award shall be rescinded.

13. **Clawback.**

- (a) The Committee shall have the authority to unilaterally terminate the PRSUs and/or cause some or all of the proceeds relating to the PRSUs that have been received by the Participant to become immediately due and payable by the Participant to the Company upon the occurrence of any of the following events:
- (i) the Participant's violation of **Section 10** of this Agreement;
 - (ii) the material restatement of the Company's financial statements due to misconduct by the Participant; or
 - (iii) the material restatement of the Company's financial statements that results in the Participant receiving more compensation under the PRSUs than the Participant would have received absent the incorrect financial statements.

The determination of whether any of the foregoing events has occurred and the extent of the application of this **Section 13(a)** to the Participant and the PRSUs shall be determined by the Committee in its sole discretion.

- (b) Without limiting the foregoing, and notwithstanding anything in this Agreement to the contrary, the Participant acknowledges and agrees that this Agreement and the award described herein are subject to the terms and conditions of any clawback or recoupment policy applicable to this award, including any such policy set forth in the Company's Corporate Governance Guidelines, as may be in effect from time to time, including specifically to implement Section 10D of the Exchange Act and any applicable rules or regulations promulgated thereunder (including applicable rules and regulations of any national securities exchange on which the Common Stock may be traded).

14. **Additional Defined Terms.** For purposes of this Agreement, the following terms shall have the following meanings:

- (a) “**Confidential Information**” means all non-public confidential and proprietary information owned by, possessed by, or in the control of the Company, including: ideas, research and development, know-how, manufacturing and production processes and techniques; technical data, designs, drawings, and specifications; customer and supplier lists, pricing and cost information; business and marketing plans and proposals; algorithms, industrial models, architectures, layouts, and “look-and-feel;” designs, specifications, methodologies, software or software applications (including source code, object code, other executable code, scripts, interfaces, data, databases, websites, firmware and related documentation), artwork, and other works of authorship; technologies, processes, inventions, ideas, know-how, improvements, discoveries, developments, designs and techniques; information regarding plans for research, development, new products, marketing and selling, business plans, budgets and unpublished financial statements, licenses, contracts, prices and costs, suppliers and customers; information regarding Participant evaluations and Participant performance; and information regarding the skills and compensation of developers of the Company. Notwithstanding the other provisions of this Agreement, nothing received by the Participant will be considered to be Confidential Information if: (i) it has been published or is otherwise readily available to the public other than by a breach of this Agreement; (ii) it has been rightfully received by the Participant from a third party without confidentiality limitations; (iii) it has been independently developed by the Participant having no access to the Confidential Information; or (iv) it was known to the Participant before being first received from the Company.
- (b) “**Customer**” means any customer of the Company in the two-year period prior to the end of the Employment Period, including potential customers which the Company was actively pursuing.

15. **Compliance With Section 409A of the Code.** To the extent applicable, it is intended that this Agreement and the Plan comply with or be exempt from the provisions of Section 409A of the Code. This Agreement and the Plan shall be administered in a manner consistent with this intent, and any provision that would cause this Agreement or the Plan to fail to satisfy Section 409A of the Code shall have no force or effect until amended to comply with or be exempt from Section 409A of the Code (which amendment may be retroactive to the extent permitted by Section 409A of the Code and may be made by the Company without the consent of the Participant). Notwithstanding the foregoing, the Company is not guaranteeing any particular tax outcome, and the Participant shall remain solely liable for any and all tax consequences associated with the PRSUs.

16. **Interpretation.** Any reference in this Agreement to Section 409A of the Code will also include any proposed, temporary or final regulations, or any other guidance,

promulgated with respect to such Section by the U.S. Department of the Treasury or the Internal Revenue Service.

17. **No Right to Future Awards or Employment.** The grant of the PRSUs under this Agreement to the Participant is a voluntary, discretionary award being made on a one-time basis and it does not constitute a commitment to make any future awards. The grant of the PRSUs and any related payments made hereunder will not be considered salary or other compensation for purposes of any severance pay or similar allowance, except as otherwise required by law. Nothing contained in this Agreement will confer upon the Participant any right to be employed or remain employed by the Company or any of its Subsidiaries, nor limit or affect in any manner the right of the Company or any of its Subsidiaries to terminate the Participant's employment or adjust the compensation of the Participant.

18. **Relation to Other Benefits.** Any economic or other benefit to the Participant under this Agreement or the Plan shall not be taken into account in determining any benefits to which the Participant may be entitled under any profit-sharing, retirement or other benefit or compensation plan maintained by the Company or any of its Subsidiaries and shall not affect the amount of any life insurance coverage available to any beneficiary under any life insurance plan covering employees of the Company or any of its Subsidiaries.

19. **Amendments.** Any amendment to the Plan shall be deemed to be an amendment to this Agreement to the extent that the amendment is applicable hereto; provided, however, that no amendment shall adversely affect the Participant's rights with respect to the PRSUs without the Participant's written consent, and the Participant's consent shall not be required to an amendment that is deemed necessary by the Company to ensure compliance with Section 409A of the Code or Section 10D of the Exchange Act.

20. **Severability.** In the event that one or more of the provisions of this Agreement shall be invalidated for any reason by a court of competent jurisdiction, any provision so invalidated shall be deemed to be separable from the other provisions hereof, and the remaining provisions hereof shall continue to be valid and fully enforceable.

21. **Relation to Plan.** The PRSUs granted under this Agreement and all of the terms and conditions hereof are subject to all of the terms and conditions of the Plan. In the event of any inconsistency between this Agreement and the Plan, the terms of the Plan will govern. The Committee acting pursuant to the Plan, as constituted from time to time, shall, except as expressly provided otherwise herein or in the Plan, have the right to determine any questions which arise in connection with this Agreement.

22. **Data Privacy.** Collection and use of the Participant's personal data, as well as any personal data belonging to the Participant's permitted beneficiaries hereunder, for the purposes of implementing, administering, and managing the Participant's participation in the Plan shall be processed by Company in accordance with the ANSYS Global Data Protection Notice. Additional details about the types of personal data used to administer the Plan, including,

where applicable, the Company's policies on sharing of personal data with third-party service providers and cross-border data transfer, may be found in the Global Data Protection Notice.

23. **Nature of Grant**. In accepting the PRSUs, the Participant acknowledges, understands and agrees that:
- (a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan;
 - (b) the grant of the PRSUs is voluntary and occasional and does not create any contractual or other right to receive future grants;
 - (c) all decisions with respect to future awards or other grants, if any, will be at the sole discretion of the Company;
 - (d) the PRSUs and the Participant's participation in the Plan shall not be interpreted as forming an employment contract with the Company;
 - (e) the Participant is voluntarily participating in the Plan;
 - (f) the PRSUs and any shares of Common Stock acquired under the Plan are not intended to replace any pension rights or compensation;
 - (g) the PRSUs and any shares of Common Stock acquired under the Plan, and the income and value of same, are not part of normal or expected compensation for any purpose, including, without limitation, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement benefits or payments or welfare benefits or similar payments;
 - (h) the future value of the shares of Common Stock underlying the PRSUs is unknown, indeterminable, and cannot be predicted with certainty;
 - (i) no claim or entitlement to compensation or damages shall arise from forfeiture of the PRSUs resulting from the termination of the Participant's employment relationship (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Participant is employed or the terms of the Participant's employment agreement, if any);
 - (j) unless otherwise provided in the Plan or by the Company in its discretion, the PRSUs and the benefits evidenced by this Agreement do not create any entitlement to have the PRSUs or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the Common Stock; and

(k) neither the employer, the Company nor any other Subsidiary shall be liable for any foreign exchange rate fluctuation between the Participant's local currency and the United States Dollar that may affect the value of the PRSUs or of any amounts due to the Participant pursuant to settlement of the PRSUs or the subsequent sale of any shares of Common Stock acquired upon settlement.

24. **Language.** If the Participant has received this Agreement, or any other document related to the PRSUs and/or the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

25. **Non-U.S. Addendum.** Notwithstanding any provisions in this Agreement, the grant and PRSUs shall also be subject to the special terms and conditions set forth in the International Appendix attached as Appendix A to this Agreement for the Participant's country, if applicable. Moreover, if the Participant relocates to one of the countries included in the International Appendix, the special terms and conditions for such country will apply to the Participant to the extent that the Company determines that the application of such terms and conditions are necessary or advisable in order to comply with local law or facilitate the administration of the Plan. The International Appendix attached hereto as Appendix A constitutes part of this Agreement.

26. **Electronic Delivery.** The Company may, in its sole discretion, deliver any documents related to the PRSUs and the Participant's participation in the Plan, or future awards that may be granted under the Plan, by electronic means or request the Participant's consent to participate in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and, if requested, agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

27. **Governing Law.** This Agreement shall be governed by and construed with the internal substantive laws of the State of Delaware, without giving effect to any principle of law that would result in the application of the law of any other jurisdiction. The Participant hereby expressly consents to the personal jurisdiction of the state and federal courts located in the Commonwealth of Pennsylvania for any lawsuit filed arising from or related to this Agreement and further agrees not to challenge the jurisdiction or venue in any suit filed in the state or federal courts of the Commonwealth of Pennsylvania.

28. **Successors and Assigns.** Without limiting **Section 3** hereof, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the successors, administrators, heirs, legal representatives and assigns of the Participant, and the successors and assigns of the Company.

29. **Acknowledgement.** The Participant acknowledges that the Participant (a) has received a copy of the Plan, (b) has had an opportunity to review the terms of this Agreement and the Plan, (c) understands the terms and conditions of this Agreement and the Plan and (d) agrees to such terms and conditions.

30. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same agreement.

THE FOREGOING AWARD IS HEREBY ACCEPTED AND THE TERMS AND CONDITIONS OF THIS AGREEMENT ARE HEREBY AGREED TO BY THE PARTICIPANT. BY ACCEPTING THIS AWARD PURSUANT TO THE COMPANY'S INSTRUCTIONS (INCLUDING THROUGH AN ONLINE ACCEPTANCE PROCESS), THE PARTICIPANT ACKNOWLEDGES THE FOLLOWING: (A) THE PARTICIPANT HAS READ THIS AGREEMENT AND UNDERSTANDS AND AGREES TO ITS TERMS AND CONDITIONS; (B) THE PARTICIPANT CAN PRINT OUT AND KEEP A COPY OF THIS AGREEMENT; (C) THE PARTICIPANT IS HEREBY ADVISED BY THE COMPANY IN WRITING TO CONSULT WITH AN ATTORNEY OF THE PARTICIPANT'S CHOICE BEFORE ACCEPTING THIS AGREEMENT; (D) THE PARTICIPANT HAS BEEN AFFORDED AND HAS HAD A FULL AND REASONABLE OPPORTUNITY AND PERIOD OF TIME OF AT LEAST 21 DAYS TO CONSIDER THE TERMS AND CONDITIONS OF THIS AGREEMENT; (E) THE PARTICIPANT FULLY UNDERSTANDS THE MEANING AND SIGNIFICANCE, AND CONSEQUENCES, OF ALL OF THE TERMS AND CONDITIONS OF THIS AGREEMENT (INCLUDING WITHOUT LIMITATION THE GENERAL RELEASE GIVEN BY THE PARTICIPANT IN THIS AGREEMENT); (F) THE PARTICIPANT IS ACCEPTING THIS AGREEMENT KNOWINGLY, VOLUNTARILY AND OF THE PARTICIPANT'S OWN FREE WILL AND WITH THE INTENT TO BE FULLY BOUND HEREBY; (G) THE PARTICIPANT HAS AGREED TO USE AN ELECTRONIC METHOD OF SIGNATURE TO DEMONSTRATE ACCEPTANCE OF THE TERMS AND CONDITIONS OF THIS AGREEMENT; AND (H) THE PARTICIPANT'S ELECTRONIC SIGNATURE IS AS LEGALLY BINDING AS AN INK SIGNATURE.

ANSYS, INC.
NOTICE OF GRANT OF PERFORMANCE-BASED RESTRICTED STOCK UNITS

ANSYS, Inc. (the “Company”) hereby grants to the Participant the target number of performance-based Restricted Stock Units (“PRsUs”) set forth below under the ANSYS, Inc. 2021 Equity and Incentive Compensation Plan (the “Plan”). The PRsUs are subject to all of the terms and conditions in this Notice of Grant of Performance-Based Restricted Stock Units (this “Grant Notice”), in the Performance-Based Restricted Stock Units Agreement attached hereto (the “Agreement”) and in the Plan. Capitalized terms used, but not otherwise defined, in this Grant Notice will have the meanings given to such terms in the Plan or Agreement, as applicable, and the Plan and Agreement are hereby incorporated by reference into this Grant Notice. If there are any inconsistencies between this Grant Notice or Agreement and the Plan, the terms of the Plan shall govern.

Participant: _____

Type of Grant: Performance-based Restricted Stock Units

Date of Grant: _____, 20__

Total Target Number of PRsUs: _____ PRsUs

Total Target Number of PRsUs Consists of the Following (each, a “Tranche” or a “Performance Period”):

_____ target PRsUs subject to a Performance Period beginning on January 1, 20__ and ending on December 31, 20__ (the “Year 1 PRsUs”);

_____ target PRsUs subject to a Performance Period beginning on January 1, 20__ and ending on December 31, 20__ (the “Year 2 PRsUs”);and

_____ target PRsUs subject to a Performance Period beginning on January 1, 20__ and ending on December 31, 20__ (the “Final Performance Period,” and such PRsUs, the “Year 3 PRsUs”).

Potential Payout % for Each Tranche: From 0% to 200% of target

Vesting Terms: Subject to the terms and conditions set forth in the Agreement and in the Statement of Performance Goals, the PRsUs shall become earned (“Earned PRsUs”) to the extent that the performance goals for each Tranche of the PRsUs are achieved, as set forth or contemplated in the Statement of Performance Goals, provided (except as otherwise provided in the Agreement) that the Participant has remained in continuous employment with the Company or a Subsidiary through the last day of the Final Performance Period.

ANSYS, INC.

Performance-Based Restricted Stock Units Agreement

ANSYS, Inc. (the “Company”) has granted, pursuant to the ANSYS, Inc. 2021 Equity and Incentive Compensation Plan (the “Plan”), to the Participant named in the Notice of Grant of Performance-Based Restricted Stock Units (the “Grant Notice”) to which this Performance-Based Restricted Stock Units Agreement is attached (together with the Grant Notice, the “Agreement”) an award of performance-based Restricted Stock Units as set forth in such Grant Notice, subject to the terms and conditions set forth in this Agreement.

1. **Certain Definitions**. Capitalized terms used, but not otherwise defined, in this Agreement will have the meanings given to such terms in the Grant Notice, or, if not defined therein, then in the Plan.

2. **Grant of PRSUs**. Subject to and upon the terms, conditions and restrictions set forth in this Agreement, including any additional terms and conditions for the Participant’s country (for Participants outside the United States only) set forth in any attached Appendix that would form part of this Agreement, and in the Plan, the Company has granted to the Participant, as of the Date of Grant, the target number of performance-based Restricted Stock Units set forth in the Grant Notice (the “PRSUs”). Each earned and vested PRSU shall represent the right of the Participant to receive one share of Common Stock subject to and upon the terms and conditions of this Agreement, the Plan and the achievement of the Performance Objectives approved by the Committee.

3. **Restrictions on Transfer of PRSUs**. Subject to Section 15 of the Plan, neither the PRSUs evidenced hereby nor any interest therein or in the shares of Common Stock underlying such PRSUs shall be transferable prior to payment to the Participant pursuant to **Section 5** hereof other than by will or pursuant to the laws of descent and distribution.

4. **Vesting of PRSUs**.

- (a) **General Rule**. The PRSUs shall be subject to the terms of the Statement of Performance Goals provided to the Participant with respect to the PRSUs and approved by the Committee. As set forth in the Grant Notice, Earned PRSUs will be determined for each Tranche of the PRSUs in accordance with the Statement of Performance Goals on the date on which the Committee determines the level of attainment of the performance goals for such Tranche (each such date, a “Determination Date”). The Determination Date for each Tranche of the PRSUs shall occur no later than 2 ½ months after the end of the applicable Performance Period. Provided that the Participant remains continuously employed with the Company or a Subsidiary through the last day of the Final Performance Period (the period from the Date of Grant through the last day of the Final Performance Period, the “Service Period”), the total Earned PRSUs shall vest on the Determination Date that follows the Final Performance Period. Any PRSUs that

do not so become vested will be forfeited, including, except as provided in **Section 4(b)** below, if the Participant ceases to be continuously employed by the Company or a Subsidiary prior to the end of the Service Period. For purposes of this Agreement, “continuously employed” (or substantially similar terms) means the absence of any interruption or termination of the Participant’s employment with the Company or a Subsidiary. Continuous employment shall not be considered interrupted or terminated in the case of transfers between locations of the Company and its Subsidiaries.

- (b) **Special Circumstances.** Notwithstanding **Section 4(a)** above and except as otherwise provided in an agreement between the Company and the Participant or in any plan or arrangement in which the Participant is a participant, if a Change in Control occurs and/or the Participant ceases to be employed by the Company or a Subsidiary prior to the end of the Service Period under certain circumstances, the PRSUs shall be forfeited or become vested, nonforfeitable and payable to the Participant, as applicable, pursuant to the terms of Section 12 of the Plan. For purposes of Section 12 of the Plan, each Tranche of the PRSUs will be treated in the same manner as Performance Shares until the end of the applicable Performance Period, and thereafter shall be treated in the same manner as Restricted Stock Units.

5. Form and Time of Payment of PRSUs.

- (a) Payment for the PRSUs, after and to the extent they have become vested and nonforfeitable, shall be made in the form of shares of Common Stock.
- (b) Payment shall be made between January 1 and March 15 of the calendar year following the calendar year in which the Final Performance Period ends. To the extent that the PRSUs are not subject to a “substantial risk of forfeiture” (within the meaning of Section 409A of the Code), the PRSUs shall be paid on an accelerated basis on the earlier of the date of a Change in Control that constitutes a “change in control event” for purposes of Treasury Regulation Section 1.409A-3(i)(5) (a “409A Change in Control”) or a separation from service of the Participant with the Company (for purposes of Treasury Regulation Section 1.409A-1(h)) within 18 months after a 409A Change in Control.
- (c) The Company’s obligations to the Participant with respect to the PRSUs will be satisfied in full upon the issuance of shares of Common Stock corresponding to such PRSUs.

6. Dividend Equivalents; Voting and Other Rights.

- (a) The Participant shall have no rights of ownership in the shares of Common Stock underlying the PRSUs and no right to vote the shares of Common Stock underlying the PRSUs until the date on which the shares of Common Stock

underlying the PRSUs are issued or transferred to the Participant pursuant to **Section 5** above.

- (b) From and after the Date of Grant and until the earlier of (i) the time when the PRSUs become vested and nonforfeitable and are paid in accordance with **Section 5** hereof or (ii) the time when the Participant's right to receive shares of Common Stock in payment of the PRSUs is forfeited in accordance with **Section 4** hereof, on the date that the Company pays a cash dividend (if any) to holders of shares of Common Stock generally, the Participant shall be credited with cash per PRSU equal to the amount of such dividend. Any amounts credited pursuant to the immediately preceding sentence shall be subject to the same applicable terms and conditions (including vesting, payment and forfeitability) as apply to the PRSUs based on which the dividend equivalents were credited, and such amounts shall be paid in cash at the same time as the PRSUs to which they relate are settled.
- (c) The obligations of the Company under this Agreement will be merely that of an unfunded and unsecured promise of the Company to deliver shares of Common Stock in the future, and the rights of the Participant will be no greater than that of an unsecured general creditor. No assets of the Company will be held or set aside as security for the obligations of the Company under this Agreement.

7. **Adjustments.** The PRSUs and the number of shares of Common Stock issuable for each PRSU and the other terms and conditions of the grant evidenced by this Agreement are subject to adjustment, including as provided in Section 11 of the Plan.

8. **Withholding Taxes.** To the extent that the Company is required to withhold federal, state, local or foreign taxes or other amounts in connection with the delivery to the Participant of Common Stock or any other payment to the Participant or any other payment or vesting event under this Agreement, the Participant agrees that the Company will withhold any taxes required to be withheld by the Company under federal, state, local or foreign law as a result of the settlement of the PRSUs in an amount sufficient to satisfy the minimum statutory withholding amount permissible. To the extent that the amounts available to the Company for such withholding are insufficient, it shall be a condition to the obligation of the Company to make any such delivery or payment that the Participant make arrangements satisfactory to the Company for payment of the balance of such taxes or other amounts required to be withheld. The shares so retained shall be credited against any such withholding requirement at the market value of such shares of Common Stock on the date of such deemed delivery (and, if not a business day, on the business day immediately preceding such day). In no event will the market value of the Common Stock to be withheld and/or delivered pursuant to this **Section 8** to satisfy applicable withholding taxes exceed the minimum amount of taxes or other amounts required to be withheld. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding the Participant's participation in the Plan, or the Participant's acquisition or sale of the underlying shares of Common Stock. The Participant

is hereby advised to consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

9. **Compliance with Law.** The Company shall make reasonable efforts to comply with all applicable federal and state securities laws; provided, however, notwithstanding any other provision of the Plan and this Agreement, the Company shall not be obligated to issue any shares of Common Stock pursuant to this Agreement if the issuance thereof would result in a violation of any such law.

10. **Non-Competition; Non-Solicitation; Company Information.** As additional consideration for the PRSUs granted to the Participant, the Participant hereby agrees that if he or she engages for any reason, directly or indirectly, whether as owner, part-owner, stockholder, member, partner, director, officer, trustee, employee, agent or consultant, or in any other capacity, on behalf of himself or herself or any firm, corporation or other business organization other than the Company and its Subsidiaries in any one or more of the following activities:

- (a) at any time during his or her employment with the Company or any Subsidiary (the "Employment Period") and for a period of one year after the termination of his or her employment with the Company or any Subsidiary no matter what the cause of that termination (the "Post-Employment Period"), the development, marketing, solicitation, or selling of any product or service that is competitive with the products or services of the Company, or products or services that the Company has under development or that are subject to active planning at any time during the Employment Period, as evidenced by the books and records of the Company, and which take place in the United States; provided that the restrictions set forth in this **Section 10(a)** for the Post-Employment Period shall not apply to any Participant who is a California-based employee;
- (b) at any time during the Employment Period or thereafter, the use of any of the Company's or its subsidiaries' Confidential Information or trade secrets, as defined by law, knowledge of which was acquired by the Participant as an employee of the Company and its Subsidiaries; or
- (c) during the Employment Period and/or Post-Employment Period, any activity for the purpose of inducing, soliciting, encouraging, or arranging for the employment or engagement by anyone other than the Company and its Subsidiaries of any employee, officer, director, agent, consultant, Customer, or sales representative of the Company and its Subsidiaries or attempt to engage any of them in a manner which would deprive the Company and its Subsidiaries of their services or place them in a conflict of interest with the Company and its Subsidiaries;

then (i) the PRSUs shall be forfeited effective on the date on which he or she first engages in such activity, unless terminated sooner by operation of any other term or condition of this Agreement or the Plan, and (ii) all shares of Common Stock issued or transferred to the Participant pursuant to this Agreement shall become immediately due and payable by the Participant to the Company and if such shares of Common Stock have been sold by the

Participant, an amount equal to the proceeds from such sale shall become immediately due and payable by the Participant to the Company. The Participant acknowledges and agrees that the activities set forth in this **Section 10 (a), (b) and (c)** are adverse to the Company's interests, and that it would be inequitable for the Participant to benefit from the PRSUs should the Participant engage in any such activities during or within one year after termination of his or her employment with the Company. The Participant acknowledges and agrees that the rights and remedies set forth in this **Section 10** are in addition to and are not intended to limit any other rights or remedies the Company may have available to it, both during and at any time after the termination of the Participant's employment with the Company, including without limitation, any rights or remedies the Company may have under the ANSYS Intellectual Property Protection Agreement or other similar agreements.

The Participant may be released from his or her obligations as stated above only if the Committee (or its duly appointed agent) determines in its sole discretion that such action is in the best interests of the Company and its Subsidiaries.

The restrictions in this **Section 10** do not supersede, and are in addition to, restrictive covenants contained in any other form of agreement, such as an employment agreement, between the Company and the Participant, to the extent enforceable pursuant to the terms of the other agreement.

Notwithstanding anything in this Agreement to the contrary, nothing in this Agreement prevents the Participant from providing, without prior notice to the Company, information to governmental authorities regarding possible legal violations or otherwise testifying or participating in any investigation or proceeding by any governmental authorities regarding possible legal violations, and for purpose of clarity the Participant is not prohibited from providing information voluntarily to the Securities and Exchange Commission pursuant to Section 21F of the Exchange Act. Furthermore, the U.S. Defend Trade Secrets Act of 2016 ("DTSA") provides that an individual shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (A) is made (1) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney; and (2) solely for the purpose of reporting or investigating a suspected violation of law or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. In addition, the DTSA provides that an individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the attorney of the individual and use the trade secret information in the court proceeding, if the individual (x) files any document containing the trade secret under seal and (y) does not disclose the trade secret, except pursuant to court order.

11. **Mandatory Arbitration.** The Participant and the Company agree that any dispute or claim arising out of or in any way related to (a) the Participant's employment with the Company, and/or (b) this Agreement or any breach hereof, the PRSUs, the Plan and/or any actions taken under the Plan, to the fullest extent permitted by law, shall be submitted to and resolved by confidential, binding arbitration by a single, neutral arbitrator. The arbitration shall be held in the county where the Company has an office at which the Participant provides services

(for remote Participants, the nearest county where the Company has an office) or any other locale to which the parties jointly agree. The arbitration shall be administered by and under the auspices of JAMS in accordance with the then-current Employment Arbitration Rules & Procedures of JAMS (which are available at www.jamsadr.com/rules-employment). Arbitrator selection and discovery shall be conducted pursuant to the JAMS Rules. The arbitrator shall issue a written award setting forth the essential findings and conclusions on which the award is based, which shall be final and binding and judgment thereon may be entered in any court of competent jurisdiction. Other than an amount equal to the fee for filing such an action in the local state court, which amount the Participant shall pay toward the costs of the arbitration, the Company shall bear the administrative, filing and forum costs of the arbitration, including the JAMS administrative fees and the arbitrator's fees. Except as otherwise provided by law or in the arbitrator's ruling, each party shall otherwise bear its own respective attorneys' fees and costs of the arbitration. The Participant and the Company agree that each may bring claims against the other only in an individual capacity, and not as a plaintiff, claimant or class member in any purported class action, collective action or other representative proceeding, or otherwise seeking to represent the interests of any other person. This agreement to arbitrate shall survive any separation of the Participant's employment. Notwithstanding the foregoing, nothing herein or otherwise shall preclude the Company from pursuing a court action for the purpose of obtaining a temporary restraining order or other injunctive relief to enforce any restrictive covenants the Participant has with or for the benefit of the Company. This mandatory arbitration provision does not apply to residents of California.

12. **General Release of Claims by the Participant.**

- (a) As a condition of and in consideration for the promises made by the Company herein, including without limitation to provide the award hereunder, the Participant hereby knowingly and voluntarily releases and discharges to the fullest extent permitted by law the Company and its past, present and future parents, subsidiaries, affiliates, and related entities, any and all of its or their past, present or future directors, stockholders, officers, executives, employees, and/or agents, and/or its and their respective predecessors, successors, and assigns (individually and collectively, the "Company Releasees"), from and with respect to any and all claims and causes of action whatsoever, in law or in equity, known or unknown, which the Participant ever had, has or may have against the Company and/or any or all of the other Company Releasees for, upon, or by reason of any matter whatsoever up to the date on which the Participant accepts this Agreement (individually and collectively, "Claims"). The parties intend the foregoing to be a general release of any and all Claims to the fullest extent permissible by law. Notwithstanding the foregoing, nothing herein is a release by the Participant of (A) any rights or Claims with respect to accrued and vested benefits and/or previously awarded equity interests, subject in each instance to the terms and conditions of any applicable plan, grant, and/or agreement pertaining to such benefits, awards or interests and applicable law, (B) any rights or Claims arising under or to enforce this Agreement, or (C) any rights or Claims that, under applicable law, cannot lawfully be released by private agreement or otherwise.

- (b) **FOR CALIFORNIA RESIDENTS ONLY:** In granting the foregoing release, the Participant acknowledges that he/she has been advised to consult with legal counsel and is familiar with the provision of California Civil Code Section 1542, a statute that otherwise prohibits the release of unknown claims, which provides as follows:

“A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM MUST HAVE MATERIALLY AFFECTED HIS SETTLEMENT WITH THE DEBTOR.”

Being aware of said California Civil Code section, the Participant hereby expressly waives any rights the Participant may have thereunder, as well as under any other state or federal statutes or common law principles of similar effect.

- (c) Nothing contained in this Agreement (including the foregoing general release) limits the Participant’s ability to file a charge or complaint with any federal, state or local governmental agency, commission or regulatory entity (a “Government Agency”). If the Participant files any charge or complaint with any Government Agency, if any Government Agency pursues any charge or claim on the Participant’s behalf, or if any other third party pursues any claim or charge on the Participant’s behalf, the Participant waives any right to monetary or other individualized relief (either individually, or as part of any collective or class action); provided, however, that nothing in this Agreement limits any right the Participant may have to receive a whistleblower award or bounty for information provided to the Securities and Exchange Commission. The Participant represents that he/she is not aware of any unlawful conduct or violations of any federal, state or local law, rule or regulation by the Company and/or any other Company Releasees or any basis to bring a charge or complaint to any Government Agency.
- (d) The Participant is advised by the Company to consult with an attorney in connection with this Agreement. The Participant understands that as part of his/her agreement to release Claims against the Company and the other Company Releasees, the Participant is releasing Claims for age discrimination under the federal Age Discrimination in Employment Act (the “ADEA”). **ACCORDINGLY, THE PARTICIPANT HAS THE RIGHT, AND ACKNOWLEDGES THAT HE/SHE HAS BEEN GIVEN THE OPPORTUNITY, TO REVIEW AND CONSIDER THIS AGREEMENT FOR A PERIOD OF TWENTY-ONE (21) DAYS FROM THE PARTICIPANT’S RECEIPT OF THIS AGREEMENT BEFORE SIGNING IT (THE “REVIEW PERIOD”).** To accept this Agreement and the award granted hereunder, the Participant must accept the agreement online via his/her E*TRADE employee stock plan account at any time before the end of the Review Period. If the Participant accepts this Agreement before the end of the Review

Period, the Participant acknowledges that such decision was voluntary and that he/she had the opportunity to consider this Agreement for the full Review Period. For the period of seven (7) days from the date when the Participant accepts this Agreement, the Participant has the right to revoke this Agreement by written notice via email to human-resources@ansys.com and addressing stock administration, provided such notice is delivered so that it is received at or before the expiration of the 7-day revocation period. This Agreement shall not become effective or enforceable during the revocation period. If timely accepted and not revoked by the Participant prior to the end of the revocation period, this Agreement shall become effective on the first business day following the expiration of the revocation period. If not timely accepted or if (after timely acceptance) the Participant revokes prior to the expiration of the revocation period, this Agreement shall not become effective and the Participant will not be entitled to or receive the award granted hereunder and/or such award shall be rescinded.

13. **Clawback.**

- (a) The Committee shall have the authority to unilaterally terminate the PRSUs and/or cause some or all of the proceeds relating to the PRSUs that have been received by the Participant to become immediately due and payable by the Participant to the Company upon the occurrence of any of the following events:
- (i) the Participant's violation of **Section 10** of this Agreement;
 - (ii) the material restatement of the Company's financial statements due to misconduct by the Participant; or
 - (iii) the material restatement of the Company's financial statements that results in the Participant receiving more compensation under the PRSUs than the Participant would have received absent the incorrect financial statements.

The determination of whether any of the foregoing events has occurred and the extent of the application of this **Section 13(a)** to the Participant and the PRSUs shall be determined by the Committee in its sole discretion.

- (b) Without limiting the foregoing, and notwithstanding anything in this Agreement to the contrary, the Participant acknowledges and agrees that this Agreement and the award described herein are subject to the terms and conditions of any clawback or recoupment policy applicable to this award, including any such policy set forth in the Company's Corporate Governance Guidelines, as may be in effect from time to time, including specifically to implement Section 10D of the Exchange Act and any applicable rules or regulations promulgated thereunder (including applicable rules and regulations of any national securities exchange on which the Common Stock may be traded).

14. **Additional Defined Terms.** For purposes of this Agreement, the following terms shall have the following meanings:

- (a) “**Confidential Information**” means all non-public confidential and proprietary information owned by, possessed by, or in the control of the Company, including: ideas, research and development, know-how, manufacturing and production processes and techniques; technical data, designs, drawings, and specifications; customer and supplier lists, pricing and cost information; business and marketing plans and proposals; algorithms, industrial models, architectures, layouts, and “look-and-feel;” designs, specifications, methodologies, software or software applications (including source code, object code, other executable code, scripts, interfaces, data, databases, websites, firmware and related documentation), artwork, and other works of authorship; technologies, processes, inventions, ideas, know-how, improvements, discoveries, developments, designs and techniques; information regarding plans for research, development, new products, marketing and selling, business plans, budgets and unpublished financial statements, licenses, contracts, prices and costs, suppliers and customers; information regarding Participant evaluations and Participant performance; and information regarding the skills and compensation of developers of the Company. Notwithstanding the other provisions of this Agreement, nothing received by the Participant will be considered to be Confidential Information if: (i) it has been published or is otherwise readily available to the public other than by a breach of this Agreement; (ii) it has been rightfully received by the Participant from a third party without confidentiality limitations; (iii) it has been independently developed by the Participant having no access to the Confidential Information; or (iv) it was known to the Participant before being first received from the Company.
- (b) “**Customer**” means any customer of the Company in the two-year period prior to the end of the Employment Period, including potential customers which the Company was actively pursuing.

15. **Compliance With Section 409A of the Code.** To the extent applicable, it is intended that this Agreement and the Plan comply with the provisions of Section 409A of the Code. This Agreement and the Plan shall be administered in a manner consistent with this intent, and any provision that would cause this Agreement or the Plan to fail to satisfy Section 409A of the Code shall have no force or effect until amended to comply with Section 409A of the Code (which amendment may be retroactive to the extent permitted by Section 409A of the Code and may be made by the Company without the consent of the Participant). Notwithstanding the foregoing, the Company is not guaranteeing any particular tax outcome, and the Participant shall remain solely liable for any and all tax consequences associated with the PRSUs.

16. **Interpretation.** Any reference in this Agreement to Section 409A of the Code will also include any proposed, temporary or final regulations, or any other guidance,

promulgated with respect to such Section by the U.S. Department of the Treasury or the Internal Revenue Service.

17. **No Right to Future Awards or Employment.** The grant of the PRSUs under this Agreement to the Participant is a voluntary, discretionary award being made on a one-time basis and it does not constitute a commitment to make any future awards. The grant of the PRSUs and any related payments made hereunder will not be considered salary or other compensation for purposes of any severance pay or similar allowance, except as otherwise required by law. Nothing contained in this Agreement will confer upon the Participant any right to be employed or remain employed by the Company or any of its Subsidiaries, nor limit or affect in any manner the right of the Company or any of its Subsidiaries to terminate the Participant's employment or adjust the compensation of the Participant.

18. **Relation to Other Benefits.** Any economic or other benefit to the Participant under this Agreement or the Plan shall not be taken into account in determining any benefits to which the Participant may be entitled under any profit-sharing, retirement or other benefit or compensation plan maintained by the Company or any of its Subsidiaries and shall not affect the amount of any life insurance coverage available to any beneficiary under any life insurance plan covering employees of the Company or any of its Subsidiaries.

19. **Amendments.** Any amendment to the Plan shall be deemed to be an amendment to this Agreement to the extent that the amendment is applicable hereto; provided, however, that no amendment shall adversely affect the Participant's rights with respect to the PRSUs without the Participant's written consent, and the Participant's consent shall not be required to an amendment that is deemed necessary by the Company to ensure compliance with Section 409A of the Code or Section 10D of the Exchange Act.

20. **Severability.** In the event that one or more of the provisions of this Agreement shall be invalidated for any reason by a court of competent jurisdiction, any provision so invalidated shall be deemed to be separable from the other provisions hereof, and the remaining provisions hereof shall continue to be valid and fully enforceable.

21. **Relation to Plan.** The PRSUs granted under this Agreement and all of the terms and conditions hereof are subject to all of the terms and conditions of the Plan. In the event of any inconsistency between this Agreement and the Plan, the terms of the Plan will govern. The Committee acting pursuant to the Plan, as constituted from time to time, shall, except as expressly provided otherwise herein or in the Plan, have the right to determine any questions which arise in connection with this Agreement.

22. **Data Privacy.** Collection and use of the Participant's personal data, as well as any personal data belonging to the Participant's permitted beneficiaries hereunder, for the purposes of implementing, administering, and managing the Participant's participation in the Plan shall be processed by Company in accordance with the ANSYS Global Data Protection Notice. Additional details about the types of personal data used to administer the Plan, including,

where applicable, the Company's policies on sharing of personal data with third-party service providers and cross-border data transfer, may be found in the Global Data Protection Notice.

23. **Nature of Grant**. In accepting the PRSUs, the Participant acknowledges, understands and agrees that:
- (a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan;
 - (b) the grant of the PRSUs is voluntary and occasional and does not create any contractual or other right to receive future grants;
 - (c) all decisions with respect to future awards or other grants, if any, will be at the sole discretion of the Company;
 - (d) the PRSUs and the Participant's participation in the Plan shall not be interpreted as forming an employment contract with the Company;
 - (e) the Participant is voluntarily participating in the Plan;
 - (f) the PRSUs and any shares of Common Stock acquired under the Plan are not intended to replace any pension rights or compensation;
 - (g) the PRSUs and any shares of Common Stock acquired under the Plan, and the income and value of same, are not part of normal or expected compensation for any purpose, including, without limitation, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement benefits or payments or welfare benefits or similar payments;
 - (h) the future value of the shares of Common Stock underlying the PRSUs is unknown, indeterminable, and cannot be predicted with certainty;
 - (i) no claim or entitlement to compensation or damages shall arise from forfeiture of the PRSUs resulting from the termination of the Participant's employment relationship (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Participant is employed or the terms of the Participant's employment agreement, if any);
 - (j) unless otherwise provided in the Plan or by the Company in its discretion, the PRSUs and the benefits evidenced by this Agreement do not create any entitlement to have the PRSUs or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the Common Stock; and

(k) neither the employer, the Company nor any other Subsidiary shall be liable for any foreign exchange rate fluctuation between the Participant's local currency and the United States Dollar that may affect the value of the PRSUs or of any amounts due to the Participant pursuant to settlement of the PRSUs or the subsequent sale of any shares of Common Stock acquired upon settlement.

24. **Language.** If the Participant has received this Agreement, or any other document related to the PRSUs and/or the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

25. **Non-U.S. Addendum.** Notwithstanding any provisions in this Agreement, the grant and PRSUs shall also be subject to the special terms and conditions set forth in the International Appendix attached as Appendix A to this Agreement for the Participant's country, if applicable. Moreover, if the Participant relocates to one of the countries included in the International Appendix, the special terms and conditions for such country will apply to the Participant to the extent that the Company determines that the application of such terms and conditions are necessary or advisable in order to comply with local law or facilitate the administration of the Plan. The International Appendix attached hereto as Appendix A constitutes part of this Agreement.

26. **Electronic Delivery.** The Company may, in its sole discretion, deliver any documents related to the PRSUs and the Participant's participation in the Plan, or future awards that may be granted under the Plan, by electronic means or request the Participant's consent to participate in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and, if requested, agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

27. **Governing Law.** This Agreement shall be governed by and construed with the internal substantive laws of the State of Delaware, without giving effect to any principle of law that would result in the application of the law of any other jurisdiction. The Participant hereby expressly consents to the personal jurisdiction of the state and federal courts located in the Commonwealth of Pennsylvania for any lawsuit filed arising from or related to this Agreement and further agrees not to challenge the jurisdiction or venue in any suit filed in the state or federal courts of the Commonwealth of Pennsylvania.

28. **Successors and Assigns.** Without limiting **Section 3** hereof, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the successors, administrators, heirs, legal representatives and assigns of the Participant, and the successors and assigns of the Company.

29. **Acknowledgement.** The Participant acknowledges that the Participant (a) has received a copy of the Plan, (b) has had an opportunity to review the terms of this Agreement and the Plan, (c) understands the terms and conditions of this Agreement and the Plan and (d) agrees to such terms and conditions.

30. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same agreement.

THE FOREGOING AWARD IS HEREBY ACCEPTED AND THE TERMS AND CONDITIONS OF THIS AGREEMENT ARE HEREBY AGREED TO BY THE PARTICIPANT. BY ACCEPTING THIS AWARD PURSUANT TO THE COMPANY'S INSTRUCTIONS (INCLUDING THROUGH AN ONLINE ACCEPTANCE PROCESS), THE PARTICIPANT ACKNOWLEDGES THE FOLLOWING: (A) THE PARTICIPANT HAS READ THIS AGREEMENT AND UNDERSTANDS AND AGREES TO ITS TERMS AND CONDITIONS; (B) THE PARTICIPANT CAN PRINT OUT AND KEEP A COPY OF THIS AGREEMENT; (C) THE PARTICIPANT IS HEREBY ADVISED BY THE COMPANY IN WRITING TO CONSULT WITH AN ATTORNEY OF THE PARTICIPANT'S CHOICE BEFORE ACCEPTING THIS AGREEMENT; (D) THE PARTICIPANT HAS BEEN AFFORDED AND HAS HAD A FULL AND REASONABLE OPPORTUNITY AND PERIOD OF TIME OF AT LEAST 21 DAYS TO CONSIDER THE TERMS AND CONDITIONS OF THIS AGREEMENT; (E) THE PARTICIPANT FULLY UNDERSTANDS THE MEANING AND SIGNIFICANCE, AND CONSEQUENCES, OF ALL OF THE TERMS AND CONDITIONS OF THIS AGREEMENT (INCLUDING WITHOUT LIMITATION THE GENERAL RELEASE GIVEN BY THE PARTICIPANT IN THIS AGREEMENT); (F) THE PARTICIPANT IS ACCEPTING THIS AGREEMENT KNOWINGLY, VOLUNTARILY AND OF THE PARTICIPANT'S OWN FREE WILL AND WITH THE INTENT TO BE FULLY BOUND HEREBY; (G) THE PARTICIPANT HAS AGREED TO USE AN ELECTRONIC METHOD OF SIGNATURE TO DEMONSTRATE ACCEPTANCE OF THE TERMS AND CONDITIONS OF THIS AGREEMENT; AND (H) THE PARTICIPANT'S ELECTRONIC SIGNATURE IS AS LEGALLY BINDING AS AN INK SIGNATURE.

ANSYS, INC.
NOTICE OF GRANT OF RESTRICTED STOCK UNITS
(Non-Employee Directors)

ANSYS, Inc. (the “Company”) hereby grants to the Participant the number of Restricted Stock Units (“RSUs”) set forth below under the ANSYS, Inc. 2021 Equity and Incentive Compensation Plan (the “Plan”). The RSUs are subject to all of the terms and conditions in this Notice of Grant of Restricted Stock Units (this “Grant Notice”), in the Restricted Stock Units Agreement attached hereto (the “Agreement”) and in the Plan. Capitalized terms used, but not otherwise defined, in this Grant Notice will have the meanings given to such terms in the Plan or Agreement, as applicable, and the Plan and Agreement are hereby incorporated by reference into this Grant Notice. If there are any inconsistencies between this Grant Notice or Agreement and the Plan, the terms of the Plan shall govern.

Participant:

Type of Grant:

Restricted Stock Units

Date of Grant:

_____, 20__

Number of RSUs:

Vesting Schedule:

Subject to the conditions set forth in the Agreement and the Plan, including but not limited to the Participant’s continued service as a member of the Board, the RSUs shall become vested on the date that is the earlier of (a) the one-year anniversary of the Date of Grant or (b) the date of the Company’s next regular annual meeting of Stockholders which occurs after the Date of Grant.

ANSYS, INC.

Restricted Stock Units Agreement
(Non-Employee Directors)

ANSYS, Inc. (the “Company”) has granted, pursuant to the ANSYS, Inc. 2021 Equity and Incentive Compensation Plan (the “Plan”), to the Participant named in the Notice of Grant of Restricted Stock Units (the “Grant Notice”) to which this Restricted Stock Units Agreement is attached (together with the Grant Notice, the “Agreement”) an award of Restricted Stock Units as set forth in such Grant Notice, subject to the terms and conditions set forth in this Agreement.

1. **Certain Definitions**. Capitalized terms used, but not otherwise defined, in this Agreement will have the meanings given to such terms in the Plan.

2. **Grant of RSUs**. Subject to and upon the terms, conditions and restrictions set forth in this Agreement and in the Plan, the Company has granted to the Participant, as of the Date of Grant, the number of Restricted Stock Units set forth in the Grant Notice (the “RSUs”). Each RSU shall represent the right of the Participant to receive one share of Common Stock subject to and upon the terms and conditions of this Agreement.

3. **Restrictions on Transfer of RSUs**. Subject to Section 15 of the Plan, neither the RSUs evidenced hereby nor any interest therein or in the shares of Common Stock underlying such RSUs shall be transferable prior to payment to the Participant pursuant to **Section 5** hereof other than by will or pursuant to the laws of descent and distribution.

4. **Vesting of RSUs**.

- (a) **General Rule**. The RSUs shall vest in accordance with the Vesting Schedule set forth in the Grant Notice (the period from the Date of Grant until the vesting date, the “Vesting Period”). Any RSUs that do not so become vested will be forfeited, including, except as provided in **Section 4(b)** or **4(c)** below, if the Participant ceases to be a member of the Board prior to the end of the Vesting Period.
- (b) **Approved Departure**. Notwithstanding **Section 4(a)** above, a pro-rata portion of the RSUs shall become vested if the Participant ceases service on the Board under circumstances approved by the Committee, such as a departure in order to avoid a conflict of interest or other similar circumstances, unless the Participant is otherwise eligible to vest in a greater amount pursuant to **Section 4(c)**. In the event that this **Section 4(b)** is applicable, one-twelfth of the RSUs shall become vested for each full month of the Participant’s continued service as a Director between the Date of Grant and the date on which the Participant ceases to be a Director. The determination of the reason for a Participant’s departure shall be made by the Committee in its sole discretion.
- (c) **Other Special Circumstances**. Notwithstanding **Section 4(a)** above, and subject to **Section 4(b)** above, if a Change in Control occurs and/or the Participant ceases to

be a Director prior to the end of the Vesting Period under certain circumstances, the RSUs shall be forfeited or become vested, nonforfeitable and payable to the Participant, as applicable, pursuant to the terms of Section 12 of the Plan.

5. **Form and Time of Payment of RSUs.**

- (a) Payment for the RSUs, after and to the extent they have become vested and nonforfeitable, shall be made in the form of shares of Common Stock.
- (b) Except as otherwise provided in **Section 5(c)**, payment for such RSUs shall be made on the first of the following dates to occur after the vesting of such RSUs: (1) the first anniversary of the Date of Grant; (2) the date of the Participant's death; (3) the date of a Change in Control that constitutes a "change in control event" for purposes of Treasury Regulation Section 1.409A-3(i)(5); or (4) the date of the Participant's "separation from service" (within the meaning of Section 409A(a)(2)(A)(i) of the Code).
- (c) If the Committee has given the Participant the option to elect to defer the settlement of the RSUs, and the Participant has made an irrevocable written election to so defer the settlement of the RSUs in accordance with the terms and conditions required by the Committee (the "**Deferral Election**"), then, in lieu of the terms specified in **Section 5(b)** (above), subject to the terms of the Plan and this Agreement, payment for such RSUs shall be made in accordance with the terms of the Deferral Election.
- (d) The Company's obligations to the Participant with respect to the RSUs will be satisfied in full upon the issuance of shares of Common Stock corresponding to such RSUs.

6. **Dividend Equivalents; Voting and Other Rights.**

- (a) The Participant shall have no rights of ownership in the shares of Common Stock underlying the RSUs and no right to vote the shares of Common Stock underlying the RSUs until the date on which the shares of Common Stock underlying the RSUs are issued or transferred to the Participant pursuant to **Section 5** above.
- (b) From and after the Date of Grant and until the earlier of (i) the time when the RSUs become vested and nonforfeitable and are paid in accordance with **Section 5** hereof or (ii) the time when the Participant's right to receive shares of Common Stock in payment of the RSUs is forfeited in accordance with **Section 4** hereof, on the date that the Company pays a cash dividend (if any) to holders of shares of Common Stock generally, the Participant shall be credited with cash per RSU equal to the amount of such dividend. Any amounts credited pursuant to the immediately preceding sentence shall be subject to the same applicable terms and conditions (including vesting, payment and forfeitability) as apply to the RSUs

based on which the dividend equivalents were credited, and such amounts shall be paid in cash at the same time as the RSUs to which they relate are settled.

- (c) The obligations of the Company under this Agreement will be merely that of an unfunded and unsecured promise of the Company to deliver shares of Common Stock in the future, and the rights of the Participant will be no greater than that of an unsecured general creditor. No assets of the Company will be held or set aside as security for the obligations of the Company under this Agreement.

7. **Adjustments.** The number of shares of Common Stock issuable for each RSU and the other terms and conditions of the grant evidenced by this Agreement are subject to adjustment, including as provided in Section 11 of the Plan.

8. **Withholding Taxes.**

- (a) The Participant acknowledges that, if the Participant is a Pennsylvania resident, the Participant is responsible for any and all applicable income and other taxes, as well as any social insurance contributions and other deductions or withholdings required by applicable law, from the RSUs, including federal, FICA, state, and local taxes applicable to the Participant (such taxes, the "Tax-Related Items"). The Participant further acknowledges that the Company (i) makes no representations or undertakings regarding the Tax-Related Items in connection with any aspect of the RSUs, including, but not limited to, the grant, vesting, or delivery of shares of Common Stock under the RSUs, the subsequent sale of shares of Common Stock pursuant to the RSUs, and the receipt of dividends, and (ii) does not commit to and is under no obligation to structure the terms of the grant or any aspect of the RSUs to reduce or eliminate the Participant's liability for Tax-Related Items.

- (b) If the Participant is not a Pennsylvania resident, the Participant acknowledges that any issuance of shares of Common Stock to a Participant pursuant to the RSUs shall be subject to any applicable tax withholding requirements. The Company shall automatically, not later than the date as of which the transfer of shares of Common Stock pursuant to this award becomes a taxable event for federal income tax or other applicable withholding tax purposes, cause the required minimum federal, state, local, non-U.S., or other taxes required by law to be withheld on account of such taxable event to be satisfied by withholding from shares of Common Stock to be issued to the Participant a number of shares of Common Stock with an aggregate Market Value per Share that would satisfy such minimum withholding obligation.

9. **Compliance with Law.** The Company shall make reasonable efforts to comply with all applicable federal and state securities laws; provided, however, notwithstanding any other provision of the Plan and this Agreement, the Company shall not be obligated to issue any

shares of Common Stock pursuant to this Agreement if the issuance thereof would result in a violation of any such law.

10. **Compliance With Section 409A of the Code.** To the extent applicable, it is intended that this Agreement and the Plan comply with or be exempt from the provisions of Section 409A of the Code. This Agreement and the Plan shall be administered in a manner consistent with this intent, and any provision that would cause this Agreement or the Plan to fail to satisfy Section 409A of the Code shall have no force or effect until amended to comply with Section 409A of the Code (which amendment may be retroactive to the extent permitted by Section 409A of the Code and may be made by the Company without the consent of the Participant). Notwithstanding the foregoing, the Company is not guaranteeing any particular tax outcome, and the Participant shall remain solely liable for any and all tax consequences associated with the RSUs.

11. **Interpretation.** Any reference in this Agreement to Section 409A of the Code will also include any proposed, temporary or final regulations, or any other guidance, promulgated with respect to such Section by the U.S. Department of the Treasury or the Internal Revenue Service.

12. **No Right to Future Awards or Board Service.** The grant of the RSUs under this Agreement to the Participant is a voluntary, discretionary award being made on a one-time basis and it does not constitute a commitment to make any future awards. Nothing contained in this Agreement will confer upon the Participant any right to continue to be a Director, nor limit or affect in any manner the right of the Company or any of its Subsidiaries to terminate the Participant's service on the Board.

13. **Relation to Other Benefits.** Any economic or other benefit to the Participant under this Agreement or the Plan shall not be taken into account in determining any benefits to which the Participant may be entitled under any profit-sharing, retirement or other benefit or compensation plan maintained by the Company or any of its Subsidiaries and shall not affect the amount of any life insurance coverage available to any beneficiary under any life insurance plan covering employees of the Company or any of its Subsidiaries.

14. **Amendments.** Any amendment to the Plan shall be deemed to be an amendment to this Agreement to the extent that the amendment is applicable hereto; provided, however, that no amendment shall adversely affect the Participant's rights with respect to the RSUs without the Participant's written consent, and the Participant's consent shall not be required to an amendment that is deemed necessary by the Company to ensure compliance with Section 409A of the Code or Section 10D of the Exchange Act.

15. **Severability.** In the event that one or more of the provisions of this Agreement shall be invalidated for any reason by a court of competent jurisdiction, any provision so

invalidated shall be deemed to be separable from the other provisions hereof, and the remaining provisions hereof shall continue to be valid and fully enforceable.

16. **Relation to Plan.** The RSUs granted under this Agreement and all of the terms and conditions hereof are subject to all of the terms and conditions of the Plan. In the event of any inconsistency between this Agreement and the Plan, the terms of the Plan will govern. The Committee acting pursuant to the Plan, as constituted from time to time, shall, except as expressly provided otherwise herein or in the Plan, have the right to determine any questions which arise in connection with this Agreement.

17. **Data Privacy.** *The Participant hereby explicitly and unambiguously consents to the collection, retention, use and transfer, in any form, of the Participant's personal data described below and any other RSU grant materials by and among, as applicable, the Company and any other Subsidiary for the purpose of implementing, administering and managing the Participant's participation in the Plan.*

The Participant understands and consents that the Company will process personal data about the Participant consisting of the name, home address, personal and business telephone number, date of birth, social insurance number or other governmental identification number, personal electronic mail address, nationality, and job title, as well as the Participant's salary, any shares of Common Stock or directorships held in the Company, details of all awards or any other entitlement to shares of Common Stock awarded, canceled, exercised, vested, unvested or outstanding in the Participant's favor, (collectively, "Data"), for the Company's legitimate interest of implementing, administering and managing the Plan and complying with the terms of this Agreement.

The Participant understands and agrees that the Data will be transferred to (a) a stock plan service provider selected by the Company to process the Data when providing in the implementation, administration and management of the Plan on behalf of the Company, (b) the Company's legal and financial advisers that process the Data when providing advisory services to the Company in connection with the implementation, administration and management of the Plan and this Agreement, and (c) third party service providers as data processors to the Company and who process the Data in support of the Company's business. The Participant may request a list with the names and addresses of any recipients of the Data by contacting his or her local human resources representative. The Company will process the Data as so long as is necessary to further the purposes for such processing as described herein. The Participant may, at any time, request access to Data, request additional information about the storage and processing of Data, require any necessary amendments to Data, withdraw consent to processing of Data, or otherwise exercise any data protection right the Participant may have under applicable law, in any case without cost, by contacting in writing his or her local human resources representative. Further, the Participant understands that he or she is providing the consents herein on a purely voluntary basis. If the Participant does not consent, or if the Participant later seeks to revoke his or her consent, his or her service with the Company will not be adversely affected; the only adverse consequence of refusing or withdrawing consent is that the Company would not be able to grant the

Participant the RSUs or other equity awards or administer or maintain such awards. Therefore, the Participant understands that refusing or withdrawing his or her consent may affect the Participant's ability to participate in the Plan. For more information on the consequences of the Participant's refusal to consent or withdrawal of consent, the Participant understands that he or she may contact his or her local human resources representative.

18. **Nature of Grant.** In accepting the RSUs, the Participant acknowledges, understands and agrees that:
- (a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan;
 - (b) the grant of the RSUs is voluntary and occasional and does not create any contractual or other right to receive future grants;
 - (c) all decisions with respect to future awards or other grants, if any, will be at the sole discretion of the Committee;
 - (d) the RSUs and the Participant's participation in the Plan shall not be interpreted as forming an employment contract with the Company;
 - (e) the Participant is voluntarily participating in the Plan;
 - (f) the RSUs and any shares of Common Stock acquired under the Plan are not intended to replace any other compensation;
 - (g) the RSUs and any shares of Common Stock acquired under the Plan, and the income and value of same, are not part of normal or expected compensation for any purpose;
 - (h) the future value of the shares of Common Stock underlying the RSUs is unknown, indeterminable, and cannot be predicted with certainty;
 - (i) no claim or entitlement to compensation or damages shall arise from forfeiture of the RSUs resulting from the termination of the Participant's service relationship; and
 - (j) neither the Company nor any other Subsidiary shall be liable for any foreign exchange rate fluctuation between the Participant's local currency and the United States Dollar that may affect the value of the RSUs or of any amounts due to the Participant pursuant to settlement of the RSUs or the subsequent sale of any shares of Common Stock acquired upon settlement.

19. **Electronic Delivery.** The Company may, in its sole discretion, deliver any documents related to the RSUs and the Participant's participation in the Plan, or future awards that may be granted under the Plan, by electronic means or request the Participant's consent to

participate in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and, if requested, agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

20. **Governing Law.** This Agreement shall be governed by and construed with the internal substantive laws of the State of Delaware, without giving effect to any principle of law that would result in the application of the law of any other jurisdiction. The Participant hereby expressly consents to the personal jurisdiction of the state and federal courts located in the Commonwealth of Pennsylvania for any lawsuit filed arising from or related to this Agreement and further agrees not to challenge the jurisdiction or venue in any suit filed in the state or federal courts of the Commonwealth of Pennsylvania.

21. **Successors and Assigns.** Without limiting **Section 3** hereof, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the successors, administrators, heirs, legal representatives and assigns of the Participant, and the successors and assigns of the Company.

22. **Acknowledgement.** The Participant acknowledges that the Participant (a) has received a copy of the Plan, (b) has had an opportunity to review the terms of this Agreement and the Plan, (c) understands the terms and conditions of this Agreement and the Plan and (d) agrees to such terms and conditions.

23. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same agreement.

THE FOREGOING AWARD IS HEREBY ACCEPTED AND THE TERMS AND CONDITIONS OF THIS AGREEMENT ARE HEREBY AGREED TO BY THE PARTICIPANT. BY ACCEPTING THIS AWARD PURSUANT TO THE COMPANY'S INSTRUCTIONS (INCLUDING THROUGH AN ONLINE ACCEPTANCE PROCESS), THE PARTICIPANT ACKNOWLEDGES THE FOLLOWING: (A) THE PARTICIPANT HAS READ THIS AGREEMENT AND UNDERSTANDS AND AGREES TO ITS TERMS AND CONDITIONS; (B) THE PARTICIPANT CAN PRINT OUT AND KEEP A COPY OF THIS AGREEMENT; (C) THE PARTICIPANT HAS AGREED TO USE AN ELECTRONIC METHOD OF SIGNATURE TO DEMONSTRATE ACCEPTANCE OF THE TERMS AND CONDITIONS OF THIS AGREEMENT; AND (D) THE PARTICIPANT'S ELECTRONIC SIGNATURE IS AS LEGALLY BINDING AS AN INK SIGNATURE.

ANSYS, INC.
NOTICE OF GRANT OF RESTRICTED STOCK UNITS
(Employees)

ANSYS, Inc. (the "Company") hereby grants to the Participant the number of Restricted Stock Units ("RSUs") set forth below under the ANSYS, Inc. 2021 Equity and Incentive Compensation Plan (the "Plan"). The RSUs are subject to all of the terms and conditions in this Notice of Grant of Restricted Stock Units (this "Grant Notice"), in the Restricted Stock Units Agreement attached hereto (the "Agreement") and in the Plan. Capitalized terms used, but not otherwise defined, in this Grant Notice will have the meanings given to such terms in the Plan or Agreement, as applicable, and the Plan and Agreement are hereby incorporated by reference into this Grant Notice. If there are any inconsistencies between this Grant Notice or Agreement and the Plan, the terms of the Plan shall govern.

Participant:

Type of Grant:

Restricted Stock Units

Date of Grant:

_____, 20__

Number of RSUs:

Vesting Schedule:

Subject to the conditions set forth in the Agreement, including but not limited to the Participant's continuous employment with the Company or a Subsidiary until the applicable vesting date, the RSUs shall become vested as follows:

_____ RSUs on _____, 20__;
 _____ RSUs on _____, 20__; and
 _____ RSUs on _____, 20__.

ANSYS, INC.

Restricted Stock Units Agreement

ANSYS, Inc. (the “Company”) has granted, pursuant to the ANSYS, Inc. 2021 Equity and Incentive Compensation Plan (the “Plan”), to the Participant named in the Notice of Grant of Restricted Stock Units (the “Grant Notice”) to which this Restricted Stock Units Agreement is attached (together with the Grant Notice, the “Agreement”) an award of Restricted Stock Units as set forth in such Grant Notice, subject to the terms and conditions set forth in this Agreement.

1. **Certain Definitions**. Capitalized terms used, but not otherwise defined, in this Agreement will have the meanings given to such terms in the Plan.

2. **Grant of RSUs**. Subject to and upon the terms, conditions and restrictions set forth in this Agreement, including any additional terms and conditions for the Participant’s country (for Participants outside the United States only) set forth in any attached Appendix that would form part of this Agreement, and in the Plan, the Company has granted to the Participant, as of the Date of Grant, the number of Restricted Stock Units set forth in the Grant Notice (the “RSUs”). Each RSU shall represent the right of the Participant to receive one share of Common Stock subject to and upon the terms and conditions of this Agreement.

3. **Restrictions on Transfer of RSUs**. Subject to Section 15 of the Plan, neither the RSUs evidenced hereby nor any interest therein or in the shares of Common Stock underlying such RSUs shall be transferable prior to payment to the Participant pursuant to **Section 5** hereof other than by will or pursuant to the laws of descent and distribution.

4. **Vesting of RSUs**.

- (a) **General Rule**. The RSUs shall vest in accordance with the Vesting Schedule set forth in the Grant Notice (the period from the Date of Grant until the last vesting date, the “Vesting Period”). Any RSUs that do not so become vested will be forfeited, including, except as provided in **Section 4(b)** below, if the Participant ceases to be continuously employed by the Company or a Subsidiary prior to the end of the Vesting Period. For purposes of this Agreement, “continuously employed” (or substantially similar terms) means the absence of any interruption or termination of the Participant’s employment with the Company or a Subsidiary. Continuous employment shall not be considered interrupted or terminated in the case of transfers between locations of the Company and its Subsidiaries.
- (b) **Special Circumstances**. Notwithstanding **Section 4(a)** above and except as otherwise provided in an agreement between the Company and the Participant or in any plan or arrangement in which the Participant is a participant, if a Change in Control occurs and/or the Participant ceases to be employed by the Company or a Subsidiary prior to the end of the Vesting Period under certain circumstances, the RSUs shall be forfeited or become vested, nonforfeitable and payable to the Participant, as applicable, pursuant to the terms of Section 12 of the Plan. For

purposes of the preceding sentence, if the Participant becomes eligible for Disability (as defined in the Plan), the Participant's employment shall be immediately terminated.

5. **Form and Time of Payment of RSUs.**

- (a) Payment for the RSUs, after and to the extent they have become vested and nonforfeitable, shall be made in the form of shares of Common Stock.
- (b) Payment for such RSUs shall be made as soon as administratively practicable following the date that the RSUs vest and become nonforfeitable pursuant to **Section 4** hereof, but in no event later than 60 days after the end of the calendar year in which such RSUs vest and become nonforfeitable, and in all events within the short-term deferral period specified in Treasury Regulation § 1.409A-1(b)(4).
- (c) The Company's obligations to the Participant with respect to the RSUs will be satisfied in full upon the issuance of shares of Common Stock corresponding to such RSUs.

6. **Dividend Equivalents; Voting and Other Rights.**

- (a) The Participant shall have no rights of ownership in the shares of Common Stock underlying the RSUs and no right to vote the shares of Common Stock underlying the RSUs until the date on which the shares of Common Stock underlying the RSUs are issued or transferred to the Participant pursuant to **Section 5** above.
- (b) From and after the Date of Grant and until the earlier of (i) the time when the RSUs become vested and nonforfeitable and are paid in accordance with **Section 5** hereof or (ii) the time when the Participant's right to receive shares of Common Stock in payment of the RSUs is forfeited in accordance with **Section 4** hereof, on the date that the Company pays a cash dividend (if any) to holders of shares of Common Stock generally, the Participant shall be credited with cash per RSU equal to the amount of such dividend. Any amounts credited pursuant to the immediately preceding sentence shall be subject to the same applicable terms and conditions (including vesting, payment and forfeitability) as apply to the RSUs based on which the dividend equivalents were credited, and such amounts shall be paid in cash at the same time as the RSUs to which they relate are settled.
- (c) The obligations of the Company under this Agreement will be merely that of an unfunded and unsecured promise of the Company to deliver shares of Common Stock in the future, and the rights of the Participant will be no greater than that of an unsecured general creditor. No assets of the Company will be held or set aside as security for the obligations of the Company under this Agreement.

7. **Adjustments.** The number of shares of Common Stock issuable for each RSU and the other terms and conditions of the grant evidenced by this Agreement are subject to adjustment, including as provided in Section 11 of the Plan.

8. **Withholding Taxes.** To the extent that the Company is required to withhold federal, state, local or foreign taxes or other amounts in connection with the delivery to the Participant of Common Stock or any other payment to the Participant or any other payment or vesting event under this Agreement, the Participant agrees that the Company will withhold any taxes required to be withheld by the Company under federal, state, local or foreign law as a result of the settlement of the RSUs in an amount sufficient to satisfy the minimum statutory withholding amount permissible. To the extent that the amounts available to the Company for such withholding are insufficient, it shall be a condition to the obligation of the Company to make any such delivery or payment that the Participant make arrangements satisfactory to the Company for payment of the balance of such taxes or other amounts required to be withheld. The shares so retained shall be credited against any such withholding requirement at the market value of such shares of Common Stock on the date of such deemed delivery (and, if not a business day, on the business day immediately preceding such day). In no event will the market value of the Common Stock to be withheld and/or delivered pursuant to this **Section 8** to satisfy applicable withholding taxes exceed the minimum amount of taxes or other amounts required to be withheld. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding the Participant's participation in the Plan, or the Participant's acquisition or sale of the underlying shares of Common Stock. The Participant is hereby advised to consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

9. **Compliance with Law.** The Company shall make reasonable efforts to comply with all applicable federal and state securities laws; provided, however, notwithstanding any other provision of the Plan and this Agreement, the Company shall not be obligated to issue any shares of Common Stock pursuant to this Agreement if the issuance thereof would result in a violation of any such law.

10. **Non-Competition; Non-Solicitation; Company Information.** As additional consideration for the RSUs granted to the Participant, the Participant hereby agrees that if he or she engages for any reason, directly or indirectly, whether as owner, part-owner, stockholder, member, partner, director, officer, trustee, employee, agent or consultant, or in any other capacity, on behalf of himself or herself or any firm, corporation or other business organization other than the Company and its Subsidiaries in any one or more of the following activities:

- (a) at any time during his or her employment with the Company or any Subsidiary (the "Employment Period") and for a period of one year after the termination of his or her employment with the Company or any Subsidiary no matter what the cause of that termination (the "Post-Employment Period"), the development, marketing, solicitation, or selling of any product or service that is competitive with the products or services of the Company, or products or services that the Company has under development or that are subject to active planning at any time

during the Employment Period, as evidenced by the books and records of the Company, and which take place in the United States; provided that the restrictions set forth in this **Section 10(a)** for the Post-Employment Period shall not apply to any Participant who is a California-based employee;

- (b) at any time during the Employment Period or thereafter, the use of any of the Company's or its subsidiaries' Confidential Information or trade secrets, as defined by law, knowledge of which was acquired by the Participant as an employee of the Company and its Subsidiaries; or
- (c) during the Employment Period and/or Post-Employment Period, any activity for the purpose of inducing, encouraging, soliciting, or arranging for the employment or engagement by anyone other than the Company and its Subsidiaries of any employee, officer, director, agent, consultant, Customer, or sales representative of the Company and its Subsidiaries or attempt to engage any of them in a manner which would deprive the Company and its Subsidiaries of their services or place them in a conflict of interest with the Company and its Subsidiaries;

then (i) the RSUs shall be forfeited effective on the date on which he or she first engages in such activity, unless terminated sooner by operation of any other term or condition of this Agreement or the Plan, and (ii) all shares of Common Stock issued or transferred to the Participant pursuant to this Agreement shall become immediately due and payable by the Participant to the Company and if such shares of Common Stock have been sold by the Participant, an amount equal to the proceeds from such sale shall become immediately due and payable by the Participant to the Company. The Participant acknowledges and agrees that the activities set forth in this **Section 10 (a), (b) and (c)** are adverse to the Company's interests, and that it would be inequitable for the Participant to benefit from the RSUs should the Participant engage in any such activities during or within one year after termination of his or her employment with the Company. The Participant acknowledges and agrees that the rights and remedies set forth in this **Section 10** are in addition to and are not intended to limit any other rights or remedies the Company may have available to it, both during and at any time after the termination of the Participant's employment with the Company, including without limitation, any rights or remedies the Company may have under the ANSYS Intellectual Property Protection Agreement or other similar agreements.

The Participant may be released from his or her obligations as stated above only if the Committee (or its duly appointed agent) determines in its sole discretion that such action is in the best interests of the Company and its Subsidiaries.

The restrictions in this **Section 10** do not supersede, and are in addition to, restrictive covenants contained in any other form of agreement, such as an employment agreement, between the Company and the Participant, to the extent enforceable pursuant to the terms of the other agreement.

Notwithstanding anything in this Agreement to the contrary, nothing in this Agreement prevents the Participant from providing, without prior notice to the Company, information to

governmental authorities regarding possible legal violations or otherwise testifying or participating in any investigation or proceeding by any governmental authorities regarding possible legal violations, and for purpose of clarity the Participant is not prohibited from providing information voluntarily to the Securities and Exchange Commission pursuant to Section 21F of the Exchange Act. Furthermore, the U.S. Defend Trade Secrets Act of 2016 (“DTSA”) provides that an individual shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (A) is made (1) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney; and (2) solely for the purpose of reporting or investigating a suspected violation of law or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. In addition, the DTSA provides that an individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the attorney of the individual and use the trade secret information in the court proceeding, if the individual (x) files any document containing the trade secret under seal and (y) does not disclose the trade secret, except pursuant to court order.

11. **Additional Defined Terms.** For purposes of this Agreement, the following terms shall have the following meanings:

- (a) “**Confidential Information**” means all non-public confidential and proprietary information owned by, possessed by, or in the control of the Company, including: ideas, research and development, know-how, manufacturing and production processes and techniques; technical data, designs, drawings, and specifications; customer and supplier lists, pricing and cost information; business and marketing plans and proposals; algorithms, industrial models, architectures, layouts, and “look-and-feel;” designs, specifications, methodologies, software or software applications (including source code, object code, other executable code, scripts, interfaces, data, databases, websites, firmware and related documentation), artwork, and other works of authorship; technologies, processes, inventions, ideas, know-how, improvements, discoveries, developments, designs and techniques; information regarding plans for research, development, new products, marketing and selling, business plans, budgets and unpublished financial statements, licenses, contracts, prices and costs, suppliers and customers; information regarding Participant evaluations and Participant performance; and information regarding the skills and compensation of developers of the Company. Notwithstanding the other provisions of this Agreement, nothing received by the Participant will be considered to be Confidential Information if: (i) it has been published or is otherwise readily available to the public other than by a breach of this Agreement; (ii) it has been rightfully received by the Participant from a third party without confidentiality limitations; (iii) it has been independently developed by the Participant having no access to the Confidential Information; or (iv) it was known to the Participant before being first received from the Company.

- (b) “**Customer**” means any customer of the Company in the two-year period prior to the end of the Employment Period, including potential customers which the Company was actively pursuing.

12. **Compliance With Section 409A of the Code.** To the extent applicable, it is intended that this Agreement and the Plan comply with or be exempt from the provisions of Section 409A of the Code. This Agreement and the Plan shall be administered in a manner consistent with this intent, and any provision that would cause this Agreement or the Plan to fail to satisfy Section 409A of the Code shall have no force or effect until amended to comply with Section 409A of the Code (which amendment may be retroactive to the extent permitted by Section 409A of the Code and may be made by the Company without the consent of the Participant). Notwithstanding the foregoing, the Company is not guaranteeing any particular tax outcome, and the Participant shall remain solely liable for any and all tax consequences associated with the RSUs.

13. **Interpretation.** Any reference in this Agreement to Section 409A of the Code will also include any proposed, temporary or final regulations, or any other guidance, promulgated with respect to such Section by the U.S. Department of the Treasury or the Internal Revenue Service.

14. **Clawback.** The Participant hereby expressly agrees that this award of RSUs shall be subject to any clawback or recoupment policy applicable to this award and set forth in the Company’s Corporate Governance Guidelines or otherwise adopted by Company.

15. **No Right to Future Awards or Employment.** The grant of the RSUs under this Agreement to the Participant is a voluntary, discretionary award being made on a one-time basis and it does not constitute a commitment to make any future awards. The grant of the RSUs and any related payments made hereunder will not be considered salary or other compensation for purposes of any severance pay or similar allowance, except as otherwise required by law. Nothing contained in this Agreement will confer upon the Participant any right to be employed or remain employed by the Company or any of its Subsidiaries, nor limit or affect in any manner the right of the Company or any of its Subsidiaries to terminate the Participant’s employment or adjust the compensation of the Participant.

16. **Relation to Other Benefits.** Any economic or other benefit to the Participant under this Agreement or the Plan shall not be taken into account in determining any benefits to which the Participant may be entitled under any profit-sharing, retirement or other benefit or compensation plan maintained by the Company or any of its Subsidiaries and shall not affect the amount of any life insurance coverage available to any beneficiary under any life insurance plan covering employees of the Company or any of its Subsidiaries.

17. **Amendments.** Any amendment to the Plan shall be deemed to be an amendment to this Agreement to the extent that the amendment is applicable hereto; provided, however, that no amendment shall adversely affect the Participant’s rights with respect to the RSUs without the Participant’s written consent, and the Participant’s consent shall not be required to an

amendment that is deemed necessary by the Company to ensure compliance with Section 409A of the Code or Section 10D of the Exchange Act.

18. **Severability.** In the event that one or more of the provisions of this Agreement shall be invalidated for any reason by a court of competent jurisdiction, any provision so invalidated shall be deemed to be separable from the other provisions hereof, and the remaining provisions hereof shall continue to be valid and fully enforceable.

19. **Relation to Plan.** The RSUs granted under this Agreement and all of the terms and conditions hereof are subject to all of the terms and conditions of the Plan. In the event of any inconsistency between this Agreement and the Plan, the terms of the Plan will govern. The Committee acting pursuant to the Plan, as constituted from time to time, shall, except as expressly provided otherwise herein or in the Plan, have the right to determine any questions which arise in connection with this Agreement. Notwithstanding anything in this Agreement to the contrary, the Participant acknowledges and agrees that this Agreement and the award described herein are subject to the terms and conditions of the Company's clawback policy (if any) as may be in effect from time to time including specifically to implement Section 10D of the Exchange Act and any applicable rules or regulations promulgated thereunder (including applicable rules and regulations of any national securities exchange on which the Common Stock may be traded).

20. **Data Privacy.** Collection and use of the Participant's personal data, as well as any personal data belonging to the Participant's permitted beneficiaries hereunder, for the purposes of implementing, administering, and managing the Participant's participation in the Plan shall be processed by Company in accordance with the ANSYS Global Data Protection Notice. Additional details about the types of personal data used to administer the Plan, including, where applicable, the Company's policies on sharing of personal data with third-party service providers and cross-border data transfer, may be found in the Global Data Protection Notice.

21. **Nature of Grant.** In accepting the RSUs, the Participant acknowledges, understands and agrees that:
- (a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan;
 - (b) the grant of the RSUs is voluntary and occasional and does not create any contractual or other right to receive future grants;
 - (c) all decisions with respect to future awards or other grants, if any, will be at the sole discretion of the Company;
 - (d) the RSUs and the Participant's participation in the Plan shall not be interpreted as forming an employment contract with the Company;
 - (e) the Participant is voluntarily participating in the Plan;

- (f) the RSUs and any shares of Common Stock acquired under the Plan are not intended to replace any pension rights or compensation;
- (g) the RSUs and any shares of Common Stock acquired under the Plan, and the income and value of same, are not part of normal or expected compensation for any purpose, including, without limitation, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement benefits or payments or welfare benefits or similar payments;
- (h) the future value of the shares of Common Stock underlying the RSUs is unknown, indeterminable, and cannot be predicted with certainty;
- (i) no claim or entitlement to compensation or damages shall arise from forfeiture of the RSUs resulting from the termination of the Participant's employment relationship (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Participant is employed or the terms of the Participant's employment agreement, if any);
- (j) unless otherwise provided in the Plan or by the Company in its discretion, the RSUs and the benefits evidenced by this Agreement do not create any entitlement to have the RSUs or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the Common Stock; and
- (k) neither the employer, the Company nor any other Subsidiary shall be liable for any foreign exchange rate fluctuation between the Participant's local currency and the United States Dollar that may affect the value of the RSUs or of any amounts due to the Participant pursuant to settlement of the RSUs or the subsequent sale of any shares of Common Stock acquired upon settlement.

22. **Language.** If the Participant has received this Agreement, or any other document related to the RSUs and/or the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

23. **Non-U.S. Addendum.** Notwithstanding any provisions in this Agreement, the grant and RSUs shall also be subject to the special terms and conditions set forth in the International Appendix attached as Appendix A to this Agreement for the Participant's country. Moreover, if the Participant relocates to one of the countries included in the International Appendix, the special terms and conditions for such country will apply to the Participant to the extent that the Company determines that the application of such terms and conditions are necessary or advisable in order to comply with local law or facilitate the administration of the

Plan. The International Appendix attached hereto as Appendix A constitutes part of this Agreement.

24. **Electronic Delivery.** The Company may, in its sole discretion, deliver any documents related to the RSUs and the Participant's participation in the Plan, or future awards that may be granted under the Plan, by electronic means or request the Participant's consent to participate in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and, if requested, agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

25. **Governing Law.** This Agreement shall be governed by and construed with the internal substantive laws of the State of Delaware, without giving effect to any principle of law that would result in the application of the law of any other jurisdiction. The Participant hereby expressly consents to the personal jurisdiction of the state and federal courts located in the Commonwealth of Pennsylvania for any lawsuit filed arising from or related to this Agreement and further agrees not to challenge the jurisdiction or venue in any suit filed in the state or federal courts of the Commonwealth of Pennsylvania.

26. **Successors and Assigns.** Without limiting **Section 3** hereof, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the successors, administrators, heirs, legal representatives and assigns of the Participant, and the successors and assigns of the Company.

27. **Acknowledgement.** The Participant acknowledges that the Participant (a) has received a copy of the Plan, (b) has had an opportunity to review the terms of this Agreement and the Plan, (c) understands the terms and conditions of this Agreement and the Plan and (d) agrees to such terms and conditions.

28. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same agreement.

THE FOREGOING AWARD IS HEREBY ACCEPTED AND THE TERMS AND CONDITIONS OF THIS AGREEMENT ARE HEREBY AGREED TO BY THE PARTICIPANT. BY ACCEPTING THIS AWARD PURSUANT TO THE COMPANY'S INSTRUCTIONS (INCLUDING THROUGH AN ONLINE ACCEPTANCE PROCESS), THE PARTICIPANT ACKNOWLEDGES THE FOLLOWING: (A) THE PARTICIPANT HAS READ THIS AGREEMENT AND UNDERSTANDS AND AGREES TO ITS TERMS AND CONDITIONS; (B) THE PARTICIPANT CAN PRINT OUT AND KEEP A COPY OF THIS AGREEMENT; (C) THE PARTICIPANT HAS AGREED TO USE AN ELECTRONIC METHOD OF SIGNATURE TO DEMONSTRATE ACCEPTANCE OF THE TERMS AND CONDITIONS OF THIS AGREEMENT; AND (D) THE PARTICIPANT'S ELECTRONIC SIGNATURE IS AS LEGALLY BINDING AS AN INK SIGNATURE.

August 4, 2021

The Board of Directors and Stockholders of ANSYS, Inc.
2600 ANSYS Drive
Canonsburg, PA 15317

We are aware that our report dated August 4, 2021, on our review of the interim financial information of ANSYS, Inc. appearing in this Quarterly Report on Form 10-Q for the quarter ended June 30, 2021, is incorporated by reference in Registration Statement Nos. 333-152765, 333-174670, 333-177030, 333-196393, 333-206111, 333-212412, and 333-256252 on Form S-8, and Registration No. 333-253472 on Form S-3.

/s/ Deloitte & Touche LLP
Pittsburgh, Pennsylvania

CHIEF EXECUTIVE OFFICER CERTIFICATION

I, Ajei S. Gopal, certify that:

1. I have reviewed this quarterly report on Form 10-Q of ANSYS, Inc. ("Ansys");
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 Ansys as of, and for, the periods presented in this report;
4. Ansys' 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 Ansys 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 Ansys, 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 Ansys' 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 Ansys' internal control over financial reporting that occurred during Ansys' most recent fiscal quarter (Ansys' fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, Ansys' internal control over financial reporting; and
5. Ansys' other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to Ansys' auditors and the audit committee of Ansys' 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 Ansys' 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 Ansys' internal control over financial reporting.

Date: August 4, 2021

/s/ Ajei S. Gopal

Ajei S. Gopal

President and Chief Executive Officer

(Principal Executive Officer)

CHIEF FINANCIAL OFFICER CERTIFICATION

I, Nicole Anasenes, certify that:

1. I have reviewed this quarterly report on Form 10-Q of ANSYS, Inc. ("Ansys");
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 Ansys as of, and for, the periods presented in this report;
4. Ansys' 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 Ansys 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 Ansys, 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 Ansys' 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 Ansys' internal control over financial reporting that occurred during Ansys' most recent fiscal quarter (Ansys' fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, Ansys' internal control over financial reporting; and
5. Ansys' other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to Ansys' auditors and the audit committee of Ansys' 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 Ansys' 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 Ansys' internal control over financial reporting.

Date: August 4, 2021

/s/ Nicole Anasenes

Nicole Anasenes

Chief Financial Officer and Senior Vice President, Finance
(Principal Financial Officer and Principal Accounting Officer)

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 Quarterly Report of ANSYS, Inc. (the "Company") on Form 10-Q for the quarter ended June 30, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Ajei S. Gopal, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

This certification is provided solely pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed to be part of the Report or filed for any purpose whatsoever.

/s/ Ajei S. Gopal

Ajei S. Gopal
President and Chief Executive Officer
(Principal Executive Officer)
August 4, 2021

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 Quarterly Report of ANSYS, Inc. (the "Company") on Form 10-Q for the quarter ended June 30, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Nicole Anasenes, Chief Financial Officer and Senior Vice President, Finance of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

This certification is provided solely pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed to be part of the Report or filed for any purpose whatsoever.

/s/ Nicole Anasenes

Nicole Anasenes

Chief Financial Officer and Senior Vice President, Finance

(Principal Financial Officer and Principal Accounting Officer)

August 4, 2021