

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 January 30, 2022

OR

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

For the transition period from _____ to _____

Broadcom Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

001-38449
(Commission file Number)

35-2617337
(I.R.S. Employer
Identification No.)

1320 Ridder Park Drive
San Jose, CA 95131-2313
(408) 433-8000

(Address, including zip code, of principal executive offices and
registrant's telephone number, including area code)

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 ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐ Emerging growth company ☐

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

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

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

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, \$0.001 par value	AVGO	The NASDAQ Global Select Market
8.00% Mandatory Convertible Preferred Stock, Series A, \$0.001 par value	AVGOP	The NASDAQ Global Select Market

As of February 25, 2022, there were 408,281,170 shares of our common stock outstanding.

BROADCOM INC.
Quarterly Report on Form 10-Q
For the Quarterly Period Ended January 30, 2022

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PART I — FINANCIAL INFORMATION	
Item 1. Condensed Consolidated Financial Statements — Unaudited	
BROADCOM INC.	
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BROADCOM INC.
CONDENSED CONSOLIDATED BALANCE SHEETS — UNAUDITED

	January 30, 2022	October 31, 2021
	(In millions, except par value)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 10,219	\$ 12,163
Trade accounts receivable, net	2,539	2,071
Inventory	1,520	1,297
Other current assets	1,063	1,055
Total current assets	15,341	16,586
Long-term assets:		
Property, plant and equipment, net	2,303	2,348
Goodwill	43,450	43,450
Intangible assets, net	10,244	11,374
Other long-term assets	1,886	1,812
Total assets	<u>\$ 73,224</u>	<u>\$ 75,570</u>
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	\$ 1,078	\$ 1,086
Employee compensation and benefits	531	1,066
Current portion of long-term debt	300	290
Other current liabilities	4,378	3,839
Total current liabilities	6,287	6,281
Long-term liabilities:		
Long-term debt	39,205	39,440
Other long-term liabilities	4,738	4,860
Total liabilities	50,230	50,581
Commitments and contingencies (Note 10)		
Preferred stock dividend obligation	26	27
Stockholders' equity:		
Preferred stock, \$0.001 par value; 100 shares authorized; 8.00% Mandatory Convertible Preferred Stock, Series A, 4 shares issued and outstanding; aggregate liquidation value of \$3,737 as of January 30, 2022 and October 31, 2021	—	—
Common stock, \$0.001 par value; 2,900 shares authorized; 410 and 413 shares issued and outstanding as of January 30, 2022 and October 31, 2021, respectively	—	—
Additional paid-in capital	23,083	24,330
Retained earnings	—	748
Accumulated other comprehensive loss	(115)	(116)
Total stockholders' equity	22,968	24,962
Total liabilities and equity	<u>\$ 73,224</u>	<u>\$ 75,570</u>

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

BROADCOM INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS — UNAUDITED

	Fiscal Quarter Ended	
	January 30, 2022	January 31, 2021
	(In millions, except per share data)	
Net revenue:		
Products	\$ 6,053	\$ 5,081
Subscriptions and services	1,653	1,574
Total net revenue	7,706	6,655
Cost of revenue:		
Cost of products sold	1,769	1,672
Cost of subscriptions and services	156	142
Amortization of acquisition-related intangible assets	730	874
Restructuring charges	2	15
Total cost of revenue	2,657	2,703
Gross margin	5,049	3,952
Research and development	1,206	1,211
Selling, general and administrative	321	339
Amortization of acquisition-related intangible assets	397	494
Restructuring, impairment and disposal charges	17	71
Total operating expenses	1,941	2,115
Operating income	3,108	1,837
Interest expense	(407)	(570)
Other income (expense), net	(14)	117
Income before income taxes	2,687	1,384
Provision for income taxes	215	6
Net income	2,472	1,378
Dividends on preferred stock	(74)	(74)
Net income attributable to common stock	\$ 2,398	\$ 1,304
Net income per share attributable to common stock:		
Basic	\$ 5.82	\$ 3.20
Diluted	\$ 5.59	\$ 3.05
Weighted-average shares used in per share calculations:		
Basic	412	407
Diluted	429	428

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

BROADCOM INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME — UNAUDITED

	Fiscal Quarter Ended	
	January 30, 2022	January 31, 2021
	(In millions)	
Net income	\$ 2,472	\$ 1,378
Other comprehensive income, net of tax:		
Change in actuarial loss and prior service costs associated with defined benefit pension plans and post-retirement benefit plans	1	1
Other comprehensive income, net of tax	1	1
Comprehensive income	<u>\$ 2,473</u>	<u>\$ 1,379</u>

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

BROADCOM INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS — UNAUDITED

	Fiscal Quarter Ended	
	January 30, 2022	January 31, 2021
	(In millions)	
Cash flows from operating activities:		
Net income	\$ 2,472	\$ 1,378
Adjustments to reconcile net income to net cash provided by operating activities:		
Amortization of intangible and right-of-use assets	1,151	1,395
Depreciation	136	138
Stock-based compensation	387	444
Deferred taxes and other non-cash taxes	70	(149)
Loss on debt extinguishment	—	172
(Gain) loss on investments	16	(119)
Non-cash interest expense	32	22
Other	(1)	10
Changes in assets and liabilities, net of acquisitions and disposals:		
Trade accounts receivable, net	(468)	(247)
Inventory	(223)	51
Accounts payable	—	44
Employee compensation and benefits	(528)	(375)
Other current assets and current liabilities	521	408
Other long-term assets and long-term liabilities	(79)	(59)
Net cash provided by operating activities	3,486	3,113
Cash flows from investing activities:		
Purchases of property, plant and equipment	(101)	(114)
Purchases of investments	(200)	—
Other	(8)	(8)
Net cash used in investing activities	(309)	(122)
Cash flows from financing activities:		
Proceeds from long-term borrowings	—	9,904
Payments on debt obligations	(255)	(9,200)
Payments of dividends	(1,764)	(1,543)
Repurchases of common stock - repurchase program	(2,724)	—
Shares repurchased for tax withholdings on vesting of equity awards	(375)	(225)
Issuance of common stock	1	35
Other	(4)	(28)
Net cash used in financing activities	(5,121)	(1,057)
Net change in cash and cash equivalents	(1,944)	1,934
Cash and cash equivalents at beginning of period	12,163	7,618
Cash and cash equivalents at end of period	\$ 10,219	\$ 9,552

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

BROADCOM INC.
CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY — UNAUDITED
Fiscal Quarter Ended January 30, 2022

	8.00% Mandatory Convertible Preferred Stock				Common Stock		Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Par Value	Shares	Par Value						
	(In millions)									
Balance as of October 31, 2021	4	\$ —	413	\$ —	\$ 24,330	\$ 748	\$ (116)	\$ 24,962		
Net income	—	—	—	—	—	2,472	—	2,472		
Other comprehensive income	—	—	—	—	—	—	1	1		
Dividends to common stockholders	—	—	—	—	—	(1,689)	—	(1,689)		
Dividends to preferred stockholders	—	—	—	—	—	(74)	—	(74)		
Common stock issued	—	—	2	—	1	—	—	1		
Stock-based compensation	—	—	—	—	387	—	—	387		
Repurchases of common stock	—	—	(4)	—	(1,267)	(1,457)	—	(2,724)		
Shares repurchased for tax withholdings on vesting of equity awards	—	—	(1)	—	(368)	—	—	(368)		
Balance as of January 30, 2022	4	\$ —	410	\$ —	\$ 23,083	\$ —	\$ (115)	\$ 22,968		

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

BROADCOM INC.
CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY — UNAUDITED
Fiscal Quarter Ended January 31, 2021

	8.00% Mandatory Convertible Preferred Stock				Common Stock		Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Par Value	Shares	Par Value						
	(In millions)									
Balance as of November 1, 2020	4	\$ —	407	\$ —	\$ 23,982	\$ —	\$ (108)	\$ 23,874		
Net income	—	—	—	—	—	1,378	—	1,378		
Other comprehensive income	—	—	—	—	—	—	1	1		
Dividends to common stockholders	—	—	—	—	(164)	(1,304)	—	(1,468)		
Dividends to preferred stockholders	—	—	—	—	—	(74)	—	(74)		
Common stock issued	—	—	2	—	35	—	—	35		
Stock-based compensation	—	—	—	—	444	—	—	444		
Shares repurchased for tax withholdings on vesting of equity awards	—	—	(1)	—	(217)	—	—	(217)		
Balance as of January 31, 2021	4	\$ —	408	\$ —	\$ 24,080	\$ —	\$ (107)	\$ 23,973		

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

BROADCOM INC.**NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS****1. Overview, Basis of Presentation and Significant Accounting Policies****Overview**

Broadcom Inc. ("Broadcom"), a Delaware corporation, is a global technology leader that designs, develops and supplies a broad range of semiconductor and infrastructure software solutions. We develop semiconductor devices with a focus on complex digital and mixed signal complementary metal oxide semiconductor based devices and analog III-V based products. We have a history of innovation in the semiconductor industry and offer thousands of products that are used in end products such as enterprise and data center networking, home connectivity, set-top boxes, broadband access, telecommunication equipment, smartphones and base stations, data center servers and storage systems, factory automation, power generation and alternative energy systems, and electronic displays. Our infrastructure software solutions enable customers to plan, develop, automate, manage and secure applications across mainframe, distributed, mobile and cloud platforms. Our portfolio of infrastructure and security software is designed to modernize, optimize, and secure the most complex hybrid environments, enabling scalability, agility, automation, insights, resiliency and security. We also offer mission critical fibre channel storage area networking ("FC SAN") products and related software in the form of modules, switches and subsystems incorporating multiple semiconductor products. Unless stated otherwise or the context otherwise requires, references to "Broadcom," "we," "our" and "us" mean Broadcom and its consolidated subsidiaries. We have two reportable segments: semiconductor solutions and infrastructure software.

Basis of Presentation

We operate on a 52- or 53-week fiscal year ending on the Sunday closest to October 31 in a 52-week year and the first Sunday in November in a 53-week year. Our fiscal year ending October 30, 2022 ("fiscal year 2022") is a 52-week fiscal year. The first quarter of our fiscal year 2022 ended on January 30, 2022, the second quarter ends on May 1, 2022 and the third quarter ends on July 31, 2022. Our fiscal year ended October 31, 2021 ("fiscal year 2021") was also a 52-week fiscal year.

The accompanying condensed consolidated financial statements include the accounts of Broadcom and its subsidiaries, and have been prepared in accordance with generally accepted accounting principles in the United States ("GAAP") for interim financial information. The financial information included herein is unaudited, and reflects all adjustments which are, in the opinion of our management, of a normal recurring nature and necessary for a fair statement of the results for the periods presented. The October 31, 2021 condensed consolidated balance sheet data were derived from Broadcom's audited consolidated financial statements included in its Annual Report on Form 10-K for fiscal year 2021 as filed with the Securities and Exchange Commission. All intercompany transactions and balances have been eliminated in consolidation. The operating results for the fiscal quarter ended January 30, 2022 are not necessarily indicative of the results that may be expected for fiscal year 2022, or for any other future period.

Significant Accounting Policies

Use of estimates. The preparation of condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. The inputs into certain of these estimates and assumptions include the consideration of the economic impact of the COVID-19 pandemic. Actual results could differ materially from these estimates, and such differences could affect the results of operations reported in future periods. As the impact of the COVID-19 pandemic continues to develop, many of these estimates could require increased judgment and carry a higher degree of variability and volatility, and may change materially in future periods.

Recently Adopted Accounting Guidance

In October 2021, the Financial Accounting Standards Boards issued Accounting Standards Update ("ASU") 2021-08, *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*. The new guidance requires contract assets and contract liabilities acquired in a business combination to be recognized and measured by the acquirer on the acquisition date in accordance with Accounting Standards Codification 606, *Revenue from Contracts with Customers*, as if it had originated the contracts. We early adopted ASU 2021-08 at the beginning of fiscal year 2022 and it did not impact our condensed consolidated financial statements.

2. Revenue from Contracts with Customers

We account for a contract with a customer when both parties have approved the contract and are committed to perform their respective obligations, each party's rights can be identified, payment terms can be identified, the contract has commercial substance, and it is probable we will collect substantially all of the consideration we are entitled to. Revenue is recognized when, or as, performance obligations are satisfied by transferring control of a promised product or service to a customer.

Disaggregation

We have considered (1) information that is regularly reviewed by our Chief Executive Officer, who has been identified as the chief operating decision maker (the "CODM") as defined by the authoritative guidance on segment reporting, in evaluating financial performance and (2) disclosures presented outside of our financial statements in our earnings releases and used in investor presentations to disaggregate revenues. The principal category we use to disaggregate revenues is the nature of our products and subscriptions and services, as presented in our condensed consolidated statements of operations. In addition, revenues by reportable segment are presented in Note 9. "Segment Information".

The following tables present revenue disaggregated by type of revenue and by region for the periods presented:

Fiscal Quarter Ended January 30, 2022				
	Americas	Asia Pacific	Europe, the Middle East and Africa	Total
	(In millions)			
Products	\$ 548	\$ 4,984	\$ 521	\$ 6,053
Subscriptions and services ^(a)	1,109	128	416	1,653
Total	\$ 1,657	\$ 5,112	\$ 937	\$ 7,706

Fiscal Quarter Ended January 31, 2021				
	Americas	Asia Pacific	Europe, the Middle East and Africa	Total
	(In millions)			
Products	\$ 390	\$ 4,320	\$ 371	\$ 5,081
Subscriptions and services ^(a)	1,004	191	379	1,574
Total	\$ 1,394	\$ 4,511	\$ 750	\$ 6,655

(a) Subscriptions and services predominantly include software licenses with termination for convenience clauses.

Although we recognize revenue for the majority of our products when title and control transfer in Penang, Malaysia, we disclose net revenue by region based primarily on the geographic shipment location or delivery location specified by our distributors, original equipment manufacturer customers, contract manufacturers, channel partners, or software customers.

Contract Balances

Contract assets and contract liabilities balances were as follows:

	January 30, 2022	October 31, 2021
	(In millions)	
Contract Assets	\$ 105	\$ 126
Contract Liabilities	\$ 3,545	\$ 3,185

Changes in our contract assets and contract liabilities primarily result from the timing difference between our performance and the customer's payment. We fulfill our obligations under a contract with a customer by transferring products and services in exchange for consideration from the customer. We recognize a contract asset when we transfer products or services to a customer and the right to consideration is conditional on something other than the passage of time. Accounts receivable are recorded when the customer has been billed or the right to consideration is unconditional. We recognize contract liabilities when we have received consideration or an amount of consideration is due from the customer and we have a future obligation to transfer products or services. Contract liabilities include amounts billed or collected and advanced payments on contracts or arrangements, which may include termination for convenience provisions. The amount of revenue recognized during the fiscal quarter ended January 30, 2022 that was included in the contract liabilities balance as of October 31, 2021 was \$1,216 million. The amount of revenue recognized during the fiscal quarter ended January 31, 2021 that was included in the contract liabilities balance as of November 1, 2020 was \$1,132 million.

Remaining Performance Obligations

Revenue allocated to remaining performance obligations represents the transaction price allocated to unsatisfied or partially unsatisfied performance obligations. Remaining performance obligations include unearned revenue and amounts that will be invoiced and recognized as revenue in future periods, but do not include contracts for software, subscriptions or services where the customer is not committed. The customer is not considered committed when termination for convenience without payment of a substantive penalty exists, either contractually or through customary business practice. The majority of our customer software contracts include termination for convenience clauses without a substantive penalty and are not considered committed. Additionally, as a practical expedient, we have not included contracts that have an original duration of one year or less, nor have we included contracts with sales-based or usage-based royalties promised in exchange for a license of intellectual property ("IP").

Certain multi-year customer contracts in our semiconductor solutions segment contain firmly committed amounts and the remaining performance obligations under these contracts as of January 30, 2022 were approximately \$15.3 billion. We expect approximately 28% of this amount to be recognized as revenue over the next 12 months. Although the majority of our software contracts are not deemed to be committed, our customers generally do not exercise their termination for convenience rights. In addition, the majority of our contracts for products, subscriptions and services have a duration of one year or less. Accordingly, our remaining performance obligations disclosed above are not indicative of revenue for future periods.

3. Supplemental Financial Information

Cash Equivalents

Cash equivalents included \$3,315 million and \$4,668 million of time deposits and \$1,080 million and \$1,607 million of money-market funds as of January 30, 2022 and October 31, 2021, respectively. For time deposits, carrying value approximates fair value due to the short-term nature of the instruments. The fair value of money-market funds, which was consistent with their carrying value, was determined using unadjusted prices in active, accessible markets for identical assets, and as such, they were classified as Level 1 assets in the fair value hierarchy.

Accounts Receivable Factoring

We sell certain of our trade accounts receivable on a non-recourse basis to third-party financial institutions pursuant to factoring arrangements. We account for these transactions as sales of receivables and present cash proceeds as cash provided by operating activities in the condensed consolidated statements of cash flows. Total trade accounts receivable sold under the factoring arrangements were \$1,200 million and \$927 million during the fiscal quarters ended January 30, 2022 and January 31, 2021, respectively. Factoring fees for the sales of receivables were recorded in other income (expense), net and were not material for any of the periods presented.

Inventory

	January 30, 2022	October 31, 2021
	(In millions)	
Finished goods	\$ 526	\$ 423
Work-in-process	779	680
Raw materials	215	194
Total inventory	<u>\$ 1,520</u>	<u>\$ 1,297</u>

Other Current Assets

	January 30, 2022	October 31, 2021
	(In millions)	
Prepaid expenses	\$ 579	\$ 539
Other (miscellaneous)	484	516
Total other current assets	<u>\$ 1,063</u>	<u>\$ 1,055</u>

Other Current Liabilities

	January 30, 2022	October 31, 2021
	(In millions)	
Contract liabilities	\$ 3,027	\$ 2,619
Tax liabilities	556	541
Interest payable	417	282
Other (miscellaneous)	378	397
Total other current liabilities	<u>\$ 4,378</u>	<u>\$ 3,839</u>

Other Long-Term Liabilities

	January 30, 2022	October 31, 2021
	(In millions)	
Unrecognized tax benefits	\$ 3,366	\$ 3,407
Other (miscellaneous)	1,372	1,453
Total other long-term liabilities	<u>\$ 4,738</u>	<u>\$ 4,860</u>

Supplemental Cash Flow Information

	Fiscal Quarter Ended	
	January 30, 2022	January 31, 2021
	(In millions)	
Cash paid for interest	\$ 240	\$ 372
Cash paid for income taxes	\$ 186	\$ 147

4. Intangible Assets

	Gross Carrying Amount	Accumulated Amortization (In millions)	Net Book Value
As of January 30, 2022:			
Purchased technology	\$ 23,597	\$ (17,542)	\$ 6,055
Customer contracts and related relationships	8,335	(4,857)	3,478
Order backlog	1,279	(1,085)	194
Trade names	698	(316)	382
Other	183	(75)	108
Intangible assets subject to amortization	34,092	(23,875)	10,217
In-process research and development	27	—	27
Total	<u>\$ 34,119</u>	<u>\$ (23,875)</u>	<u>\$ 10,244</u>

As of October 31, 2021:			
Purchased technology	\$ 23,932	\$ (17,148)	\$ 6,784
Customer contracts and related relationships	8,356	(4,533)	3,823
Order backlog	2,579	(2,352)	227
Trade names	787	(386)	401
Other	239	(127)	112
Intangible assets subject to amortization	35,893	(24,546)	11,347
In-process research and development	27	—	27
Total	<u>\$ 35,920</u>	<u>\$ (24,546)</u>	<u>\$ 11,374</u>

Based on the amount of intangible assets subject to amortization at January 30, 2022, the expected amortization expense for each of the next five years and thereafter was as follows:

Fiscal Year:	Expected Amortization Expense (In millions)
2022 (remainder)	\$ 3,235
2023	3,237
2024	2,367
2025	659
2026	323
Thereafter	396
Total	<u>\$ 10,217</u>

The weighted-average remaining amortization periods by intangible asset category were as follows:

Amortizable intangible assets:	January 30, 2022 (In years)
Purchased technology	4
Customer contracts and related relationships	3
Order backlog	1
Trade names	8
Other	9

5. Net Income Per Share

Basic net income per share is computed by dividing net income attributable to common stock by the weighted-average number of shares of common stock outstanding during the period. Diluted net income per share is computed by dividing net income attributable to common stock by the weighted-average number of shares of common stock and potentially dilutive shares of common stock outstanding during the period.

Diluted shares outstanding include the dilutive effect of unvested restricted stock units ("RSUs"), in-the-money stock options and employee stock purchase plan rights under the Broadcom Inc. Employee Stock Purchase Plan, as amended ("ESPP"), (collectively referred to as "equity awards"), as well as Mandatory Convertible Preferred Stock, as defined in Note 7. "Stockholders' Equity." Potentially dilutive shares whose effect would have been antidilutive are excluded from the computation of diluted net income per share.

The dilutive effect of equity awards is calculated based on the average stock price for each fiscal period, using the treasury stock method. Under the treasury stock method, the amount the employee must pay for exercising stock options and purchasing shares under the ESPP and the amount of compensation cost for future service that we have not yet recognized are collectively assumed to be used to repurchase shares. The dilutive effect of Mandatory Convertible Preferred Stock is calculated using the if-converted method. The if-converted method assumes that these securities were converted at the beginning of the reporting period to the extent that the effect is dilutive.

For each of the fiscal quarters ended January 30, 2022 and January 31, 2021, diluted net income per share excluded the potentially dilutive effect of 12 million shares of common stock issuable upon the conversion of Mandatory Convertible Preferred Stock as their effect was antidilutive.

The following is a reconciliation of the numerators and denominators of the basic and diluted net income per share computations for the periods presented:

	Fiscal Quarter Ended	
	January 30, 2022	January 31, 2021
	(In millions, except per share data)	
Numerator:		
Net income	\$ 2,472	\$ 1,378
Dividends on preferred stock	(74)	(74)
Net income attributable to common stock	<u>\$ 2,398</u>	<u>\$ 1,304</u>
Denominator:		
Weighted-average shares outstanding - basic	412	407
Dilutive effect of equity awards	17	21
Weighted-average shares outstanding - diluted	<u>429</u>	<u>428</u>
Net income per share attributable to common stock:		
Basic	\$ 5.82	\$ 3.20
Diluted	\$ 5.59	\$ 3.05

6. Borrowings

	Effective Interest Rate	January 30, 2022	October 31, 2021
(In millions, except percentages)			
<u>September 2021 Senior Notes - fixed rate</u>			
3.137% notes due November 2035	4.23 %	\$ 3,250	\$ 3,250
3.187% notes due November 2036	4.79 %	2,750	2,750
		6,000	6,000
<u>March 2021 Senior Notes - fixed rate</u>			
3.419% notes due April 2033	4.66 %	2,250	2,250
3.469% notes due April 2034	4.63 %	3,250	3,250
		5,500	5,500
<u>January 2021 Senior Notes - fixed rate</u>			
1.950% notes due February 2028	2.10 %	750	750
2.450% notes due February 2031	2.56 %	2,750	2,750
2.600% notes due February 2033	2.70 %	1,750	1,750
3.500% notes due February 2041	3.60 %	3,000	3,000
3.750% notes due February 2051	3.84 %	1,750	1,750
		10,000	10,000
<u>June 2020 Senior Notes - fixed rate</u>			
3.459% notes due September 2026	4.19 %	752	752
4.110% notes due September 2028	5.02 %	1,965	1,965
		2,717	2,717
<u>May 2020 Senior Notes - fixed rate</u>			
2.250% notes due November 2023	2.40 %	105	105
3.150% notes due November 2025	3.29 %	900	900
4.150% notes due November 2030	4.27 %	2,679	2,679
4.300% notes due November 2032	4.39 %	2,000	2,000
		5,684	5,684
<u>April 2020 Senior Notes - fixed rate</u>			
4.700% notes due April 2025	4.88 %	1,020	1,020
5.000% notes due April 2030	5.18 %	1,086	1,086
		2,106	2,106
<u>April 2019 Senior Notes - fixed rate</u>			
3.625% notes due October 2024	3.98 %	622	622
4.250% notes due April 2026	4.54 %	944	944
4.750% notes due April 2029	4.95 %	1,958	1,958
		3,524	3,524
<u>2017 Senior Notes - fixed rate</u>			
3.000% notes due January 2022	3.21 %	—	255
2.650% notes due January 2023	2.78 %	260	260
3.625% notes due January 2024	3.74 %	829	829
3.125% notes due January 2025	3.23 %	495	495
3.875% notes due January 2027	4.02 %	2,922	2,922
3.500% notes due January 2028	3.60 %	777	777
		5,283	5,538

	Effective Interest Rate	January 30, 2022	October 31, 2021
(In millions, except percentages)			
Assumed CA Senior Notes - fixed rate			
4.500% notes due August 2023	4.10 %	143	143
4.700% notes due March 2027	5.15 %	265	265
		408	408
Other borrowings			
2.500% - 4.500% senior notes due August 2022 - August 2034	2.59% - 4.55%	22	22
Total principal amount outstanding		41,244	41,499
Less: Unamortized discount and issuance costs		(1,803)	(1,834)
Total debt		\$ 39,441	\$ 39,665

As of January 30, 2022 and October 31, 2021, short-term finance lease liabilities of \$31 million and \$26 million, respectively, were included in the current portion of long-term debt and long-term finance lease liabilities of \$33 million and \$39 million, respectively, were included in long-term debt.

January 2021 Credit Agreement

In January 2021, we entered into a credit agreement (the "January 2021 Credit Agreement"), which provides for a five-year \$7.5 billion unsecured revolving credit facility (the "Revolving Facility"), of which \$500 million is available for the issuance of multi-currency letters of credit. The issuance of letters of credit and certain other instruments would reduce the aggregate amount otherwise available under the Revolving Facility for revolving loans. Subject to the terms of the January 2021 Credit Agreement, we are permitted to borrow, repay and reborrow revolving loans at any time prior to the earlier of (a) January 19, 2026 and (b) the date of termination in whole of the revolving lenders' commitments under the January 2021 Credit Agreement. We had no borrowings outstanding under the Revolving Facility at either January 30, 2022 or October 31, 2021.

Commercial Paper

In February 2019, we established a commercial paper program pursuant to which we may issue unsecured commercial paper notes ("Commercial Paper") in principal amount of up to \$2 billion outstanding at any time with maturities of up to 397 days from the date of issue. Commercial Paper is sold under customary terms in the commercial paper market and may be issued at a discount from par or, alternatively, may be sold at par and bear interest at rates dictated by market conditions at the time of their issuance. The discount associated with the Commercial Paper is amortized to interest expense over its term. Outstanding Commercial Paper reduces the amount that would otherwise be available to borrow for general corporate purposes under the Revolving Facility. As our commercial paper program is supported by the Revolving Facility, we have the ability and intent to continuously refinance Commercial Paper. We had no Commercial Paper outstanding at either January 30, 2022 or October 31, 2021.

Fair Value of Debt

As of January 30, 2022, the estimated aggregate fair value of debt was \$41,558 million. The fair value of our senior notes was determined using quoted prices from less active markets. All of our debt obligations are categorized as Level 2 instruments.

Future Principal Payments of Debt

The future scheduled principal payments of debt as of January 30, 2022 were as follows:

Fiscal Year:	Future Scheduled Principal Payments	
	(In millions)	
2022 (remainder)	\$	9
2023		403
2024		1,563
2025		1,515
2026		2,596
Thereafter		35,158
Total	\$	41,244

As of January 30, 2022 and October 31, 2021, we accrued interest payable of \$417 million and \$282 million, respectively, and were in compliance with all debt covenants.

7. Stockholders' Equity

Mandatory Convertible Preferred Stock

On September 30, 2019, we completed an offering of approximately 4 million shares of 8.00% Mandatory Convertible Preferred Stock, Series A, \$0.001 par value per share ("Mandatory Convertible Preferred Stock").

On September 30, 2022, unless earlier converted, each outstanding share of Mandatory Convertible Preferred Stock will automatically convert into shares of our common stock at a rate between the then minimum and maximum conversion rates. At any time prior to September 30, 2022, holders may elect to convert each share of Mandatory Convertible Preferred Stock into shares of our common stock at the then minimum conversion rate. The conversion rates are subject to anti-dilution adjustments. As of January 30, 2022, the minimum conversion rate was 3.0894 and the maximum conversion rate was 3.6109.

We recognized \$26 million and \$27 million of accrued preferred stock dividends, which were presented as temporary equity on our condensed consolidated balance sheets as of January 30, 2022 and October 31, 2021, respectively.

Cash Dividends Declared and Paid

	Fiscal Quarter Ended	
	January 30, 2022	January 31, 2021
	(In millions, except per share data)	
Dividends per share to common stockholders	\$ 4.10	\$ 3.60
Dividends to common stockholders	\$ 1,689	\$ 1,468
Dividends per share to preferred stockholders	\$ 20.00	\$ 20.00
Dividends to preferred stockholders	\$ 75	\$ 75

Stock Repurchase Program

In December 2021, our Board of Directors authorized a stock repurchase program to repurchase up to \$10 billion of our common stock from time to time on or prior to December 31, 2022. During the fiscal quarter ended January 30, 2022, we repurchased and retired approximately 4 million shares of our common stock for \$2,724 million under this stock repurchase program.

Repurchases under our stock repurchase program may be effected through a variety of methods, including open market or privately negotiated purchases. The timing and amount of shares repurchased will depend on the stock price, business and market conditions, corporate and regulatory requirements, alternative investment opportunities, acquisition opportunities, and other factors. We are not obligated to repurchase any specific amount of shares of common stock, and the stock repurchase program may be suspended or terminated at any time.

Stock-Based Compensation Expense

	Fiscal Quarter Ended	
	January 30, 2022	January 31, 2021
	(In millions)	
Cost of products sold	\$ 18	\$ 20
Cost of subscriptions and services	18	12
Research and development	268	328
Selling, general and administrative	83	84
Total stock-based compensation expense	<u>\$ 387</u>	<u>\$ 444</u>

As of January 30, 2022, the total unrecognized compensation cost related to unvested stock-based awards was \$2,692 million, which is expected to be recognized over the remaining weighted-average service period of 2.8 years.

Equity Incentive Award Plans

A summary of time- and market-based RSU activity is as follows:

	Number of RSUs Outstanding	Weighted-Average Grant Date Fair Value Per Share	
		(In millions, except per share data)	
Balance as of October 31, 2021	23	\$	200.38
Granted	1	\$	453.96
Vested	(2)	\$	226.39
Forfeited	—	*	\$ 234.59
Balance as of January 30, 2022	<u>22</u>	\$	<u>201.93</u>

* Represents fewer than 1 million shares.

The aggregate fair value of time- and market-based RSUs that vested during the fiscal quarter ended January 30, 2022 was \$1,076 million, which represented the market value of our common stock on the date that the RSUs vested. The number of RSUs vested included shares of common stock that we withheld for settlement of employees' tax obligations due upon the vesting of RSUs.

8. Income Taxes

The provision for income taxes was \$215 million and \$6 million for the fiscal quarters ended January 30, 2022 and January 31, 2021, respectively. The increase was primarily due to higher income before income taxes and a shift in jurisdictional mix of income and expenses. The provision for income taxes for the fiscal quarter ended January 31, 2021 was substantially offset by excess tax benefits from stock-based awards and benefits from lapses of statutes of limitations and audit settlements.

As of January 30, 2022, we had \$5,038 million of gross unrecognized tax benefits, of which all, if recognized, would favorably impact the effective tax rate. It is possible that our existing unrecognized tax benefits may change up to \$271 million as a result of lapses of the statute of limitations for certain audit periods and/or anticipated closure of audit examinations within the next 12 months.

9. Segment Information

Reportable Segments

We have two reportable segments: semiconductor solutions and infrastructure software. Each segment has separate financial information that is utilized on a regular basis by the CODM in determining how to allocate resources and evaluate performance. The reportable segments are determined based on several factors including, but not limited to, customer base, homogeneity of products, technology, delivery channels and similar economic characteristics.

Semiconductor solutions. We provide semiconductor solutions for managing the movement of data in data center, telecom, enterprise and embedded networking applications. We provide a broad variety of radio frequency semiconductor devices, wireless connectivity solutions and custom touch controllers for mobile applications. We also provide semiconductor solutions for enabling the set-top box and broadband access markets and for enabling secure movement of digital data to and from host machines, such as servers, personal computers and storage systems, to the underlying storage devices, such as hard disk drives and solid state drives. We also provide a broad variety of products for the general industrial and automotive markets. Our semiconductor solutions segment also includes our IP licensing.

Infrastructure software. We provide a portfolio of software solutions that enables customers to plan, develop, automate, manage and secure applications across mainframe, distributed, mobile and cloud platforms. Our portfolio of infrastructure and security software is designed to modernize, optimize, and secure the most complex hybrid environments, enabling scalability, agility, automation, insights, resiliency and security. We also offer mission critical FC SAN products and related software.

Our CODM assesses the performance of each segment and allocates resources to each segment based on net revenue and operating results and does not evaluate each segment using discrete asset information. Operating results by segment include items that are directly attributable to each segment and also include shared expenses such as global operations, including manufacturing support, logistics and quality control, expenses associated with selling, general and administrative activities, facilities and information technology ("IT") expenses. Shared expenses are primarily allocated based on revenue and headcount.

Unallocated Expenses

Unallocated expenses include amortization of acquisition-related intangible assets, stock-based compensation expense, restructuring, impairment and disposal charges, acquisition-related costs, charges related to inventory step-up to fair value, and other costs, which are not used in evaluating the results of, or in allocating resources to, our segments. Acquisition-related costs include transaction costs and any costs directly related to the acquisition and integration of acquired businesses.

Depreciation expense directly attributable to each reportable segment is included in the operating results of each segment. However, the CODM does not evaluate depreciation expense by operating segment and, therefore, it is not separately presented. There was no inter-segment revenue in either of the fiscal quarters ended January 30, 2022 or January 31, 2021. The accounting policies of the segments are the same as those described in the "Summary of Significant Accounting Policies" included in the Annual Report on Form 10-K for fiscal year 2021.

	Fiscal Quarter Ended	
	January 30, 2022	January 31, 2021
	(In millions)	
Net revenue:		
Semiconductor solutions	\$ 5,873	\$ 4,908
Infrastructure software	1,833	1,747
Total net revenue	<u>\$ 7,706</u>	<u>\$ 6,655</u>
Operating income:		
Semiconductor solutions	\$ 3,349	\$ 2,561
Infrastructure software	1,307	1,219
Unallocated expenses	(1,548)	(1,943)
Total operating income	<u>\$ 3,108</u>	<u>\$ 1,837</u>

10. Commitments and Contingencies

Commitments

The following table summarizes contractual obligations and commitments as of January 30, 2022 that materially changed from the end of fiscal year 2021:

Fiscal Year:	Purchase Commitments		Other Contractual Commitments	
	(In millions)			
2022 (remainder)	\$	126	\$	698
2023		146		181
2024		80		122
2025		60		25
2026		—		49
Thereafter		—		2
Total	\$	412	\$	1,077

Purchase Commitments. Represent unconditional purchase obligations that are enforceable and legally binding on us and specify all significant terms, including fixed or minimum quantities to be purchased, price provisions, and the approximate timing of the transaction. These commitments include agreements to purchase inventory and other goods or services. Purchase obligations exclude agreements that are cancelable without penalty and unconditional purchase obligations with a remaining term of one year or less.

Other Contractual Commitments. Represents amounts payable pursuant to agreements related to IT, human resources, and other service agreements.

Due to the inherent uncertainty with respect to the timing of future cash outflows associated with our unrecognized tax benefits at January 30, 2022, we are unable to reliably estimate the timing of cash settlement with the respective taxing authorities. Therefore, \$3,366 million of unrecognized tax benefits and accrued interest and penalties classified within other long-term liabilities on our condensed consolidated balance sheet as of January 30, 2022 have been excluded from the table above.

Contingencies

From time to time, we are involved in litigation that we believe is of the type common to companies engaged in our lines of business, including commercial disputes, employment issues, tax disputes and disputes involving claims by third parties that our activities infringe their patent, copyright, trademark or other IP rights, as well as regulatory investigations or inquiries. Legal proceedings and regulatory investigations or inquiries are often complex, may require the expenditure of significant funds and other resources, and the outcome of such proceedings is inherently uncertain, with material adverse outcomes possible. IP property claims generally involve the demand by a third-party that we cease the manufacture, use or sale of the allegedly infringing products, processes or technologies and/or pay substantial damages or royalties for past, present and future use of the allegedly infringing IP. Claims that our products or processes infringe or misappropriate any third-party IP rights (including claims arising through our contractual indemnification of our customers) often involve highly complex, technical issues, the outcome of which is inherently uncertain. Moreover, from time to time, we pursue litigation to assert our IP rights. Regardless of the merit or resolution of any such litigation, complex IP litigation is generally costly and diverts the efforts and attention of our management and technical personnel.

Lawsuits Relating to California Institute of Technology

California Institute of Technology ("Caltech") filed a complaint against Broadcom and Apple Inc. on May 26, 2016 in the United States District Court for the Central District of California (the "U.S. Central District Court"), and an amended complaint adding Cypress Semiconductor Corporation as a defendant on August 15, 2016. The amended complaint alleged that chips that support certain error correction codes as specified in IEEE Standards 802.11n and 802.11ac willfully infringed four patents related to error correction coding: U.S. Patent Nos. 7,116,710; 7,421,032; 7,916,781; and 8,284,833 ("833 patent"). Prior to trial, Caltech dismissed its claims against Cypress and withdrew its infringement allegations as to '833 patent. The complaint sought a preliminary and permanent injunction, damages, pre- and post-judgment interest, as well as attorneys' fees, costs, and expenses. The trial was held in January 2020, and on January 29, 2020, the jury issued its verdict finding infringement and awarding Caltech past damages of \$270.2 million from Broadcom and \$837.8 million from Apple, for which Apple is seeking indemnification from Broadcom. On August 3, 2020, the U.S. Central District Court issued its judgment, awarding Caltech past damages in the amounts awarded by the jury, as well as pre- and post-judgment interest. Additionally, the U.S. Central District

Court awarded Caltech an unspecified amount of ongoing royalties to be determined after the anticipated appeals process is resolved. Neither the jury nor the U.S. Central District Court found willful infringement, which if it had, could have resulted in enhanced damages up to three times the amount awarded. Broadcom and Apple appealed to the United States Court of Appeals for the Federal Circuit (the "Federal Circuit Court") and oral arguments were heard on September 1, 2021. The Federal Circuit Court issued its decision on February 4, 2022. While the Federal Circuit Court affirmed infringement of two patents, both of which expired in August 2020, it did not address all issues and ordered a new trial on damages and on the infringement of the 7,916,781 patent, which also expired in August 2020. Broadcom and Apple anticipate filing a petition for rehearing with the Federal Circuit Court by April 6, 2022.

We believe that the evidence and the law do not support the U.S. Central District Court's findings of infringement. We do not believe a material loss is probable or estimable at this time. As a result, we have not recorded a reserve with respect to this litigation, in accordance with the applicable accounting standards. We believe the low end of the possible range of loss is zero, but we cannot reasonably estimate the ultimate outcome as the Federal Circuit Court vacated the above damages, and a number of factors (including a possible rehearing by the Federal Circuit Court, retrial at the lower court and further appeals) could significantly change the assessment of damages.

Other Matters

In addition to the matters discussed above, we are currently engaged in a number of legal actions in the ordinary course of our business.

Contingency Assessment

We do not believe, based on currently available facts and circumstances, that the final outcome of any pending legal proceedings or ongoing regulatory investigations, taken individually or as a whole, will have a material adverse effect on our condensed consolidated financial statements. However, lawsuits may involve complex questions of fact and law and may require the expenditure of significant funds and other resources to defend. The results of litigation or regulatory investigations are inherently uncertain, and material adverse outcomes are possible. From time to time, we may enter into confidential discussions regarding the potential settlement of such lawsuits. Any settlement of pending litigation could require us to incur substantial costs and other ongoing expenses, such as future royalty payments in the case of an IP dispute.

During the periods presented, no material amounts have been accrued or disclosed in the accompanying condensed consolidated financial statements with respect to loss contingencies associated with any other legal proceedings or regulatory investigations, as potential losses for such matters are not considered probable and ranges of losses are not reasonably estimable. These matters are subject to many uncertainties and the ultimate outcomes are not predictable. There can be no assurances that the actual amounts required to satisfy any liabilities arising from the matters described above will not have a material adverse effect on our condensed consolidated financial statements.

Other Indemnifications

As is customary in our industry and as provided for in local law in the U.S. and other jurisdictions, many of our standard contracts provide remedies to our customers and others with whom we enter into contracts, such as defense, settlement, or payment of judgment for IP claims related to the use of our products. From time to time, we indemnify customers, as well as our suppliers, contractors, lessors, lessees, companies that purchase our businesses or assets and others with whom we enter into contracts, against combinations of loss, expense, or liability arising from various triggering events related to the sale and the use of our products, the use of their goods and services, the use of facilities and state of our owned facilities, the state of the assets and businesses that we sell and other matters covered by such contracts, usually up to a specified maximum amount. In addition, from time to time we also provide protection to these parties against claims related to undiscovered liabilities, additional product liabilities or environmental obligations. In our experience, claims made under such indemnifications are rare and the associated estimated fair value of the liability is not material.

11. Restructuring Charges

From time to time, we initiate cost reduction activities to integrate acquired businesses, to align our workforce with strategic business activities, or to improve efficiencies in our operations. In the first quarter of fiscal years 2022 and 2021, we recognized \$19 million and \$75 million of restructuring expense, respectively. These charges, which were primarily recognized in operating expenses, included employee termination and lease and other exit costs in fiscal year 2022 and primarily related to employee termination costs in fiscal year 2021.

The following table summarizes the significant activities within, and components of, the restructuring liabilities during the fiscal quarter ended January 30, 2022:

	Employee Termination Costs	Other Exit Costs	Total
	(In millions)		
Balance as of October 31, 2021	\$ 4	\$ —	\$ 4
Restructuring charges	10	1	11
Utilization	(9)	(1)	(10)
Balance as of January 30, 2022 ^(a)	\$ 5	\$ —	\$ 5

(a) We expect the majority of the employee termination costs balance to be paid within the next six months.

Restructuring, impairment and disposal charges for the fiscal quarter ended January 30, 2022 included \$8 million for the write-down of certain lease-related right-of-use assets and other lease-related charges. As of January 30, 2022, short-term and long-term lease liabilities included \$43 million of liabilities related to restructuring activities.

12. Subsequent Events

Preferred Stock Cash Dividends Declared

On March 2, 2022, our Board of Directors declared a quarterly cash dividend of \$20.00 per share on our Mandatory Convertible Preferred Stock, payable on March 31, 2022 to stockholders of record on March 15, 2022.

Common Stock Cash Dividends Declared

On March 2, 2022, our Board of Directors declared a quarterly cash dividend of \$4.10 per share on our common stock, payable on March 31, 2022 to stockholders of record on March 22, 2022.

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

The following discussion and analysis of the financial condition and results of operations should be read in conjunction with the unaudited condensed consolidated financial statements and the related notes thereto included elsewhere in this Quarterly Report on Form 10-Q ("Form 10-Q") and the audited consolidated financial statements and notes thereto and management's discussion and analysis of financial condition and results of operations for the fiscal year ended October 31, 2021 ("fiscal year 2021") included in our Annual Report on Form 10-K for fiscal year 2021 ("2021 Annual Report on Form 10-K"). References to "Broadcom," "we," "our," and "us" are to Broadcom Inc. and its consolidated subsidiaries, unless otherwise specified or the context otherwise requires. This Form 10-Q may contain predictions, estimates and other forward-looking statements that involve a number of risks and uncertainties, which are made under the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These forward-looking statements may include the potential impact of the COVID-19 pandemic; projections of financial information; statements about historical results that may suggest trends for our business; statements of the plans, strategies and objectives of management for future operations; and statements of expectation or belief regarding future events (including any acquisitions we may make), technology developments, our products, product sales, expenses, liquidity, cash flow and growth rates, customer concentration and relationships, or enforceability of our intellectual property ("IP") rights. Such statements are based on current expectations, estimates, forecasts and projections of our industry performance and macroeconomic conditions, based on management's judgment, beliefs, current trends and market conditions, and involve risks and uncertainties that may cause actual results to differ materially from those contained in the forward-looking statements. We derive most of our forward-looking statements from our operating budgets and forecasts, which are based upon many detailed assumptions. While we believe that our assumptions are reasonable, we caution that it is very difficult to predict the impact of known factors, and it is impossible for us to anticipate all factors that could affect our actual results. Accordingly, we caution you not to place undue reliance on these statements. Important factors that could cause actual results to differ materially from our expectations are disclosed under "Risk Factors" in Part II, Item 1A of this Form 10-Q, and in other documents we file from time to time with the Securities and Exchange Commission (the "SEC"). All of the forward-looking statements in this Form 10-Q are qualified in their entirety by reference to the factors listed above and those discussed under the heading "Risk Factors" below. We undertake no intent or obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise, except as otherwise required by law.

Overview

We are a global technology leader that designs, develops and supplies a broad range of semiconductor and infrastructure software solutions. We develop semiconductor devices with a focus on complex digital and mixed signal complementary metal oxide semiconductor based devices and analog III-V based products. We have a history of innovation in the semiconductor industry and offer thousands of products that are used in end products such as enterprise and data center networking, home connectivity, set-top boxes, broadband access, telecommunication equipment, smartphones and base stations, data center servers and storage systems, factory automation, power generation and alternative energy systems, and electronic displays. Our infrastructure software solutions enable customers to plan, develop, automate, manage and secure applications across mainframe, distributed, mobile and cloud platforms. Our portfolio of industry-leading infrastructure and security software is designed to modernize, optimize, and secure the most complex hybrid environments, enabling scalability, agility, automation, insights, resiliency and security. We also offer mission critical fibre channel storage area networking ("FC SAN") products and related software in the form of modules, switches and subsystems incorporating multiple semiconductor products.

We have two reportable segments: semiconductor solutions and infrastructure software. Our semiconductor solutions segment includes all of our product lines and IP licensing. Our infrastructure software segment includes our mainframe, distributed and cyber security solutions, and our FC SAN business.

Quarterly Highlights

Highlights during the fiscal quarter ended January 30, 2022 include the following:

- We generated \$3,486 million of cash from operations.
- We paid \$1,764 million in cash dividends.
- We repurchased \$2,724 million of common stock.

COVID-19 Update

In response to the ongoing COVID-19 pandemic and the various resulting government directives, we have taken extensive measures to protect the health and safety of our employees and contractors at our facilities. We modified our workplace practices globally, which resulted in some of our employees working remotely for an extended period of time and some of whom are still working remotely. While we have implemented personal safety measures at all of our facilities where our employees are working on site, we may need to modify our business practices and policies. We continue to monitor the implications of the COVID-19 pandemic on our business, as well as our customers' and suppliers' businesses.

The demand environment for our semiconductor products was consistent with our expectations for the first quarter of our fiscal year ending October 30, 2022 ("fiscal year 2022"), with continued demand for products and infrastructure as customers invest in technologies and cloud environments to support remote or hybrid tele-work and learning arising from COVID-19, as well as the transition to office re-openings. While we continue to see robust demand in this area and record profitability driven by the supply imbalance, the macroeconomic environment remains uncertain and it may not be sustainable over the longer term. We continue to experience various constraints in our supply chain due to the pandemic, including with respect to wafers and substrates. While supply lead times have stabilized, we continue to have difficulties in obtaining some necessary components and inputs in a timely manner to meet increased demand. To date, the impact of COVID-19 on the demand environment for our software products has been limited.

We have also taken various actions to de-risk our business in light of the ongoing uncertainty and strengthen our balance sheet, including closely managing working capital and our debt instruments.

Overall, in light of the changing nature and continuing uncertainty around the COVID-19 pandemic, our ability to predict the impact of COVID-19 on our business in future periods remains limited. The effects of the pandemic on our business are unlikely to be fully realized, or reflected in our financial results, until future periods.

Critical Accounting Estimates

The preparation of financial statements in accordance with generally accepted accounting principles in the United States requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. We base our estimates and assumptions on current facts, historical experience and various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities and the accrual of costs and expenses that are not readily apparent from other sources. Our actual financial results may differ materially and adversely from our estimates. Our critical accounting estimates are those that affect our historical financial statements materially and involve difficult, subjective or complex judgments by management. Those estimates include revenue recognition, business combinations, valuation of goodwill and long-lived assets, inventory valuation, income taxes, retirement and post-retirement benefit plan assumptions, stock-based compensation expense, and employee bonus programs.

There were no significant changes in our critical accounting estimates during the fiscal quarter ended January 30, 2022 compared to those previously disclosed in “Critical Accounting Estimates” in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in the 2021 Annual Report on Form 10-K.

Results of Operations

Fiscal Quarter Ended January 30, 2022 Compared to Fiscal Quarter Ended January 31, 2021

The following table sets forth our results of operations for the periods presented:

	Fiscal Quarter Ended			
	January 30, 2022	January 31, 2021	January 30, 2022	January 31, 2021
	(In millions)		(As a percentage of net revenue)	
Statements of Operations Data:				
Net revenue:				
Products	\$ 6,053	\$ 5,081	79 %	76 %
Subscriptions and services	1,653	1,574	21	24
Total net revenue	7,706	6,655	100	100
Cost of revenue:				
Cost of products sold	1,769	1,672	23	25
Cost of subscriptions and services	156	142	2	2
Amortization of acquisition-related intangible assets	730	874	9	13
Restructuring charges	2	15	—	1
Total cost of revenue	2,657	2,703	34	41
Gross margin	5,049	3,952	66	59
Research and development	1,206	1,211	16	18
Selling, general and administrative	321	339	4	5
Amortization of acquisition-related intangible assets	397	494	5	7
Restructuring, impairment and disposal charges	17	71	—	1
Total operating expenses	1,941	2,115	25	31
Operating income	\$ 3,108	\$ 1,837	41 %	28 %

Net Revenue

A relatively small number of customers account for a significant portion of our net revenue. Direct sales to WT Microelectronics Co., Ltd., a distributor, accounted for 23% and 19% of our net revenue for the fiscal quarters ended January 30, 2022 and January 31, 2021, respectively.

We believe aggregate sales to our top five end customers, through all channels, accounted for more than 35% of our net revenue for each of the fiscal quarters ended January 30, 2022 and January 31, 2021. We believe aggregate sales to Apple Inc., through all channels, accounted for approximately 25% of our net revenue for each of the fiscal quarters ended January 30, 2022 and January 31, 2021. We expect to continue to experience significant customer concentration in future periods. The loss of, or significant decrease in demand from, any of our top five end customers could have a material adverse effect on our business, results of operations and financial condition.

From time to time, some of our key semiconductor customers place large orders or delay orders, causing our quarterly net revenue to fluctuate significantly. This is particularly true of our wireless products as fluctuations may be magnified by the timing of launches, and seasonal variations in sales, of mobile handsets. The ongoing COVID-19 pandemic and related uncertainties and supply imbalance have caused and may continue to cause our net revenue to fluctuate significantly and impact our results of operations, as discussed above.

The following tables set forth net revenue by segment for the periods presented:

Net Revenue by Segment	Fiscal Quarter Ended		\$ Change	% Change	
	January 30, 2022	January 31, 2021			
(In millions, except percentages)					
Semiconductor solutions	\$ 5,873	\$ 4,908	\$ 965	20	%
Infrastructure software	1,833	1,747	86	5	%
Total net revenue	\$ 7,706	\$ 6,655	\$ 1,051	16	%

Net Revenue by Segment	Fiscal Quarter Ended	
	January 30, 2022	January 31, 2021
(As a percentage of net revenue)		
Semiconductor solutions	76 %	74 %
Infrastructure software	24	26
Total net revenue	100 %	100 %

Net revenue from our semiconductor solutions segment increased due to on-going strong demand for our semiconductor products, primarily networking, server storage and broadband products. Net revenue from our infrastructure software segment increased primarily due to higher demand for our mainframe solutions.

Gross Margin

Gross margin was \$5,049 million, or 66% of net revenue, for the fiscal quarter ended January 30, 2022 compared to \$3,952 million, or 59% of net revenue, for the fiscal quarter ended January 31, 2021. The increase was primarily due to lower amortization of acquisition-related intangible assets and higher profitability within our semiconductor solutions segment.

Research and Development Expense

Research and development expense decreased \$5 million for the fiscal quarter ended January 30, 2022 compared to the prior year fiscal period. The decrease was primarily due to lower stock-based compensation expense reflecting the full vesting of certain equity awards and the effects of forfeitures, offset by higher variable employee compensation expense and higher engineering project and material costs.

Selling, General and Administrative Expense

Selling, general and administrative expense decreased \$18 million, or 5%, for the fiscal quarter ended January 30, 2022 compared to the prior year fiscal period. The decrease was primarily due to lower acquisition-related costs incurred in the current year fiscal period following the completion of key integration activities.

Amortization of Acquisition-Related Intangible Assets

Amortization of acquisition-related intangible assets recognized in operating expenses decreased \$97 million, or 20%, for the fiscal quarter ended January 30, 2022 compared to the prior year fiscal period primarily due to lower amortization of certain intangible assets from our acquisition of CA, Inc.

Restructuring, Impairment and Disposal Charges

Restructuring, impairment and disposal charges recognized in operating expenses decreased \$54 million, or 76%, for the fiscal quarter ended January 30, 2022 compared to the prior year fiscal period primarily due to lower employee termination costs in the current year fiscal period following the completion of key restructuring activities from acquisitions.

Stock-Based Compensation Expense

Total stock-based compensation expense was \$387 million for the fiscal quarter ended January 30, 2022, compared to \$444 million for the prior year fiscal period. The decrease primarily reflects the full vesting of certain equity awards and the effect of forfeitures.

The following table sets forth the total unrecognized compensation cost related to unvested stock-based awards outstanding and expected to vest as of January 30, 2022, which we expect to recognize over the remaining weighted-average service period of 2.8 years.

Fiscal Year:	Unrecognized Compensation Cost, Net of Expected Forfeitures	
	(In millions)	
2022 (remainder)	\$	963
2023		922
2024		552
2025		230
2026		25
Total	\$	2,692

During the first quarter of fiscal year ended November 3, 2019 ("fiscal year 2019"), our Compensation Committee approved a broad-based program of multi-year equity grants of time- and market-based restricted stock units (the "Multi-Year Equity Awards") in lieu of our annual employee equity awards historically granted on March 15 of each year. Each Multi-Year Equity Award vests on the same basis as four annual grants made March 15 of each year, beginning in fiscal year 2019, with successive four-year vesting periods. We recognize stock-based compensation expense related to the Multi-Year Equity Awards from the grant date through their respective vesting date, ranging from 4 years to 7 years.

Segment Operating Results

Operating Income by Segment	Fiscal Quarter Ended		\$ Change	% Change
	January 30, 2022	January 31, 2021		
	(In millions, except percentages)			
Semiconductor solutions	\$ 3,349	\$ 2,561	\$ 788	31 %
Infrastructure software	1,307	1,219	88	7 %
Unallocated expenses	(1,548)	(1,943)	395	(20)%
Total operating income	\$ 3,108	\$ 1,837	\$ 1,271	69 %

Operating income from our semiconductor solutions segment increased primarily due to on-going strong demand for our semiconductor products, primarily networking, broadband and server storage products and higher profitability across the markets. Operating income from our infrastructure software segment increased primarily due to higher demand for our mainframe solutions.

Unallocated expenses include amortization of acquisition-related intangible assets; stock-based compensation expense; restructuring, impairment and disposal charges; acquisition-related costs; and other costs that are not used in evaluating the results of, or in allocating resources to, our segments. Unallocated expenses decreased 20% for the fiscal quarter ended January 30, 2022 compared to the prior year fiscal period primarily due to lower amortization of acquisition-related intangible assets.

Non-Operating Income and Expenses

Interest expense. Interest expense was \$407 million and \$570 million for the fiscal quarters ended January 30, 2022 and January 31, 2021, respectively. The decrease was primarily due to losses on extinguishment of debt related to debt transactions in the prior year fiscal period.

Other income (expense), net. Other income (expense), net, includes interest income, gains or losses on investments, foreign currency remeasurement and other miscellaneous items. Other expense, net, was \$14 million and other income, net was \$117 million for the fiscal quarters ended January 30, 2022 and January 31, 2021, respectively. The decrease was primarily due to changes in investment gains or losses.

Provision for income taxes. The provision for income taxes was \$215 million and \$6 million for the fiscal quarters ended January 30, 2022 and January 31, 2021, respectively. The increase was primarily due to higher income before income taxes and a shift in the jurisdictional mix of income and expenses. The provision for income taxes for the fiscal quarter ended January 31, 2021 was substantially offset by excess tax benefits from stock-based awards and benefits from lapses of statutes of limitations and audit settlements.

Liquidity and Capital Resources

The following section discusses our principal liquidity and capital resources as well as our principal liquidity requirements and uses of cash. Our cash and cash equivalents are maintained in highly liquid investments with remaining maturities of 90 days or less at the time of purchase. We believe our cash equivalents are liquid and accessible.

Our primary sources of liquidity as of January 30, 2022 consisted of: (i) \$10,219 million in cash and cash equivalents, (ii) cash we expect to generate from operations and (iii) available capacity under our \$7.5 billion unsecured revolving credit facility (the “Revolving Facility”). In addition, we may also generate cash from the sale of assets and debt or equity financing from time to time.

Our short-term and long-term liquidity requirements primarily arise from: (i) business acquisitions and investments we may make from time to time, (ii) working capital requirements, (iii) research and development and capital expenditure needs, (iv) cash dividend payments (if and when declared by our Board of Directors), (v) interest and principal payments related to our \$41,244 million of outstanding indebtedness, (vi) share repurchases, and (vii) payment of income taxes. Our ability to fund these requirements will depend, in part, on our future cash flows, which are determined by our future operating performance and, therefore, subject to prevailing global macroeconomic conditions and financial, business and other factors, some of which are beyond our control. We expect a slight increase in capital expenditures in fiscal year 2022 as compared to fiscal year 2021.

We believe that our cash and cash equivalents on hand, cash flows from operations, and the Revolving Facility will provide sufficient liquidity to operate our business and fund our current and assumed obligations for at least the next 12 months. For additional information regarding our cash requirement from contractual obligations and indebtedness, see Note 10. “Commitments and Contingencies” and Note 6. “Borrowings” in Part I, Item 1 of this Form 10-Q.

From time to time, we engage in discussions with third parties regarding potential acquisitions of, or investments in, businesses, technologies and product lines. Any such transaction, or evaluation of potential transactions, could require significant use of our cash and cash equivalents, or require us to increase our borrowings to fund such transactions. If we do not have sufficient cash to fund our operations or finance growth opportunities, including acquisitions, or unanticipated capital expenditures, our business and financial condition could suffer. In such circumstances, we may also seek to obtain new debt or equity financing. However, we cannot assure you that such additional financing will be available on terms acceptable to us or at all. Our ability to service our senior unsecured notes and any other indebtedness we may incur will depend on our ability to generate cash in the future. We may also elect to sell additional debt or equity securities for reasons other than those specified above.

In addition, we may, at any time and from time to time, seek to retire or purchase our outstanding debt through cash tenders and/or exchanges for equity or debt, in open-market purchases, privately negotiated transactions or otherwise. Such tenders, exchanges or purchases, if any, will be upon such terms and at such prices as we may determine, and will depend on prevailing market conditions, our liquidity requirements, contractual restrictions and other factors. The amounts involved may be material.

Working Capital

Working capital decreased to \$9,054 million at January 30, 2022 from \$10,305 million at October 31, 2021. The decrease was primarily attributable to the following:

- Cash and cash equivalents decreased to \$10,219 million at January 30, 2022 from \$12,163 million at October 31, 2021, primarily due to \$2,724 million of common stock repurchases, \$1,764 million of dividend payments, \$375 million of employee withholding tax payments related to net settled equity awards, and \$255 million of debt payments. These decreases were partially offset by \$3,486 million in net cash provided by operating activities.
- Other current liabilities increased to \$4,378 million at January 30, 2022 from \$3,839 million at October 31, 2021, primarily due to increases in contract liabilities and interest payable.

These decreases in working capital were offset in part by the following:

- Employee compensation and benefits decreased to \$531 million at January 30, 2022 from \$1,066 million at October 31, 2021, primarily due to the timing of employee bonus plan payments.
- Accounts receivable increased to \$2,539 million at January 30, 2022 from \$2,071 million at October 31, 2021, primarily due to revenue linearity.
- Inventory increased to \$1,520 million at January 30, 2022 from \$1,297 million at October 31, 2021, primarily due to higher material costs and to support customer demand.

Capital Returns

	Fiscal Quarter Ended	
	January 30, 2022	January 31, 2021
	(In millions, except per share data)	
Cash dividends declared and paid per share to common stockholders	\$ 4.10	\$ 3.60
Cash dividends declared and paid to common stockholders	\$ 1,689	\$ 1,468
Cash dividends declared and paid per share to preferred stockholders	\$ 20.00	\$ 20.00
Cash dividends declared and paid to preferred stockholders	\$ 75	\$ 75
Stock repurchases	\$ 2,724	\$ —

Pursuant to a \$10 billion stock repurchase program authorized by our Board of Directors in December 2021, we repurchased and retired approximately 4 million shares of our common stock at a weighted average price of \$622.91 during the fiscal quarter ended January 30, 2022.

During the fiscal quarter ended January 30, 2022 and January 31, 2021, we paid approximately \$375 million and \$225 million, respectively, in employee withholding taxes due upon the vesting of net settled equity awards. We withheld approximately 1 million shares of common stock from employees in connection with such net share settlements during each of the fiscal quarters ended January 30, 2022 and January 31, 2021.

Cash Flows

	Fiscal Quarter Ended	
	January 30, 2022	January 31, 2021
	(In millions)	
Net cash provided by operating activities	\$ 3,486	\$ 3,113
Net cash used in investing activities	(309)	(122)
Net cash used in financing activities	(5,121)	(1,057)
Net change in cash and cash equivalents	\$ (1,944)	\$ 1,934

Operating Activities

Cash provided by operating activities consisted of net income adjusted for certain non-cash and other items and changes in assets and liabilities. The \$373 million increase in cash provided by operations during the fiscal quarter ended January 30, 2022 compared to the prior year fiscal period was due to \$1,094 million higher net income, offset by a \$122 million decrease in amortization of intangible assets and stock-based compensation and other adjustments, as well as a \$599 million decrease resulting from changes in operating assets and liabilities.

Investing Activities

Cash flows from investing activities primarily consisted of cash used for investments and capital expenditures. The \$187 million increase in cash used in investing activities during the fiscal quarter ended January 30, 2022 compared to the prior year fiscal period was primarily related to investment purchases.

Financing Activities

Cash flows from financing activities primarily consisted of proceeds and payments related to our stock repurchases, long-term borrowings, dividend payments and employee withholding tax payments related to net settled equity awards. The \$4,064 million increase in cash used in financing activities during the fiscal quarter ended January 30, 2022 compared to the prior year fiscal period was primarily due to a \$2,724 million increase in common stock repurchases, a \$959 million change in net borrowing activities, a \$221 million increase in dividend payments and a \$150 million increase in employee withholding tax payments related to net settled equity awards.

Accounting Changes and Recent Accounting Standards

For a description of accounting changes and recent accounting standards, including the expected dates of adoption and estimated effects, if any, in our condensed consolidated financial statements, see Note 1. “Overview, Basis of Presentation and Significant Accounting Policies” in Part I, Item 1 of this Form 10-Q.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

There have been no material changes in market risk from the information presented in Part II, Item 7A. “Quantitative and Qualitative Disclosures About Market Risk,” in the 2021 Annual Report on Form 10-K.

Item 4. Controls and Procedures

(a) *Evaluation of Disclosure Controls and Procedures.* Our management, with the participation of our Chief Executive Officer (“CEO”) and Chief Financial Officer (“CFO”), evaluated the effectiveness of our disclosure controls and procedures as of January 30, 2022. We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Exchange Act filings is properly and timely recorded, processed, summarized and reported. These disclosure controls and procedures are also intended to ensure that information is accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosures. Based on this evaluation, our CEO and CFO concluded that, as of January 30, 2022, our disclosure controls and procedures were effective at the reasonable assurance level.

In designing and evaluating our disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

(b) *Changes in Internal Control over Financial Reporting.* There was no change in our internal control over financial reporting identified in connection with the evaluation required by Rules 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the period covered by this report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. Although we have modified our workplace practices globally due to the COVID-19 pandemic, resulting in some of our employees working remotely for an extended period of time and some of whom are still working remotely, this has not meaningfully affected our internal controls over financial reporting. We are continually monitoring and assessing the COVID-19 situation on our internal controls to minimize the impact on their design and operating effectiveness.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings

The information set forth under Note 10. “Commitments and Contingencies” included in Part I, Item 1 of this Form 10-Q, is incorporated herein by reference. For additional discussion of certain risks associated with legal proceedings, see “Risk Factors” immediately below.

Item 1A. Risk Factors

Our business, operations and financial results are subject to various risks and uncertainties, including those described below, that could adversely affect our business, financial condition, results of operations, cash flows, and the trading price of our common stock and preferred stock. Many of the following risks and uncertainties are, and will continue to be, exacerbated by the COVID-19 pandemic and any worsening of the global business and economic environment as a result. The following material factors, among others, could cause our actual results to differ materially from historical results and those expressed in forward-looking statements made by us or on our behalf in filings with the SEC, press releases, communications with investors and oral statements.

Risk Factors Summary

The following is a summary of the principal risks that could adversely affect our business, operations and financial results.

Risks Related to Our Business

- The ongoing COVID-19 pandemic has disrupted and will likely continue to disrupt normal business activity.
- The majority of our sales come from a small number of customers and a reduction in demand or loss of one or more of our significant customers may adversely affect our business.
- Dependence on contract manufacturing and suppliers of critical components within our supply chain may adversely affect our ability to bring products to market.
- We purchase a significant amount of the materials used in our products from a limited number of suppliers.
- Our business is subject to various governmental regulations and trade restrictions. Compliance with these regulations may cause us to incur significant expense and, if we fail to maintain compliance, we may be forced to cease manufacture and distribution of certain products or subjected to administrative proceedings and civil or criminal penalties.
- Adverse global economic conditions could have a negative effect on us.
- We operate in the highly cyclical semiconductor industry.
- Global political and economic conditions and other factors related to our international operations could adversely affect us.
- We are subject to risks associated with our distributors and other channel partners, including product inventory levels and product sell-through.
- Our dependence on senior management and if we are unable to attract and retain qualified personnel, we may not be able to execute our business strategy effectively.
- We may pursue acquisitions, investments, joint ventures and dispositions, which could adversely affect our results of operations.
- We may be involved in legal proceedings, including IP, securities litigation, and employee-related claims.
- Our operating results are subject to substantial quarterly and annual fluctuations.
- Failure to adjust our manufacturing and supply chain to accurately meet customer demand could adversely affect our results of operations.
- Winning business in the semiconductor solutions industry is subject to a lengthy process that often requires us to incur significant expense, from which we may ultimately generate no revenue.
- Competition in our industries could prevent us from growing our revenue.
- A prolonged disruption of our manufacturing facilities, research and development facilities, warehouses or other significant operations, or those of our suppliers, could have a material adverse effect on us.
- We may be unable to maintain appropriate manufacturing capacity or product yields at our own manufacturing facilities.
- Any failure of our information technology ("IT") systems or one or more of our corporate infrastructure vendors to provide necessary services could have a material adverse effect on our business.
- Our ability to maintain or improve gross margin.
- Our ability to protect the significant amount of IP in our business.
- Incompatibility of our software products with operating environments, platforms, or third-party products, demand for our products and services could decrease.
- Failure to enter into software license agreements on a satisfactory basis could adversely affect us.
- Licensed third party software used in our products may not be available to us in the future, which may delay product development and production or cause us to incur additional expense.
- Use of open source code sources, which, under certain circumstances could materially adversely affect us.
- We are subject to warranty claims, product recalls and product liability.
- The complexity of our products could result in unforeseen delays or expense or undetected defects or bugs.
- We make substantial investments in research and development and unsuccessful investments could materially adversely affect our business, financial condition and results of operations.
- We collect, use, store, or otherwise process personal information, which subjects us to privacy and data security laws and contractual commitments, and our actual or perceived failure to comply with such laws and commitments could harm our business.

- We are subject to environmental, health and safety laws, which could increase our costs, restrict our operations and require expenditures.
- Social and environmental responsibility regulations, policies and provisions, as well as customer and investor demands, may make our supply chain more complex and may adversely affect our relationships with customers and investors.
- The average selling prices of semiconductor products in our markets have often decreased rapidly and may do so in the future.
- A breach of our security systems may have a material adverse effect on our business.
- Fluctuations in foreign exchange rates could result in losses.

Risks Relating to Taxes

- Changes in tax legislation or policies could materially impact our financial position and results of operations.
- Our corporate income taxes could significantly increase if we are unable to maintain our tax concessions or if our assumptions and interpretations regarding tax laws and concessions prove to be incorrect.
- Our income taxes and overall cash tax costs are affected by a number of factors that could materially, adversely affect financial results.

Risks Relating to Our Indebtedness

- Our substantial indebtedness could adversely affect our financial health and our ability to execute our business strategy.
- The instruments governing our indebtedness impose certain restrictions on our business.
- Servicing our debt requires a significant amount of cash, and we may not have sufficient cash flows from our business to pay our substantial debt.

Risks Relating to Owning Our Common Stock

- Volatility of our stock price could result in substantial losses for our investors as well as class action litigation against us and our management.
- The amount and frequency of our stock repurchases may fluctuate.
- A substantial amount of our stock is held by a small number of large investors.
- There can be no assurance that we will continue to declare cash dividends.

For a more complete discussion of the material risks facing our business, see below.

Risks Related to Our Business

The ongoing COVID-19 pandemic has disrupted and will likely continue to disrupt normal business activity, which may have an adverse effect on our results of operations.

The global spread of COVID-19 and the efforts to control it have disrupted, and reduced the efficiency of, normal business activities in much of the world. The pandemic has resulted in authorities around the world implementing numerous unprecedented measures such as travel restrictions, quarantines, shelter in place orders, factory and office shutdowns and vaccine mandates. These measures have impacted, and will likely continue to impact our workforce and operations, and those of our customers, contract manufacturers (“CMs”), suppliers and logistics providers.

We have been, and expect to continue, experiencing some disruption to parts of our global semiconductor supply chain, including procuring necessary components and inputs, such as wafers and substrates, in a timely fashion, with suppliers increasing lead times or placing products on allocation and raising prices. In addition, our primary warehouse and a number of our key suppliers, particularly assembly and test service providers, are in Malaysia. While our Malaysia warehouse has remained fully operational, many of the facilities of our key suppliers and other service providers were shut down or operated at reduced capacity for extended periods. This resulted in significant logistical challenges and product delays, which could recur in the event of any future closures of, or periods of reduced operations at, our warehouse or the facilities of our suppliers and providers. Any similar disruption at our Fort Collins, Colorado manufacturing facility would severely impact our ability to manufacture our film bulk acoustic resonator (“FBAR”) products and adversely affect our wireless business. In addition, disruptions to commercial transportation infrastructure have increased delivery times for materials and components to our facilities, transfers of our products to our key suppliers and, in some cases, our ability to timely ship our products to customers. As a result of these supply chain disruptions, we have increased customer order lead times, placed some products on allocation and raised prices. We are also largely building semiconductor products to order as demand continues to outpace supply. This has limited and may continue to limit our ability to fulfill orders and satisfy all of the demand for our products.

In response to governmental directives and recommended safety measures, we modified our workplace practices globally, which has resulted in many of our employees working remotely for extended periods of time. Working remotely for extended periods may reduce our employees' efficiency and productivity, which may cause product development delays, hamper new product innovation and have other unforeseen adverse effects on our business. In addition, if a significant number of our employees, or employees and third parties performing key functions, including our Chief Executive Officer and members of our board of directors, become ill, our business may be further adversely impacted. While we have implemented personal safety measures at all of our facilities where our employees are working onsite, existing and new precautionary measures or modifications in our business practices and policies, may negatively impact our business or operations, especially if the spread of COVID-19 (including any variants) worsens significantly. In addition, any actions we take may not be sufficient to mitigate the risk of infection and could result in a significant number of COVID-19-related claims. Changes to state workers' compensation laws, such as those in California, may increase our potential liability for such claims. See also our risk factor *"If we are unable to attract and retain qualified personnel, especially our engineering and technical personnel, we may not be able to execute our business strategy effectively."*

While we continue to see robust demand in our semiconductor solutions segment and record profitability driven by the supply imbalance, and have seen little impact to our software business from the COVID-19 pandemic, the macroeconomic environment remains uncertain and it may not be sustainable over the longer term. The degree to which the pandemic ultimately impacts our business and results of operations will depend on future developments beyond our control, including the extent of actions to contain the virus (including any variants), availability and efficacy of the vaccines or other treatments, public acceptance of the vaccines (including boosters), and how quickly and to what extent normal economic and operating conditions resume.

The majority of our sales come from a small number of customers and a reduction in demand or loss of one or more of our significant customers may adversely affect our business.

We are dependent on a small number of end customers, original equipment manufacturer ("OEMs"), their respective CMs, and certain distributors for a majority of our business, revenue and results of operations. For the fiscal quarter ended January 30, 2022, sales to distributors accounted for 59% of our net revenue. We believe aggregate sales, through all channels, to Apple and our top five end customers, accounted for approximately 25% and more than 35%, respectively, of our net revenue for the fiscal quarter ended January 30, 2022. This customer concentration increases the risk of quarterly fluctuations in our operating results and our sensitivity to any material, adverse developments experienced by our significant customers.

Our semiconductor customers are not generally required to purchase specific quantities of products. Even when customers agree to source an agreed portion of their product needs from us, such arrangements often include pricing schedules or methodologies that apply regardless of the volume of products purchased, and those customers may not purchase the amount of product we expect. As a result, we may not generate the amount of revenue or achieve the level of profitability we expect under such arrangements. Moreover, our top customers' purchasing power has, in some cases, given them the ability to make greater demands on us with regard to pricing and contractual terms in general. We expect this trend to continue, which may adversely affect our gross margin on certain products and, should we fail to perform under these arrangements, we could also be liable for significant monetary damages.

The loss of, or any substantial reduction in sales to, any of our top customers could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Dependence on contract manufacturing and suppliers of critical components within our supply chain may adversely affect our ability to bring products to market, damage our reputation and adversely affect our results of operations.

We operate a primarily outsourced manufacturing business model that principally utilizes CMs, such as third-party wafer foundries and module assembly and test capabilities. Our semiconductor products require wafer manufacturers with state-of-the-art fabrication equipment and techniques, and most of our products are designed to be manufactured in a specific process, typically at one particular fab or foundry, either our own or with a particular CM.

We depend on our CMs to allocate sufficient manufacturing capacity to meet our needs, to produce products of acceptable quality at acceptable yields, and to deliver those products to us on a timely basis. We do not generally have long-term capacity commitments with our CMs and substantially all of our manufacturing services are on a purchase order basis with no minimum quantities. Further, our CMs may fail to timely develop new, advanced manufacturing processes, including transitions to smaller geometry process technologies or, from time to time, will cease to, or will become unable to, manufacture a component for us. As lead times to identify, qualify and establish reliable production at acceptable yields with a new CM is typically lengthy, there is often no readily available alternative source and there may be other constraints on our ability to change CMs. In addition, qualifying new CMs is often expensive, and they may not produce products as cost-effectively as our current suppliers.

Taiwan Semiconductor Manufacturing Company Limited (“TSMC”), one of our CMs, manufactured approximately 90% of the wafers manufactured by our CMs during the fiscal quarter ended January 30, 2022. Our wafer requirements represent a significant portion of the total production capacity of TSMC. However, TSMC also fabricates wafers for other companies, including some of our competitors, and could choose or be required to prioritize capacity for other customers or reduce or eliminate deliveries to us on short notice. In addition, TSMC has, and may in the future, raise their prices to us.

If any of the foregoing circumstances occur, we may be unable to meet our customer demand, or to the same extent as our competitors, may fail to meet our contractual obligations or forgo revenue opportunities. This has in the past damaged, and may in the future damage our relationships with our customers. This could also result in litigation for alleged failure to meet our obligations, payment of significant damages, and our net revenue could decline, adversely affecting our business, financial condition, results of operations and gross margin.

Further, any substantial disruption in the contract manufacturing services that we utilize, including TSMC’s supply of wafers to us, as a result of a natural disaster, climate change, water shortages, political unrest, military conflicts, geopolitical turmoil, trade tensions, government orders, medical epidemics, such as the COVID-19 pandemic, economic instability, equipment failure or other cause, could materially harm our business, customer relationships and results of operations.

We purchase a significant amount of the materials used in our products from a limited number of suppliers.

Our manufacturing processes and those of our CMs rely on many materials, including silicon, gallium arsenide and indium phosphide (“InP”) wafers, copper lead frames, precious and rare earth metals, mold compound, ceramic packages and various chemicals and gases. During the fiscal quarter ended January 30, 2022, we purchased approximately two-thirds of our manufacturing materials from five materials providers, some of which are single source suppliers. As certain materials are highly specialized, the lead time needed to identify and qualify a new supplier is typically lengthy and there is often no readily available alternative source. We do not generally have long-term contracts with our materials providers and substantially all of our purchases are on a purchase order basis. Suppliers may extend lead times, limit supplies, place products on allocation or increase prices due to commodity price increases, capacity constraints, inflation, or other factors, any of which could lead to interruption of supply or increased demand in the industry. For example, due to the COVID-19 pandemic, we have experienced some supply constraints and increases in prices, including with respect to wafers and substrates. Additionally, the supply of these materials may be negatively impacted by increased trade tensions between the U.S. and its trading partners, particularly China. The supply constraints have had, and may continue to have, a negative impact on our customer relationships. Further, continued supply constraints for these or any other reasons could result in loss of revenue opportunities and adversely impact our business, financial condition and results of operations.

Our business is subject to various governmental regulations, and compliance with these regulations may cause us to incur significant expense. If we fail to maintain compliance with applicable regulations, we may be forced to cease the manufacture and distribution of certain products, and we could be subject to administrative proceedings and civil or criminal penalties.

Our business is subject to various domestic and international laws and other legal requirements, including anti-competition and import/export regulations, such as the U.S. Export Administration Regulations, and applicable executive orders. These laws, regulations and orders are complex, may change frequently and with limited notice, have generally and may continue to become more stringent over time. We may be required to incur significant expense to comply with, or to remedy violations of, these regulations. In addition, if our customers fail to comply with these regulations, we may be required to suspend sales to these customers, which could damage our reputation and negatively impact our results of operations. The U.S. government may also add companies to its restricted entity list and/or technologies to its list of prohibited exports to specific countries, which have had and will continue to have an adverse effect on our ability to sell our products and our revenue. For example, Huawei Technologies Co., Ltd., one of our customers, is subject to certain U.S. export restrictions, which has required us to suspend sales to Huawei until we obtain licenses from the U.S. Department of Commerce. We may be unable to obtain or maintain the necessary licenses to allow us to export products to them. These restrictive governmental actions and any similar measures that may be imposed on U.S. companies by other governments, especially in light of ongoing trade tensions with China, will likely limit or prevent us from doing business with certain of our customers or suppliers and harm our ability to compete effectively or otherwise negatively affect our ability to sell our products, and adversely affect our business and results of operations.

Our products and operations are also subject to regulation by U.S. and non-U.S. regulatory agencies, such as the U.S. Federal Trade Commission. From time to time, we may also be involved or required to participate in regulatory investigations or inquiries, such as the ongoing investigation by the Korean Fair Trade Commission into certain of our contracting and business practices, which may evolve into legal or other administrative proceedings. Growing public concern over concentration of economic power in corporations is likely to result in increased anti-competition legislation, regulation, administrative rule making, and enforcement activity. Involvement in regulatory investigations or inquiries, can be costly, lengthy, complex and time consuming, diverting the attention and energies of our management and technical personnel.

If any pending or future governmental investigations result in an unfavorable resolution, we could be required to cease the manufacture and sale of the subject products or technology, pay fines or disgorge profits or other payments, and/or cease certain conduct and/or modify our contracting or business practices, which could have a material adverse effect on our business, financial condition and results of operations. We may be obligated to indemnify our current or former directors or employees, or former directors or employees of companies that we have acquired, in connection with regulatory investigations. These liabilities could be substantial and may include, among other things, the cost of government, law enforcement or regulatory investigations and civil or criminal fines and penalties.

In addition, the manufacture and distribution of our semiconductors must comply with various laws and adapt to changes in regulatory requirements as they occur. For example, if a country in which our products are manufactured or sold sets technical standards that are not widely shared, it may require us to stop distributing our products commercially until they comply with such new standards, lead certain of our customers to suspend imports of their products into that country, require manufacturers in that country to manufacture products with different technical standards and disrupt cross-border manufacturing relationships, any of which could have a material adverse effect on our business, financial condition and results of operations. If we fail to comply with these requirements, we could also be required to pay civil penalties or face criminal prosecution.

Adverse global economic conditions could have a negative effect on our business, results of operations and financial condition and liquidity.

A general slowdown in the global economy or in a particular region or industry, an increase in trade tensions with U.S. trading partners, inflation or a tightening of the credit markets could negatively impact our business, financial condition and liquidity. Adverse global economic conditions have from time to time caused or exacerbated significant slowdowns in the industries and markets in which we operate, which have adversely affected our business and results of operations. Macroeconomic weakness and uncertainty also make it more difficult for us to accurately forecast revenue, gross margin and expenses, and may make it more difficult to raise or refinance debt. An escalation of trade tensions between the U.S. and China has resulted in trade restrictions and increased tariffs that harm our ability to participate in Chinese markets or compete effectively with Chinese companies. Sustained uncertainty about, or worsening of, current global economic conditions and further escalation of trade tensions between the U.S. and its trading partners, especially China, and possible decoupling of the U.S. and China economies, could result in a global economic slowdown and long-term changes to global trade. Such events may also (i) cause our customers and consumers to reduce, delay or forgo technology spending, (ii) result in customers sourcing products from other suppliers not subject to such restrictions or tariffs, (iii) lead to the insolvency or consolidation of key suppliers and customers, and (iv) intensify pricing pressures. Any or all of these factors could negatively affect demand for our products and our business, financial condition and results of operations.

We operate in the highly cyclical semiconductor industry.

The semiconductor industry is highly cyclical and is characterized by constant and rapid technological change and price erosion, evolving technical standards, frequent new product introductions, short product life cycles (for semiconductors and for many of the end products in which they are used) and wide fluctuations in product supply and demand. From time to time, these factors, together with changes in general economic conditions, cause significant upturns and downturns in the industry in general, and in our business in particular. The industry is still in the midst of a significant upturn due to the supply imbalance resulting in record profitability and increases in average selling prices as well as the payment by customers of other amounts like expedite fees and surcharges, which may not be sustainable in the longer term. It is possible that this current industry up-cycle will eventually be followed by a downturn, and historically, such down-cycles have been characterized by diminished demand for end-user products, high inventory levels and periods of inventory adjustment, under-utilization of manufacturing capacity, changes in revenue mix and accelerated erosion of average selling prices leading to reduced profitability and a decline in our stock price. We expect our business to continue to be subject to cyclical downturns even when overall economic conditions are relatively stable. If we cannot offset industry or market downturns, our net revenue may decline and our financial condition and results of operations may suffer.

Global political and economic conditions and other factors related to our international operations could adversely affect our business, financial condition and results of operations.

A majority of our products are produced, sourced and sold internationally and our international revenue represents a significant percentage of our overall revenue. In addition, as of January 30, 2022, nearly 50% of our employees were located outside the U.S. Multiple factors relating to our international operations and to particular countries in which we operate could have a material adverse effect on our business, financial condition and results of operations. These factors include:

- changes in political, regulatory, legal or economic conditions or geopolitical turmoil, including terrorism, war or political or military coups, state-sponsored or politically motivated cyber-attacks, or civil disturbances or political instability foreign and domestic;

- restrictive governmental actions, such as restrictions on the transfer or repatriation of funds and foreign investments, data privacy regulations, imposition of climate change regulations, and trade protection measures, including increasing protectionism, import/export restrictions, import/export duties and quotas, trade sanctions and customs duties and tariffs, all of which have increased in recent years;
- difficulty in obtaining product distribution and support, and transportation delays;
- potential inability to localize software products for a significant number of international markets;
- difficulty in conducting due diligence with respect to business partners in certain international markets;
- public health or safety concerns, medical epidemics or pandemics, such as COVID-19, and other natural- or man-made disasters;
- nationalization of businesses and expropriation of assets; and
- changes in U.S. and foreign tax laws.

A significant legal risk associated with conducting business internationally is compliance with the various and differing laws and regulations of the many countries in which we do business. In addition, the laws in various countries are constantly evolving and may, in some cases, conflict with each other. Although our policies prohibit us, our employees and our agents from engaging in unethical business practices, there can be no assurance that all of our employees, distributors or other agents will refrain from acting in violation of our related anti-corruption or other policies and procedures. Any such violation could have a material adverse effect on our business.

We are subject to risks associated with our distributors and other channel partners, including product inventory levels and product sell-through.

We sell our products through a direct sales force and a select network of distributors and other channel partners globally. Sales to distributors accounted for 59% of our net revenue in the fiscal quarter ended January 30, 2022 and are subject to a number of risks, including:

- fluctuations in demand based on our distributors' product inventory levels and end customer demand;
- our distributors and other channel partners are generally not subject to minimum sales requirements or any obligation to market our products to their customers;
- our distributors and other channel partners agreements are generally nonexclusive and may be terminated at any time without cause;
- our lack of control over the timing of delivery of our products to end customers; and
- our distributors and other channel partners may market and distribute competing products and may place greater emphasis on the sale of these products.

In addition, we are selling our semiconductor products through an increasingly limited number of distributors, which exposes us to additional customer concentration and related credit risks.

We do not always have a direct relationship with the end customers of our products. As a result, our semiconductor products may be used in applications for which they were not necessarily designed or tested, including, for example, medical devices, and they may not perform as anticipated in such applications. In such event, failure of even a small number of parts could result in significant liabilities to us, damage our reputation and harm our business and results of operations.

Our business would be adversely affected by the departure of existing members of our senior management team.

Our success depends, in large part, on the continued contributions of our senior management team, and in particular, the services of Mr. Hock E. Tan, our President and Chief Executive Officer. Effective succession planning is also important for our long-term success. Failure to ensure effective transfers of knowledge and smooth transitions involving senior management could hinder our strategic planning and execution. None of our senior management is bound by written employment contracts. In addition, we do not currently maintain key person life insurance covering our senior management. The loss of any of our senior management could harm our ability to implement our business strategy and respond to the rapidly changing market conditions in which we operate.

If we are unable to attract and retain qualified personnel, especially our engineering and technical personnel, we may not be able to execute our business strategy effectively.

Our future success depends on our ability to attract, retain and motivate qualified personnel. As the source of our technological and product innovations, our engineering and technical personnel (including cyber security experts) are a

significant asset. Competition for these employees is significant in many areas of the world in which we operate, particularly in Silicon Valley and Southeast Asia where qualified engineers are in high demand. In addition, current or future immigration laws may make it more difficult to hire or retain qualified engineers, further limiting the pool of available talent. We believe equity awards provide a powerful long-term retention incentive and have historically granted these awards to the substantial majority of our employees. However, the amendments to our 2012 Stock Incentive Plan approved by our stockholders at our 2021 Annual Meeting of Stockholders significantly reduced the number of shares available for equity awards. As a result, we may need to change our current equity granting philosophy, which could impair our efforts to attract and retain necessary personnel. Any inability to retain, attract or motivate such personnel could have a material adverse effect on our business, financial condition and results of operations.

We may pursue acquisitions, investments, joint ventures and dispositions, which could adversely affect our results of operations.

Our growth strategy includes acquiring or investing in businesses that offer complementary products, services and technologies, or enhance our market coverage or technological capabilities.

Any acquisitions we may undertake and their integration involve risks and uncertainties, such as:

- unexpected delays, challenges and related expenses, and disruption of our business;
- diversion of management's attention from daily operations and the pursuit of other opportunities;
- incurring significant restructuring charges and amortization expense, assuming liabilities (some of which may be unexpected) and ongoing or new lawsuits, potential impairment of acquired goodwill and other intangible assets, and increasing our expenses and working capital requirements;
- the potential for deficiencies in internal controls at the acquired business, as well as implementing our own management information systems, operating systems and internal controls for the acquired operations;
- our due diligence process may fail to identify significant issues with the acquired business' products, financial disclosures, accounting practices, legal, tax and other contingencies, compliance with local laws and regulations (and interpretations thereof) in the U.S. and multiple international jurisdictions;
- additional acquisition-related debt, which could increase our leverage and potentially negatively affect our credit ratings resulting in more restrictive borrowing terms or increased borrowing costs thereby limiting our ability to borrow;
- dilution of stock ownership of existing stockholders;
- difficulties integrating the acquired business or company and in managing and retaining acquired employees, vendors and customers; and
- inaccuracies in our original estimates and assumptions used to assess a transaction, which may result in us not realizing the expected financial or strategic benefits of any such transaction.

In addition, the current and the proposed changes to the U.S. and foreign regulatory approval process and requirements related to acquisitions may cause approvals to take longer than anticipated, not be forthcoming or contain burdensome conditions, which may prevent the transaction or jeopardize, delay or reduce the anticipated benefits of the transaction, and impede the execution of our business strategy.

From time to time, we may also seek to divest or wind down portions of our business, either acquired or otherwise, or we may exit minority investments, any of which could materially affect our cash flows and results of operations. Such dispositions involve risks and uncertainties, including our ability to sell such businesses on terms acceptable to us, or at all, disruption to other parts of our business, potential loss of employees or customers, or exposure to unanticipated liabilities or ongoing obligations to us following any such dispositions. In addition, dispositions may include the transfer of technology and/or the licensing of certain IP rights to third-party purchasers, which could limit our ability to utilize such IP rights or assert these rights against such third-party purchasers or other third parties.

We may be involved in legal proceedings, including IP, securities litigation, and employee-related claims, which could, among other things, divert efforts of management and result in significant expense and loss of our IP rights.

We are often involved in legal proceedings, including cases involving our IP rights and those of others, commercial matters, acquisition-related suits, securities class action suits, employee-related claims and other actions. Litigation or settlement of such actions, regardless of their merit, can be costly, lengthy, complex and time consuming, diverting the attention and energies of our management and technical personnel.

The industries in which we operate are characterized by companies holding large numbers of patents, copyrights, trademarks and trade secrets and by the vigorous pursuit, protection and enforcement of IP rights, including actions by patent-holding companies that do not make or sell products. From time to time, third parties assert against us and our customers and distributors their IP rights to technologies that are important to our business. For example, in August 2020 judgment was entered against Broadcom and Apple for infringement of certain patents and California Institute of Technology was awarded past damages of \$270.2 million from Broadcom and \$837.8 million from Apple, for which Apple is seeking indemnification from Broadcom. Although the appellate court recently vacated these damages and ordered a new trial, there are no assurances that we will be successful or what, if any, damages we will be required to pay.

Many of our customer agreements, and in some cases our asset sale agreements, and/or the laws of certain jurisdictions may require us to indemnify our customers or purchasers for third-party IP infringement claims, including costs to defend those claims, and payment of damages in the case of adverse rulings. However, our CMs and suppliers may or may not be required to indemnify us should we or our customers be subject to such third-party claims. Claims of this sort could also harm our relationships with our customers and might deter future customers from doing business with us. If any pending or future proceedings result in an adverse outcome, we could be required to:

- cease the manufacture, use or sale of the infringing products, processes or technology and/or make changes to our processes or products;
- pay substantial damages for past, present and future use of the infringing technology, including up to treble damages if willful infringement is found;
- expend significant resources to develop non-infringing technology;
- license technology from the third-party claiming infringement, which license may not be available on commercially reasonable terms, or at all;
- enter into cross-licenses with our competitors, which could weaken our overall IP portfolio and our ability to compete in particular product categories;
- pay substantial damages to our direct or end customers to discontinue use or replace infringing technology with non-infringing technology; or
- relinquish IP rights associated with one or more of our patent claims.

Any of the foregoing results could have a material adverse effect on our business, financial condition and results of operations.

In addition, we may be obligated to indemnify our current or former directors or employees, or former directors or employees of companies that we have acquired, in connection with such litigation. These liabilities could be substantial and may include, among other things, the cost of defending lawsuits against these individuals, as well as stockholder derivative suits; civil or criminal fines and penalties; legal and other expenses; and expenses associated with the remedial measure, if any, which may be imposed.

Our operating results are subject to substantial quarterly and annual fluctuations.

Our operating results have fluctuated in the past and are likely to fluctuate in the future. These fluctuations may occur on a quarterly and annual basis and are due to a number of factors, many of which are beyond our control. In addition to many of the risks described elsewhere in this “Risk Factors” section, these factors include, among others:

- the timing of launches by our customers of new product in which our products are included and changes in end-user demand for our customers’ the products;
- fluctuations in the levels of component or product inventories held by our customers;
- the shift to cloud-based IT solutions and services, such as hyperscale computing, which may adversely affect the timing and volume of sales of our products for use in traditional enterprise data centers;
- the timing of new software contracts and renewals, as well as the timing of any terminations of software contracts that require us to refund to customers any pre-paid amounts under the contract;
- our ability to timely develop, introduce and market new products and technologies;
- the timing and extent of our software license and subscription revenue, and other non-product revenue;
- new product announcements and introductions by us or our competitors;
- seasonality or other fluctuations in demand in our markets;

- timing and amount of research and development and related new product expenditures, and the timing of receipt of any research and development grant monies; and
- timing of any regulatory changes, particularly with respect to trade sanctions and customs duties and tariffs, and tax reform.

The foregoing factors are often difficult to predict, and these, as well as other factors, could materially adversely affect our quarterly or annual operating results. In addition, a significant amount of our operating expenses are relatively fixed in nature. Any failure to adjust spending quickly enough to compensate for a revenue shortfall could magnify the adverse impact of such revenue shortfall on our results of operations. As a result, we believe that quarter-to-quarter comparisons of our revenue and operating results may not be meaningful or a reliable indicator of our future performance. If our operating results in one or more future quarters fail to meet the expectations of securities analysts or investors, a significant decline in the trading price of our common stock may occur, which may happen immediately or over time.

Failure to adjust our manufacturing and supply chain to accurately meet customer demand could adversely affect our results of operations.

We make significant decisions, including determining the levels of business that we will seek and accept, production schedules, levels of reliance on contract manufacturing and outsourcing, internal fabrication utilization and other resource requirements, based on our estimates of customer requirements, which may not be accurate.

During the COVID-19 pandemic, we have moved largely to a build to order model and have extended customer lead times substantially in light of supply chain challenges. More typically, however, to ensure the availability of our semiconductor products we start manufacturing based on customer forecasts, which are not binding. As a result, we incur inventory and manufacturing costs in advance of anticipated sales that may be substantially lower than expected. If actual demand for our products is lower than forecast, we may also experience higher inventory carrying and operating costs and product obsolescence. Because certain of our sales, research and development, and internal manufacturing overhead expenses are relatively fixed, a reduction in customer demand may also decrease our gross margin and operating income.

Conversely, customers often require rapid increases in production on short notice. If we are unable to meet such increases in demand, this could damage our customer relationships, reduce revenue growth and margins, subject us to additional liabilities, harm our reputation, and prevent us from taking advantage of opportunities.

Winning business in the semiconductor solutions industry is subject to a lengthy process that often requires us to incur significant expense, from which we may ultimately generate no revenue.

Our semiconductor business is dependent on us winning competitive bid selection processes, known as “design wins”. These selection processes are typically lengthy and can require us to dedicate significant development expenditures and scarce engineering resources in pursuit of a single customer opportunity. Failure to obtain a particular design win may prevent us from obtaining design wins in subsequent generations of a particular product. This can result in lost revenue and can weaken our position in future selection processes.

Winning a product design does not guarantee sales to a customer. A delay or cancellation of a customer’s plans could materially and adversely affect our financial results, as we incur significant expense in the design process and may generate little or no revenue from it. In addition, the timing of design wins is unpredictable and implementing production for a major design win, or multiple design wins at the same time, may strain our resources and those of our CMs. In such event, we may be forced to dedicate significant additional resources and incur additional costs and expenses. Further, often customers will only purchase limited numbers of evaluation units until they qualify the products and/or the manufacturing line for those products. The qualification process can take significant time and resources. Delays in qualification or failure to qualify our products may cause a customer to discontinue use of our products and result in a significant loss of revenue. Finally, customers could choose at any time to stop using our products or could fail to successfully market and sell their products, which could reduce demand for our products, and cause us to hold excess inventory, materially adversely affecting our business, financial condition and results of operations. These risks are exacerbated by the fact that many of our products, and the end products into which our products are incorporated, often have very short life cycles.

Competition in our industries could prevent us from growing our revenue.

The industries in which we operate are highly competitive and characterized by rapid technological changes, evolving industry standards, changes in customer requirements, often aggressive pricing practices and, in some cases, new delivery methods. We expect competition in these industries to continue to increase as existing competitors improve or expand their product offerings or as new competitors enter our markets.

Some of our competitors have longer operating histories, greater name recognition, a larger installed customer base, larger technical staffs, more established relationships with vendors or suppliers, or greater manufacturing, distribution,

financial, research and development, technical and marketing resources than us. We also face competition from numerous smaller companies that specialize in specific aspects of the highly fragmented software industry, open source authors who provide software and IP for free, competitors who offer their products through try-and-buy or freemium models, and customers who develop competing products.

In addition, the trend toward consolidation is changing the competitive landscape. We expect this trend to continue, which may result in combined competitors having greater resources than us. Some of our competitors may also receive financial and other support from their home country government or may have a greater presence in key markets, a larger customer base, a more comprehensive IP portfolio or better patent protection than us.

The actions of our competitors, in the areas of pricing and product bundling in particular, could have a substantial adverse impact on us. Further, competitors may leverage their superior market position, as well as IP or other proprietary information, including interface, interoperability or technical information, in new and emerging technologies and platforms that may inhibit our ability to compete effectively. If we are unable to compete successfully, we may lose market share for our products or incur significant reduction in our gross margins, either of which could have a material adverse effect on our business and results of operations.

A prolonged disruption of our manufacturing facilities, research and development facilities, warehouses or other significant operations, or those of our suppliers, could have a material adverse effect on our business, financial condition and results of operations.

Although we operate a primarily outsourced manufacturing business model, we also rely on our own manufacturing facilities, in particular in Fort Collins, Colorado, Singapore, and Breinigsville, Pennsylvania. We use these internal fabrication facilities for products utilizing our innovative and proprietary processes. Our Fort Collins and Breinigsville facilities are the sole sources for the FBAR components used in many of our wireless devices and for the InP-based wafers used in our fibre optics products, respectively. Many of our facilities, and those of our CMs and suppliers, are located in California and the Pacific Rim region, which have above average seismic activity and severe weather activity. In addition, a significant majority of our research and development personnel are located the Czech Republic, India, Israel, Singapore and the U.S., with the expertise of the personnel at each such location tending to be focused on one or two specific areas, and our primary warehouse is in Malaysia.

A prolonged disruption at or shut-down of one or more of our manufacturing facilities or warehouses, especially our Colorado, Singapore, Malaysia and Pennsylvania facilities, or those of our CMs or suppliers, due to natural- or man-made disasters or other events outside of our control, such as equipment malfunction or widespread outbreaks of acute illness, including COVID-19, or for any other reason, would limit our capacity to meet customer demands and delay new product development until a replacement facility and equipment, if necessary, were found. Any such event would likely disrupt our operations, delay production, shipments and revenue, result in us being unable to timely satisfy customer demand, expose us to claims by our customers, result in significant expense to repair or replace our affected facilities, and, in some instances, could significantly curtail our research and development efforts in a particular product area or target market. As a result, we could forgo revenue opportunities, potentially lose market share, damage our customer relationships and be subject to litigation and additional liabilities, all of which could materially and adversely affect our business. Although we purchase insurance to mitigate certain losses, such insurance often carries a high deductible amount and any uninsured losses could negatively affect our operating results. In addition, even if we were able to promptly resume production of our affected products, if our customers cannot timely resume their own manufacturing following such an event, they may cancel or scale back their orders from us and this may in turn adversely affect our results of operations. Such events could also result in increased fixed costs relative to the revenue we generate and adversely affect our results of operations.

We may be unable to maintain appropriate manufacturing capacity or product yields at our own manufacturing facilities, which could adversely affect our relationships with our customers, and our business, financial condition and results of operations.

We must maintain appropriate capacity and product yields at our own manufacturing facilities to meet anticipated customer demand. From time to time, this requires us to invest in expansion or improvements of those facilities, which often involves substantial cost and other risks. Such expanded manufacturing capacity may still be insufficient, or may not come online soon enough, to meet customer demand and we may have to put customers on product allocation, forgo sales or lose customers as a result. Conversely, if we overestimate customer demand, we would experience excess capacity and fixed costs at these facilities will not be fully absorbed, all of which could adversely affect our results of operations. Similarly, reduced product yields, due to design or manufacturing issues or otherwise, may involve significant time and cost to remedy and cause delays in our ability to supply product to our customers, all of which could cause us to forgo sales, incur liabilities or lose customers, and harm our results of operations.

In addition, current and future government restrictions imposed as a result of the COVID-19 pandemic that limit our manufacturing capabilities could severely impact our ability to manufacture our proprietary products, adversely affecting our wireless business.

Any failure of our IT systems or one or more of our corporate infrastructure vendors to provide necessary services could have a material adverse effect on our business.

Our business depends on various IT systems and outsourced IT services. We rely on third-party vendors to provide critical corporate infrastructure services and to adequately address cyber security threats to their own systems. Services provided by these third parties include services related to financial reporting, product orders and shipping, human resources, benefit plan administration, IT network development and network monitoring. While we may be entitled to damages if our vendors fail to perform under their agreements with us, any award may be insufficient to cover the actual costs incurred by us and, as a result of a vendor's failure to perform, we may be unable to collect any damages.

Any failure of these internal or third-party systems and services to operate effectively could disrupt our operations and could have a material adverse effect on our business, financial condition and results of operations.

Our gross margin is dependent on a number of factors, including our product mix, price erosion, acquisitions we may make, level of capacity utilization and commodity prices.

Our gross margin is highly dependent on product mix, which is susceptible to seasonal and other fluctuations in our markets. A shift in sales mix away from our higher margin products, as well as the timing and amount of our software licensing and non-product revenue, could adversely affect our future gross margin percentages. In addition, increased competition and the existence of product alternatives, more complex engineering requirements, lower demand or reductions in our technological lead compared to our competitors, and other factors have in the past and may in the future lead to further price erosion, lower revenue and lower margin. Conversely, periods of robust demand that create a supply imbalance, as we have seen recently, can lead to higher gross margins that may not be sustainable over the longer term.

In addition, semiconductor manufacturing requires significant capital investment, leading to high fixed costs, including depreciation expense. If we are unable to utilize our owned manufacturing facilities at a high level, the fixed costs associated with these facilities will not be fully absorbed, resulting in higher average unit costs and a lower gross margin. Furthermore, we do not hedge our exposure to commodity prices, some of which are very volatile, and sudden or prolonged increases in commodities prices may adversely affect our gross margin.

Our gross margin may also be adversely affected if businesses or companies that we acquire have different gross margin profiles and by expenses related to such acquisitions.

We utilize a significant amount of IP in our business. If we are unable or fail to protect our IP, our business could be adversely affected.

Our success depends in part upon protecting our IP. To accomplish this, we rely on a combination of IP rights, including patents, copyrights, trademarks and trade secrets, as well as customary contractual protections with our customers, suppliers, employees and consultants. We spend significant resources to monitor and protect our IP rights, including the unauthorized use of our products, usage rates of the software seat licenses and subscriptions that we sell, and even with significant expenditures, we may not be able to protect the IP rights that are valuable to our business. We are unable to predict or assure that:

- our IP rights will not lapse or be invalidated, circumvented, challenged, or, in the case of third-party IP rights licensed to us, be licensed to others;
- our IP rights will provide competitive advantages to us;
- rights previously granted by third parties to IP licensed or assigned to us, including portfolio cross-licenses, will not hamper our ability to assert our IP rights or hinder the settlement of currently pending or future disputes;
- any of our pending or future patent, trademark or copyright applications will be issued or have the coverage originally sought;
- our IP rights will be enforced in certain jurisdictions where competition is intense or where legal protection may be weak; or
- we have sufficient IP rights to protect our products or our business.

Effective IP protection may be unavailable or more limited in other jurisdictions, relative to those protections available in the U.S., and may not be applied for or may be abandoned in one or more relevant jurisdictions. In addition, when patents expire, we lose the protection and competitive advantages they provided to us.

We also generate revenue from licensing royalty payments and from technology claim settlements relating to certain of our IP. Licensing of our IP rights, particularly exclusive licenses, may limit our ability to assert those IP rights against third parties, including the licensee of those rights. In addition, we may acquire companies with IP that is subject to licensing obligations to other third parties. These licensing obligations may extend to our own IP following any such acquisition and may limit our ability to assert our IP rights. From time to time, we pursue litigation to assert our IP rights, including, in some cases, against our customers and suppliers. Claims of this sort could also harm our relationships with our customers and might deter future customers from doing business with us. Conversely, third parties have and may in the future pursue IP litigation against us, including as a result of our IP licensing business. An adverse decision in such types of legal action could limit our ability to assert our IP rights and limit the value of our technology, including the loss of opportunities to sell or license our technology to others or to collect royalty payments, which could otherwise negatively impact our business, financial condition and results of operations.

From time to time, we may need to obtain additional IP licenses or renew existing license agreements. We are unable to predict whether these license agreements can be obtained or renewed on acceptable terms or at all.

If our software products do not remain compatible with ever-changing operating environments, platforms, or third-party products, demand for our products and services could decrease, which could materially adversely affect our business.

We may be required to make substantial modification of our products to maintain compatibility with operating systems, systems software and computer hardware used by our customers or to provide our customers with desired features or capabilities. We must also continually address the challenges of dynamic and accelerating market trends and competitive developments, such as the emergence of advanced persistent threats in the security space to compete effectively. There can be no assurance that we will be able to adapt our products in response to these developments.

Further, our software solutions interact with a variety of software and hardware developed by third parties. If we lose access to third-party code and specifications for the development of code, this could negatively impact our ability to develop compatible software. In addition, if software providers and hardware manufacturers, including some of our largest vendors, adopt new policies restricting the use or availability of their code or technical documentation for their operating systems, applications, or hardware, or otherwise impose unfavorable terms and conditions for such access, this could result in higher research and development costs for the enhancement and modification of our existing products or development of new products. Any additional restrictions could materially adversely affect our business, financial condition and operating results and cash flow.

Failure to enter into software license agreements on a satisfactory basis could materially adversely affect our business.

Many of our existing customers have multi-year enterprise software license agreements, some of which involve substantial aggregate fee amounts. Customer renewal rates may decline or fluctuate as a result of a number of factors, including the level of customer satisfaction with our solutions or customer support, customer budgets and the pricing of our solutions as compared with the solutions offered by our competitors, any of which may cause our revenue to grow more slowly than expected, if at all. The failure to renew customer agreements of similar scope, on terms that are commercially attractive to us, could materially adversely affect our business, financial condition and operating results and cash flow.

Certain software that we use in our products is licensed from third parties and may not be available to us in the future, which may delay product development and production or cause us to incur additional expense.

Some of our solutions contain software licensed from third parties, some of which may not be available to us in the future on terms that are acceptable to us or allow our products to remain competitive. The loss of these licenses or the inability to maintain any of them on commercially acceptable terms could delay development of future products or the enhancement of existing products.

Certain software we use is from open source code sources, which, under certain circumstances could materially adversely affect our business, financial condition, operating results and cash flow.

Some of our products contain software from open source code sources, the use of which may subject us to certain conditions, including the obligation to offer such products for no cost or to make the proprietary source code of those products publicly available. Further, although some open source vendors provide warranty and support agreements, it is common for such software to be available “as-is” with no warranty, indemnity or support. Although we monitor our use of such open source code to avoid subjecting our products to unintended conditions, such use, under certain circumstances, could materially adversely affect our business, financial condition and operating results and cash flow, including if we are required to take remedial action that may divert resources away from our development efforts.

We are subject to warranty claims, product recalls and product liability.

From time to time, we may be subject to warranty or product liability claims that may lead to significant expense. Our customer contracts typically contain warranty and indemnification provisions, and in certain cases may also contain liquidated damages provisions, relating to product quality issues. The potential liabilities associated with such provisions are significant, and in some cases, including in agreements with some of our largest customers, are potentially unlimited. Any such liabilities may greatly exceed any revenue we receive from the relevant products. Costs, payments or damages incurred or paid by us in connection with warranty and product liability claims and product recalls could materially adversely affect our financial condition and results of operations. We may also be exposed to such claims as a result of any acquisition we may undertake in the future.

Product liability insurance is subject to significant deductibles and there is no guarantee that such insurance will be available or adequate to protect against all such claims, or we may elect to self-insure with respect to certain matters. For example, it is possible for one of our customers to recall a product containing one of our semiconductor devices. In such an event, we may incur significant costs and expenses, including among others, replacement costs, contract damage claims from our customers and reputational harm. Although we maintain reserves for reasonably estimable liabilities and purchase product liability insurance, our reserves may be inadequate to cover the uninsured portion of such claims. Conversely, in some cases, amounts we reserve may ultimately exceed our actual liability for particular claims and may need to be reversed.

The complexity of our products could result in unforeseen delays or expense or undetected defects or bugs, which could adversely affect the market acceptance of new products, damage our reputation with current or prospective customers, and materially and adversely affect our operating costs.

Highly complex products, such as those we offer, may contain defects and bugs when they are first introduced or as new versions, software documentation or enhancements are released, or their release may be delayed due to unforeseen difficulties during product development. If any of our products or third-party components used in our products, contain defects or bugs, or have reliability, quality or compatibility problems, we may not be able to successfully design workarounds. Furthermore, if any of these problems are not discovered until after we have commenced commercial production or deployment of a new product, we may be required to incur additional development costs and product recall, repair or replacement costs. Significant technical challenges also arise with our software products because our customers license and deploy our products across a variety of computer platforms and integrate them with a number of third-party software applications and databases. As a result, if there is system-wide failure or an actual or perceived breach of information integrity, security or availability occurs in one of our end-user customer's system, it can be difficult to determine which product is at fault and we could ultimately be harmed by the failure of another supplier's product. Consequently, our reputation may be damaged and customers may be reluctant to buy our products, which could materially and adversely affect our ability to retain existing customers and attract new customers. To resolve these problems, we may have to invest significant capital and other resources and we would likely lose, or experience a delay in, market acceptance of the affected product or products. These problems may also result in claims against us by our customers or others. For example, if a delay in the manufacture and delivery of our products causes the delay of a customer's end-product delivery, we may be required, under the terms of our agreement with that customer, to compensate the customer for the adverse effects of such delays. As a result, our financial results could be materially adversely affected.

We make substantial investments in research and development and unsuccessful investments could materially adversely affect our business, financial condition and results of operations.

The industries in which we compete are characterized by rapid technological change, changes in customer requirements, frequent new product introductions and enhancements, short product cycles and evolving industry standards, and new delivery methods. In addition, semiconductor products transition over time to increasingly smaller line width geometries and failure to successfully transition to smaller geometry process technologies could impair our competitive position. In order to remain competitive, we have made, and expect to continue to make, significant investments in research and development. If we fail to develop new and enhanced products and technologies, if we focus on technologies that do not become widely adopted, or if new competitive technologies that we do not support become widely accepted, demand for our products may be reduced. Increased investments in research and development or unsuccessful research and development efforts could cause our cost structure to fall out of alignment with demand for our products, which would have a negative impact on our financial results.

We collect, use, store, or otherwise process personal information, which subjects us to privacy and data security laws and contractual commitments, and our actual or perceived failure to comply with such laws and commitments could harm our business.

We collect, use and store (collectively, "process") a high volume, variety and velocity of certain personal information in connection with the operation of our business. This creates various levels of privacy risks across different parts of our business, depending on the type of personal information, the jurisdiction in question and the purpose of their processing. The personal information we process is subject to an increasing number of federal, state, local, and foreign laws and regulations

regarding privacy and data security, as well as contractual commitments. Privacy legislation and other data protection regulations, enforcement and policy activity in this area are expanding rapidly in many jurisdictions and creating a complex regulatory compliance environment. Sectoral legislation, certification requirements and technical standards applying to certain categories of our customers, such as those in the financial services or public sector, are likely to further exacerbate this trend. The cost of complying with and implementing these privacy-related and data governance measures could be significant as they may create additional burdensome security, business process, business record or data localization requirements. Concerns about government interference, sovereignty, expanding privacy, cyber security and data governance legislation could adversely affect our customers and our products and services, particularly in cloud computing, artificial intelligence and our own data management practices. The theft, loss or misuse of personal data collected, used, stored or transferred by us to run our business could result in significantly increased business and security costs or costs related to defending legal claims. Any inadvertent failure or perceived failure by us to comply with privacy, data governance or cyber security obligations may result in governmental enforcement actions, litigation, substantial fines and damages, and could cause our customers to lose trust in us, which could have an adverse effect on our reputation and business.

We are subject to environmental, health and safety laws, which could increase our costs, restrict our operations and require expenditures that could have a material adverse effect on our results of operations and financial condition.

We are subject to a variety of international laws and regulations relating to the use, disposal, clean-up of and human exposure to hazardous materials. Compliance with environmental, health and safety requirements could, among other things, require us to modify our manufacturing processes, restrict our ability to expand our facilities, or require us to acquire pollution control equipment, all of which can be very costly. Any failure by us to comply with such requirements could result in the limitation or suspension of the manufacture of our products and could result in litigation against us and the payment of significant fines and damages by us in the event of a significant adverse judgment. In addition, complying with any cleanup or remediation obligations for which we are or become responsible could be costly and have a material adverse effect on our business, financial condition and results of operations.

Changing requirements relating to the materials composition of our semiconductor products, including the restrictions on lead and certain other substances in electronic products sold in various countries, including the U.S., China and Japan, and in the European Union, increase the complexity and costs of our product design and procurement operations and may require us to re-engineer our products. Such re-engineering may result in excess inventory or other additional costs and could have a material adverse effect on our results of operations. We may also experience claims from employees from time to time with regard to exposure to hazardous materials or other workplace related environmental claims.

Social and environmental responsibility regulations, policies and provisions, as well as customer and investor demands, may make our supply chain more complex and may adversely affect our relationships with customers and investors.

There is an increasing focus on corporate social and environmental responsibility in the semiconductor industry, particularly with OEMs that manufacture consumer electronics. A number of our customers have adopted, or may adopt, procurement policies that include social and environmental responsibility provisions or requirements that their suppliers should comply with, or they may seek to include such provisions or requirements in their procurement terms and conditions. An increasing number of investors are also requiring companies to disclose corporate social and environmental policies, practices and metrics. In addition, various jurisdictions are developing climate change-based laws or regulations that could cause us to incur additional direct costs for compliance, as well as indirect costs resulting from our customers, suppliers, or both incurring additional compliance costs that are passed on to us. These legal and regulatory requirements, as well as investor expectations, on corporate environmental and social responsibility practices and disclosure, are subject to change, can be unpredictable, and may be difficult and expensive for us to comply with, given the complexity of our supply chain and our significant outsourced manufacturing. If we are unable to comply, or are unable to cause our suppliers or OEMs to comply, with such policies or provisions or meet the requirements of our customers and investors, a customer may stop purchasing products from us or an investor may sell their shares, and may take legal action against us, which could harm our reputation, revenue and results of operations.

In addition, as part of their corporate social and environmental responsibility programs, an increasing number of OEMs are seeking to source products that do not contain minerals sourced from areas where proceeds from the sale of such minerals are likely to be used to fund armed conflicts, such as in the Democratic Republic of Congo. This could adversely affect the sourcing, availability and pricing of minerals used in the manufacture of semiconductor devices, including our products. As a result, we may face difficulties in satisfying these customers' demands, which may harm our sales and operating results.

The average selling prices of semiconductor products in our markets have often decreased rapidly and may do so in the future, which could harm our revenue and gross profit.

The semiconductor products we develop and sell are used for high volume applications. As a result, the prices of those products have often decreased rapidly. Gross profit on our products may be negatively affected by, among other things, pricing pressures from our customers. In the past, we have reduced the average selling prices of our products in anticipation

of future competitive pricing pressures, new product introductions by us or our competitors and other factors. In addition, some of our customer agreements provide for volume-based pricing and product pricing roadmaps, which can also reduce the average selling prices of our products over time. Our margins and financial results will suffer if we are unable to offset any reductions in our average selling prices by increasing our sales volumes, reducing manufacturing costs, or developing new and higher value-added products on a timely basis.

A breach of our security systems may have a material adverse effect on our business.

Our security systems are designed to protect and secure our facilities and our customers', suppliers' and employees' confidential information, as well as our own proprietary information. However, we are also dependent on a number of third-party cloud-based and other service providers of critical corporate infrastructure services relating to, among other things, human resources, electronic communication services and certain finance functions, and we are, out of necessity, dependent on the security systems of these providers. In addition, all software, including the security technologies produced by us have had occasionally in the past and may have in the future, vulnerabilities that, if left unmanaged, could reduce the overall level of security.

Accidental or willful security breaches or other unauthorized access of our facilities, our information systems or the systems of our service providers, or the existence of computer viruses or malware (such as ransomware) in our or their data or software could expose us to a risk of information loss, business disruption, and misappropriation of proprietary and confidential information, including information relating to our products or customers and the personal information of our employees. We have, from time to time, been subject to disruptive cyber-attacks or there have been attempts of unauthorized network intrusions and malware on our own IT networks. As a result of the COVID-19 pandemic, remote access to our networks and systems has increased substantially. While we have taken steps to secure our networks and systems, we may be more vulnerable to a successful cyber-attack or information security incident when our workforce works remotely.

Certain aspects of our software products are intended to manage and secure IT infrastructures and environments, and as a result, we expect these products to be ongoing targets of cyber security attacks. Open source code or other third-party software used in these products could also be targeted. Additionally, we use third-party data centers, which may also be subject to hacking or accidental incidents. Although we continually seek to improve our countermeasures to prevent such incidents, we may be unable to anticipate every scenario and it is possible that certain cyber threats or vulnerabilities will be undetected or unmitigated in time to prevent an attack or an accidental incident on us and our customers. Geopolitical instability may increase the likelihood that we will experience direct or collateral consequences from cyber conflicts between nation-states or other politically motivated actors targeting critical technology infrastructure. Cyber security attacks could require significant expenditures of our capital and diversion of our resources. Additionally, efforts by malicious cyber actors or others could cause interruptions, delays or cessation of our product licensing, or modification of our software, which could cause us to lose existing or potential customers. A successful cyber security attack involving our products and IT infrastructure could also negatively impact the market perception of their effectiveness and adversely affect our reputation, relationship with our customers and our financial results.

Any theft, accidental loss or misuse of confidential, personally identifiable or proprietary information could disrupt our business and result in, among other things, unfavorable publicity, damage to our reputation, loss of our trade secrets and other competitive information, difficulty in marketing our products, allegations by our customers that we have not performed our contractual obligations, litigation by affected parties and possible financial obligations for liabilities and damages related to the theft or misuse of such information, as well as fines and other sanctions resulting from any related breaches of data privacy regulations (such as the General Data Protection Regulation), any of which could have a material adverse effect on our business, profitability and financial condition. Interruptions in our operations and services or disruptions to the functionality provided by our software could adversely impact our revenues or cause customers to cease doing business with us. In addition, our business would be harmed if any of the events of this nature caused our customers and potential customers to believe our services are unreliable. Our operations are dependent upon our ability to protect our technology infrastructure against damage from business continuity events that could have a significant disruptive effect on our operations. Since the techniques used to obtain unauthorized access to systems, or to otherwise sabotage them, change frequently and are often not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures.

Fluctuations in foreign exchange rates could result in losses.

We operate global businesses and our consolidated financial results are reported in U.S. dollars. However, some of the revenue and expenses of our foreign subsidiaries are denominated in local currencies. Fluctuations in foreign exchange rates against the U.S. dollar could result in substantial changes in reported revenues and operating results due to the foreign exchange impact of translating these transactions into U.S. dollars.

In the normal course of business, we employ various hedging strategies to partially mitigate these risks, including the use of derivative instruments. These strategies may not be effective in protecting us against the effects of fluctuations in foreign exchange rates. As a result, fluctuations in foreign exchange rates could result in financial losses.

Risks Related to Our Taxes

Changes in tax legislation or policies could materially impact our financial position and results of operations.

Corporate tax reform, anti-base-erosion rules and tax transparency continue to be high priorities in many jurisdictions. As a result, policies regarding corporate income and other taxes in numerous jurisdictions are under heightened scrutiny and tax reform legislation has been, and will likely continue to be, proposed or enacted in a number of jurisdictions in which we operate.

After enactment of the U.S. Tax Cuts and Jobs Act, most of our income is taxable in the U.S. with a significant portion taxable under the Global Intangible Low-Taxed Income ("GILTI") regime. Beginning in fiscal year 2027, the deduction allowable under the GILTI regime will decrease from 50% to 37.5%, which will increase the effective tax rate imposed on our income. If the U.S. tax rate increases or the deduction allowable under the GILTI regime is further reduced or eliminated, or additional limitations are put on our ability to deduct interest expense, our provision for income taxes, net income, and cash flows would be adversely impacted.

In addition, many countries are implementing legislation and other guidance to align their international tax rules with the Organisation for Economic Co-operation and Development's ("OECD") Base Erosion and Profit Shifting recommendations and action plan that aim to standardize and modernize global corporate tax policy, including changes to cross-border tax, transfer pricing documentation rules, and nexus-based tax incentive practices. The OECD is also continuing discussions surrounding fundamental changes in allocation of profits among tax jurisdictions in which companies do business, as well as the implementation of a global minimum tax (namely the "Pillar One" and "Pillar Two" proposals). As a result of this heightened scrutiny, prior decisions by tax authorities regarding treatments and positions of corporate income taxes could be subject to enforcement activities, and legislative investigation and inquiry, which could also result in changes in tax policies or prior tax rulings. Any such changes may also result in the taxes we previously paid being subject to change. Further, many jurisdictions have passed, and may pass additional legislation, intended to alleviate the economic burdens of COVID-19 and to fund economic recovery and growth, including various temporary tax incentives or relief and restricted tax measures, which could result in future tax increases. We cannot predict the extent to which the COVID-19 pandemic will impact our tax liabilities and are continuing to evaluate the impact of the new legislation to our financial statements.

Any substantial changes in domestic or international corporate tax policies, regulations or guidance, enforcement activities or legislative initiatives may materially adversely affect our business, the amount of taxes we are required to pay and our financial condition and results of operations generally.

If the tax incentives or tax holiday arrangements we have negotiated change or cease to be in effect or applicable for any reason, or if our assumptions and interpretations regarding tax laws and incentives or holiday arrangements prove to be incorrect, our corporate income taxes could significantly increase.

Our operations are currently structured to benefit from the various tax incentives extended to us in various jurisdictions to encourage investment or employment. For example, absent our principal tax incentives from the Singapore Economic Development Board, which is scheduled to expire in 2025, the corporate income tax rate that would apply to our Singapore taxable income would be 17%. We also have a tax holiday on our qualifying income in Malaysia, which is scheduled to expire in fiscal year 2028. Each tax incentive and tax holiday is subject to our compliance with various operating and other conditions and may, in some instances, be amended or terminated prior to their scheduled termination date by the relevant governmental authority. If we cannot, or elect not to, comply with the operating conditions included in any particular tax incentive or tax holiday, we could, in some instances, be required to refund previously realized material tax benefits, or if such tax incentive or tax holiday is terminated prior to its expiration absent a new incentive applying, we will lose the related tax benefits earlier than scheduled. In addition, we may be required, or elect, to modify our operational structure and tax strategy in order to keep an incentive, which could result in a decrease in the benefits of the incentive. Our tax incentives could also be adversely impacted if the global minimum tax provisions (Pillar Two) are adopted in a country in which we have an existing tax incentive. Our tax incentives and tax holiday, before taking into consideration U.S. foreign tax credits, decreased the provision for income taxes by approximately \$1,156 million in the aggregate and increased diluted net income per share by \$2.69 for fiscal year 2021.

Our interpretations and conclusions regarding the tax incentives are not binding on any taxing authority, and if our assumptions about tax and other laws are incorrect or if these tax incentives are substantially modified or rescinded, we could suffer material adverse tax and other financial consequences, which would increase our expenses, reduce our profitability and adversely affect our cash flows.

Our income taxes and overall cash tax costs are affected by a number of factors that could materially, adversely affect financial results.

Significant judgment is required in determining our worldwide income taxes. In the ordinary course of our business, there are many transactions where the ultimate tax determination is uncertain. Additionally, our calculations of income taxes payable currently and on a deferred basis are based on our interpretations of applicable tax laws in the jurisdictions in which we are required to file tax returns. Although we believe our tax estimates are reasonable, there is no assurance that the final determination of our income tax liability will not be materially different than what is reflected in our income tax provisions and accruals.

Our income taxes are subject to volatility and could be adversely affected by numerous factors including:

- reorganization or restructuring of our businesses, tangible and intangible assets, outstanding indebtedness and corporate structure;
- jurisdictional mix of our income and assets;
- changes in the allocation of income and expenses, including adjustments related to changes in our corporate structure, acquisitions or tax law;
- changes in U.S. and foreign tax laws and regulations, changes to the taxation of earnings of foreign subsidiaries, taxation of U.S. income generated from foreign sources, the deductibility of expenses attributable to income and foreign tax credit rules;
- tax effects of increases in non-deductible employee compensation; and
- changes in tax accounting rules or principles and in the valuation of deferred tax assets and liabilities.

We have adopted transfer pricing policies that call for the provision of services, the sale of products, the arrangement of financing and the grant of licenses from one affiliate to another at prices that we believe are negotiated on an arm's length basis. Our taxable income is dependent upon acceptance by local authorities that our operational practices and intercompany transfer pricing are on an arm's length basis. Due to inconsistencies in application of the arm's length standard among taxing authorities, as well as lack of comprehensive treaty-based protection, transfer pricing challenges by tax authorities could, if successful, result in adjustments for prior or future years. The effects of any such changes could subject us to higher taxes and our earnings, results of operations and cash flow would be adversely affected.

In addition, we are subject to, and are under, tax audit in various jurisdictions, and such jurisdictions may assess additional income tax against us. Although we believe our tax positions are reasonable, the final determination of tax audits could be materially different from our income tax provisions and accruals. The ultimate result of an audit could have a material adverse effect on our results of operations and cash flows in the period or periods for which that determination is made.

Risks Related to Our Indebtedness

Our substantial indebtedness could adversely affect our financial health and our ability to execute our business strategy.

As of January 30, 2022, the aggregate indebtedness under our senior notes was \$41,244 million. We expect to maintain significant levels of indebtedness going forward.

Our substantial indebtedness could have important consequences including:

- increasing our vulnerability to adverse general economic and industry conditions;
- exposing us to interest rate risk due to our variable rate term facilities, which we do not typically hedge against;
- limiting our flexibility in planning for, or reacting to, changes in the economy and the semiconductor industry;
- placing us at a competitive disadvantage compared to our competitors with less indebtedness;
- making it more difficult to borrow additional funds in the future to fund growth, acquisitions, working capital, capital expenditures and other purposes; and
- potentially requiring us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, thereby reducing the availability of our cash flow to fund our other business needs.

We receive debt ratings from the major credit rating agencies in the U.S. Factors that may impact our credit ratings include debt levels, planned asset purchases or sales and near-term and long-term production growth opportunities. Liquidity, asset quality, cost structure, reserve mix and commodity pricing levels could also be considered by the rating agencies. While we are focused on maintaining investment grade ratings from these agencies, we may be unable to do so. Any downgrade in our credit rating or the ratings of our indebtedness, or adverse conditions in the debt capital markets, could:

- adversely affect the trading price of, or market for, our debt securities;
- increase interest expense under our term facilities;
- increase the cost of, and adversely affect our ability to refinance, our existing debt; and
- adversely affect our ability to raise additional debt.

The instruments governing our indebtedness impose certain restrictions on our business.

The instruments governing our indebtedness contain certain covenants imposing restrictions on our business. These restrictions may affect our ability to operate our business, to plan for, or react to, changes in the market conditions or our capital needs and may limit our ability to take advantage of potential business opportunities as they arise. The restrictions placed on us include maintenance of an interest coverage ratio and limitations on our ability to incur certain secured debt, enter into certain sale and lease-back transactions and consolidate, merge, sell or otherwise dispose of all or substantially all of our assets. In addition, the instruments contain customary events of default upon the occurrence of which, after any applicable grace period, the indebtedness could be declared immediately due and payable. In such event, we may not have sufficient available cash to repay such debt at the time it becomes due, or be able to refinance such debt on acceptable terms or at all. Any of the foregoing could materially adversely affect our business, financial condition and results of operations.

Servicing our debt requires a significant amount of cash, and we may not have sufficient cash flow from our business to pay our substantial debt.

Our ability to make scheduled payments of the principal of, to pay interest on, and to refinance our debt, depends on our future performance, which is subject to economic, financial, competitive and other factors. Our business may not continue to generate cash flow from operations in the future sufficient to satisfy our obligations under our current indebtedness and any future indebtedness we may incur and to make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as reducing or delaying investments or capital expenditures, selling assets, refinancing or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our outstanding indebtedness or future indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms when needed, which could result in a default on our indebtedness.

Risks Related to Owning Our Common Stock

At times, our stock price has been volatile and it may fluctuate substantially in the future, which could result in substantial losses for our investors as well as class action litigation against us and our management which could cause us to incur substantial costs and divert our management's attention and resources.

The trading price of our common stock has, at times, fluctuated significantly and could be subject to wide fluctuations in response to any of the risk factors listed in this "Risk Factors" section, and others, including:

- issuance of new or updated research or other reports by securities analysts;
- fluctuations in the valuation and results of operations of our significant customers as well as companies perceived by investors to be comparable to us;
- announcements of proposed acquisitions by us or our competitors;
- announcements of, or expectations of, additional debt or equity financing transactions;
- stock price and volume fluctuations attributable to inconsistent trading volume levels of our common stock;
- issuance, and subsequent sale, of common stock upon conversion of our 8.00% Mandatory Convertible Preferred Stock, Series A ("Mandatory Convertible Preferred Stock");
- hedging or arbitrage trading activity involving our Mandatory Convertible Preferred Stock or common stock; and
- unsubstantiated news reports or other inaccurate publicity regarding us or our business.

These fluctuations are often unrelated or disproportionate to our operating performance. Broad market and industry fluctuations, as well as general economic, political and market conditions such as recessions, interest rate changes or currency

fluctuations, may negatively impact the market price of our common stock. You may not realize any return on your investment in us and may lose some or all of your investment. In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. We are also the subject of a number of lawsuits stemming from our acquisitions. Securities litigation against us, including the lawsuits related to such transactions, could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

The amount and frequency of our stock repurchases may fluctuate.

The amount, timing and execution of our stock repurchase program may fluctuate based on our priorities for the use of cash for other purposes. These purposes include operational spending, capital spending, acquisitions, repayment of debt and returning cash to our stockholders as dividend payments. Changes in cash flows, tax laws and our stock price could also impact our stock repurchase program. We are not obligated to repurchase any specific amount of shares of common stock, and the stock repurchase program may be suspended or terminated at any time.

A substantial amount of our stock is held by a small number of large investors and significant sales of our common stock by one or more of these holders could cause our stock price to fall.

As of December 31, 2021, we believe 10 of our 20 largest holders of common stock were active institutional investors who held 29% of our outstanding shares of common stock in the aggregate, with Capital World Investors being our largest stockholder with 9% of our outstanding shares of common stock. These investors may sell their shares at any time for a variety of reasons and such sales could depress the market price of our common stock. In addition, any such sales of our common stock by these entities could also impair our ability to raise capital through the sale of additional equity securities.

There can be no assurance that we will continue to declare cash dividends.

Our Board of Directors has adopted a dividend policy pursuant to which we currently pay a cash dividend on our common stock on a quarterly basis. The declaration and payment of any dividend is subject to the approval of our Board of Directors and our dividend may be discontinued or reduced at any time. Because we are a holding company, our ability to pay cash dividends is also limited by restrictions or limitations on our ability to obtain sufficient funds through dividends from subsidiaries. In addition, any payment of dividends on our common stock is subject to and conditioned upon our payment of quarterly dividends on our Mandatory Convertible Preferred Stock. There can be no assurance that we will declare cash dividends in the future in any particular amounts, or at all.

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

Issuer Purchases of Equity Securities

In December 2021, our Board of Directors authorized a stock repurchase program to repurchase up to \$10 billion of our common stock from time to time on or prior to December 31, 2022.

The following table presents details of our various repurchases during the fiscal quarter ended January 30, 2022.

Period	Total Number of Shares Purchased ^(a)	Average Price per Share	Total Number of Shares Purchased as Part of Publicly Announced Plan ^(a)	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plan
(In millions, except per share data)				
December 14, 2021 - December 26, 2021	2	\$ 626.32	2	\$ 8,659
December 27, 2021 - January 30, 2022	2	\$ 619.63	2	\$ 7,276
Total	4	\$ 622.91	4	

(a) We also paid approximately \$375 million in employee withholding taxes due upon the vesting of net settled equity awards. We withheld approximately 1 million shares of common stock from employees in connection with such net share settlement at an average price of \$629.89 per share. These shares may be deemed to be "issuer purchases" of shares and are not included in this table.

Repurchases under our stock repurchase program may be effected through a variety of methods, including open market or privately negotiated purchases. The timing and amount of shares repurchased will depend on the stock price, business and market conditions, corporate and regulatory requirements, alternative investment opportunities, acquisition opportunities and other factors. We are not obligated to repurchase any specific amount of shares of common stock, and the stock repurchase program may be suspended or terminated at any time.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

None.

Item 5. Other Information

None.

Item 6. Exhibits
EXHIBIT INDEX

Exhibit Number	Description	Incorporated by Reference Herein		Filed Herewith
		Form	Filing Date	
2.1#	Agreement and Plan of Merger, dated as of July 11, 2018, by and among Broadcom Inc., Collie Acquisition Corp. and CA, Inc.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	July 12, 2018	
2.2#	Asset Purchase Agreement, dated August 8, 2019, by and between Broadcom Inc. and Symantec Corporation.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	August 9, 2019	
2.3#	APA Letter Agreement, dated as of October 1, 2020, by and between Broadcom Inc. and NortonLifeLock Inc.	Broadcom Inc. Annual Report on Form 10-K (Commission File No. 001-38449)	December 18, 2020	
3.1	Amended and Restated Certificate of Incorporation.	Broadcom Inc. Current Report on Form 8-K12B (Commission File No. 001-38449)	April 4, 2018	
3.2	Certificate of Designation of the 8.00% Mandatory Convertible Preferred Stock, Series A.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	September 30, 2019	
3.3	Amended and Restated Bylaws.	Broadcom Inc. Current Report on Form 8-K12B (Commission File No. 001-38449)	April 4, 2018	
4.1	Form of Common Stock Certificate.	Broadcom Inc. Quarterly Report on Form 10-Q (Commission File No. 001-38449)	June 14, 2018	
4.2	Form of Certificate of the 8.00% Mandatory Convertible Preferred Stock, Series A (included in the Exhibit 3.2).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	September 30, 2019	
4.3	Description of Common Stock.	Broadcom Inc. Annual Report on Form 10-K (Commission File No. 001-38449)	December 20, 2019	
4.4	Description of 8.00% Mandatory Convertible Preferred Stock, Series A.	Broadcom Inc. Annual Report on Form 10-K (Commission File No. 001-38449)	December 20, 2019	
4.5	Indenture, dated as of January 19, 2017, by and among the Broadcom Corporation and Broadcom Cayman Finance Limited (the "Co-Issuers"), the guarantors and Wilmington Trust, National Association, as trustee.	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	January 20, 2017	
4.6	Supplement Indenture to the January 2017 Indenture, dated as of April 9, 2018.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	April 9, 2018	
4.7	Second Supplement Indenture to the January 2017 Indenture, dated as of January 25, 2019.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	January 25, 2019	
4.8	Form of 2.375% Senior Note due 2020 (included in Exhibit 4.5).	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	January 20, 2017	
4.9	Form of 3.000% Senior Note due 2022 (included in Exhibit 4.5).	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	January 20, 2017	
4.10	Form of 3.625% Senior Note due 2024 (included in Exhibit 4.5).	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	January 20, 2017	
4.11	Form of 3.875% Senior Note due 2027 (included in Exhibit 4.5).	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	January 20, 2017	
4.12	Indenture, dated as of October 17, 2017, by and among the Co-Issuers, the guarantors and Wilmington Trust, National Association, as trustee.	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	October 17, 2017	
4.13	Supplemental Indenture to October 2017 Indenture, dated as of April 9, 2018.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	April 9, 2018	
4.14	Second Supplemental Indenture to October 2017 Indenture, dated as of January 25, 2019.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	January 25, 2019	
4.15	Form of 2.200% Senior Note due 2021 (included in Exhibit 4.12).	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	October 17, 2017	
4.16	Form of 2.650% Senior Note due 2023 (included in Exhibit 4.12).	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	October 17, 2017	
4.17	Form of 3.125% Senior Note due 2025 (included in Exhibit 4.12).	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	October 17, 2017	
4.18	Form of 3.500% Senior Note due 2028 (included in Exhibit 4.12).	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	October 17, 2017	
4.19	Indenture, dated as of April 5, 2019, by and among the Company, as Issuer, Broadcom Technologies Inc., Broadcom Corporation and Broadcom Cayman Finance Limited (the "2019 Guarantors"), and Wilmington Trust, National Association, as trustee.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	April 5, 2019	
4.20	Form of 3.125% Senior Notes due 2021 (included in Exhibit 4.19).	Broadcom Inc. Current Report on Form 8-K12B (Commission File No. 001-38449)	April 5, 2019	
4.21	Form of 3.125% Senior Notes due 2022 (included in Exhibit	Broadcom Inc. Current Report on	April 5, 2019	

	4.19).	Form 8-K (Commission File No. 001-38449)	
4.22	Form of 3.625% Senior Notes due 2024 (included in Exhibit 4.19).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	April 5, 2019
4.23	Form of 4.250% Senior Notes due 2026 (included in Exhibit 4.19).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	April 5, 2019
4.24	Form of 4.750% Senior Notes due 2029 (included in Exhibit 4.19).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	April 5, 2019
4.25	Registration Rights Agreement, dated as of April 5, 2019, by and among the Company, the 2019 Guarantors and Merrill Lynch, Pierce, Fenner & Smith Incorporated and J.P. Morgan Securities LLC, as representatives of the several initial purchasers of the April 2019 Senior Notes.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	April 5, 2019
4.26	Indenture, dated as of April 9, 2020, by and among the Company, as Issuer, Broadcom Technologies Inc. and Broadcom Corporation (the "2020 Guarantors"), and Wilmington Trust, National Association, as trustee.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	April 9, 2020
4.27	Form of 4.700% Senior Notes due 2025 (included in Exhibit 4.26).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	April 9, 2020
4.28	Form of 5.000% Senior Notes due 2030 (included in Exhibit 4.26).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	April 9, 2020
4.29	Registration Rights Agreement, dated as of April 9, 2020, by and among the Company, the 2020 Guarantors and J.P. Morgan Securities LLC, as representative of the several initial purchasers of the April 2020 Senior Notes.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	April 9, 2020
4.30	Indenture, dated as of May 8, 2020, by and among the Company, as Issuer, the 2020 Guarantors, and Wilmington Trust, National Association, as trustee.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	May 8, 2020
4.31	Form of 2.250% Senior Notes due 2023 (included in Exhibit 4.30).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	May 8, 2020
4.32	Form of 3.150% Senior Notes due 2025 (included in Exhibit 4.30).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	May 8, 2020
4.33	Form of 4.150% Senior Notes due 2030 (included in Exhibit 4.30).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	May 8, 2020
4.34	Form of 4.300% Senior Notes due 2032 (included in Exhibit 4.30).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	May 8, 2020
4.35	Registration Rights Agreement, dated as of May 8, 2020, by and among the Company, the 2020 Guarantors and Citigroup Global Markets Inc., HSBC Securities (USA) Inc., J.P. Morgan Securities LLC and Wells Fargo Securities, LLC, as representatives of the several initial purchasers of the May 2020 Senior Notes.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	May 8, 2020
4.36	Indenture, dated as of May 21, 2020, by and among the Company, the 2020 Guarantors and Wilmington Trust, National Association, as trustee.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	May 21, 2020
4.37	Form of 3.459% Senior Notes due 2026 (included in Exhibit 4.36).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	May 21, 2020
4.38	Form of 4.110% Senior Notes due 2028 (included in Exhibit 4.36).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	May 21, 2020
4.39	Registration Rights Agreement, dated as of May 21, 2020, by and among the Company, the 2020 Guarantors and Barclays Capital Inc. and Credit Suisse Securities (USA) LLC, as dealer-managers in connection with the 2020 Exchange Offers.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	May 21, 2020
4.40	Indenture, dated as of January 19, 2021, by and among the Company, the 2020 Guarantors and Wilmington Trust, National Association, as Trustee.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	January 19, 2021
4.41	Form of 1.950% Senior Notes due 2028 (included in Exhibit 4.40).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	January 19, 2021
4.42	Form of 2.450% Senior Notes due 2031 (included in Exhibit 4.40).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	January 19, 2021
4.43	Form of 2.600% Senior Notes due 2033 (included in Exhibit 4.40).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	January 19, 2021
4.44	Form of 3.500% Senior Notes due 2041 (included in Exhibit 4.40).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	January 19, 2021
4.45	Form of 3.750% Senior Notes due 2051 (included in Exhibit 4.40).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	January 19, 2021
4.46	Registration Rights Agreement, dated as of January 19, 2021, by and among the Company, the 2020 Guarantors and Morgan Stanley & Co. LLC, BNP Paribas Securities Corp., RBC Capital Markets, LLC, SMBC Nikko Securities America, Inc., and Truist Securities, Inc., as representatives of the several initial purchasers of the January 2021 Senior Notes.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	January 19, 2021
4.47	Indenture, dated as of March 31, 2021, by and between the Company and Wilmington Trust, National Association, as Trustee.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	March 31, 2021
4.48	Form of 3.419% Senior Notes due 2033 (included in Exhibit	Broadcom Inc. Current Report on	March 31, 2021

	4.47).	Form 8-K (Commission File No. 001-38449)	
4.49	Form of 3.469% Senior Notes due 2034 (included in Exhibit 4.47).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	March 31, 2021
4.50	Registration Rights Agreement, dated as of March 31, 2021, by and among the Company and BofA Securities, Inc. and HSBC Securities (USA) Inc., as dealer-managers in connection with the March 2021 Senior Notes.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	March 31, 2021
4.51	Indenture, dated as of September 30, 2021, by and between the Company and Wilmington Trust, National Association, as Trustee.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	September 30, 2021
4.52	Form of 3.137% Senior Notes due 2035 (included in Exhibit 4.51).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	September 30, 2021
4.53	Form of 3.187% Senior Notes due 2036 (included in Exhibit 4.51).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	September 30, 2021
4.54	Registration Rights Agreement, dated as of September 30, 2021, by and among the Company and BNP Paribas Securities Corp., J.P. Morgan Securities LLC and TD Securities (USA) LLC, as dealer-managers in connection with the 2021 Exchange Offers.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	September 30, 2021
31.1	Certification of Principal Executive Officer of Broadcom Inc. Pursuant to Rule 13a-14 of the Securities Exchange Act of 1934, As Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.		X
31.2	Certification of Principal Financial Officer of Broadcom Inc. Pursuant to Rule 13a-14 of the Securities Exchange Act of 1934, As Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.		X
32.1	Certification of Principal Executive Officer of Broadcom Inc. Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.		X
32.2	Certification of Principal Financial Officer of Broadcom Inc. Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.		X
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.		X
101.SCH	XBRL Schema Document		X
101.CAL	XBRL Calculation Linkbase Document		X
101.DEF	XBRL Definition Linkbase Document		X
101.LAB	XBRL Labels Linkbase Document		X
101.PRE	XBRL Presentation Linkbase Document		X
104	Cover Page Interactive Data File - the cover page interactive data file does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.		X

Schedules have been omitted pursuant to Item 601(b)(2) of Regulation S-K. Broadcom Inc. hereby undertakes to furnish supplementally copies of any omitted schedules upon request by the SEC.

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.

BROADCOM INC.

By: /s/ Kirsten M. Spears
Kirsten M. Spears
Chief Financial Officer

Date: March 10, 2022