

APPLIED MATERIALS INC /DE (CIK 0000006951), 10-K for period end Oct-2017

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Document and Entity Information (USD \$)	12 Months Ended		
	Oct. 29, 2017	Dec. 08, 2017	Apr. 28, 2017
Document and Entity Information [Abstract]			
Entity Registrant Name	APPLIED MATERIALS INC /DE	-	-
Entity Central Index Key	0000006951	-	-
Current Fiscal Year End Date	--10-29	-	-
Entity Filer Category	Large Accelerated Filer	-	-
Document Type	10-K	-	-
Document Period End Date	Oct. 29, 2017	-	-
Document Fiscal Year Focus	2017	-	-
Document Fiscal Period Focus	FY	-	-
Amendment Flag	false	-	-
Entity Common Stock, Shares Outstanding	-	1,056,340,714	-
Entity Well-known Seasoned Issuer	Yes	-	-
Entity Voluntary Filers	No	-	-
Entity Current Reporting Status	Yes	-	-
Entity Public Float	-	-	\$ 43,552,849,133

Consolidated Statements of Operations (USD \$) In Millions, except Per Share data, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Income Statement [Abstract]			
Net sales	\$ 14,537	\$ 10,825	\$ 9,659
Cost of products sold	8,005	6,314	5,707
Gross profit	6,532	4,511	3,952
Operating expenses:			
Research, development and engineering	1,774	1,540	1,451
Marketing and selling	456	429	428
General and administrative	434	390	469
Gain on derivatives associated with terminated business combination	0	0	(89)
Total operating expenses	2,664	2,359	2,259
Income from operations	3,868	2,152	1,693
Interest expense	198	155	103
Interest and other income, net	61	16	8
Income before income taxes	3,731	2,013	1,598
Provision for income taxes	297	292	221
Net income	\$ 3,434	\$ 1,721	\$ 1,377
Earnings per share:			
Basic (in dollars per share)	\$ 3.20	\$ 1.56	\$ 1.13
Diluted (in dollars per share)	\$ 3.17	\$ 1.54	\$ 1.12
Weighted average number of shares:			
Basic (in shares)	1,073	1,107	1,214
Diluted (in shares)	1,084	1,116	1,226

Consolidated Statements of Comprehensive Income (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Statement of Comprehensive Income [Abstract]			
Net income	\$ 3,434	\$ 1,721	\$ 1,377
Other comprehensive income (loss), net of tax:			
Change in unrealized net gain on investments	23	16	(10)
Change in unrealized net loss on derivative instruments	7	(3)	(15)
Change in defined and postretirement benefit plans	21	(36)	0
Change in cumulative translation adjustments	0	0	9
Other comprehensive income (loss), net of tax	51	(23)	(16)
Comprehensive income	\$ 3,485	\$ 1,698	\$ 1,361

Consolidated Balance Sheets (USD \$) In Millions, unless otherwise specified	Oct. 29, 2017	Oct. 30, 2016
Current assets:		
Cash and cash equivalents	\$ 5,010	\$ 3,406
Short-term investments	2,266	343
Accounts receivable, net	2,338	2,279
Inventories	2,930	2,050
Other current assets	374	275
Total current assets	12,918	8,353
Long-term investments	1,143	929
Property, plant and equipment, net	1,066	937
Goodwill	3,368	3,316
Purchased technology and other intangible assets, net	412	575
Deferred income taxes and other assets	512	460
Total assets	19,419	14,570
Current liabilities:		
Accounts payable, notes payable and accrued expenses	2,450	2,256
Customer deposits and deferred revenue	1,665	1,376
Total current liabilities	4,115	3,632
Long-term debt	5,304	3,125
Other liabilities	651	596
Total liabilities	10,070	7,353
Commitments and contingencies (Note 14)	-	-
Stockholders' equity:		
Preferred stock: \$.01 par value per share; 1 shares authorized; no shares issued	0	0
Common stock: \$.01 par value per share; 2,500 shares authorized; 1,060 and 1,078 shares outstanding at 2017 and 2016, respectively	11	11
Additional paid-in capital	7,056	6,809
Retained earnings	18,258	15,252
Treasury stock: 917 and 889 shares at 2017 and 2016, respectively	(15,912)	(14,740)
Accumulated other comprehensive loss	(64)	(115)
Total stockholders' equity	9,349	7,217
Total liabilities and stockholders' equity	\$ 19,419	\$ 14,570

Consolidated Balance Sheets (Parenthetical) (USD \$)	Oct. 29, 2017	Oct. 30, 2016
Stockholders' equity:		
Preferred stock, par value per share (in dollars per share)	\$ 0.01	\$ 0.01
Preferred stock, shares authorized	1,000,000	1,000,000
Preferred stock, shares issued	0	0
Common stock, par value per share (in dollars per share)	\$ 0.01	\$ 0.01
Common stock, shares authorized	2,500,000,000	2,500,000,000
Common stock, shares outstanding	1,060,000,000	1,078,000,000
Treasury stock, shares	917,000,000	889,000,000

Consolidated Statements of Stockholders' Equity (USD \$) In Millions, unless otherwise specified	Total	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)
Beginning Balance at Oct. 26, 2014	\$ 7,868	\$ 12	\$ 6,384	\$ 13,072	\$ (11,524)	\$ (76)
Beginning Balance, (in shares) at Oct. 26, 2014	-	1,221	-	-	717	-
Increase (Decrease) in Stockholders' Equity [Roll Forward]						
Net income	1,377	-	-	1,377	-	-
Other comprehensive income (loss), net of tax	(16)	-	-	-	-	(16)
Dividends	(482)	-	-	(482)	-	-
Share-based compensation	187	-	187	-	-	-
Issuance under stock plans, net of a tax benefit, (in shares)	-	15	-	-	-	-
Issuance under stock plans, net of a tax benefit \$55, \$23 and \$55 for 2017, 2016 and 2015, respectively	4	-	4	-	-	-
Common stock repurchases, (in shares)	(76)	(76)	-	-	(76)	-
Common stock repurchases	(1,325)	(1)	-	-	(1,324)	-
Ending Balance at Oct. 25, 2015	7,613	11	6,575	13,967	(12,848)	(92)
Ending Balance, (in shares) at Oct. 25, 2015	-	1,160	-	-	793	-
Increase (Decrease) in Stockholders' Equity [Roll Forward]						
Net income	1,721	-	-	1,721	-	-
Other comprehensive income (loss), net of tax	(23)	-	-	-	-	(23)
Dividends	(436)	-	-	(436)	-	-
Share-based compensation	201	-	201	-	-	-
Issuance under stock plans, net of a tax benefit, (in shares)	-	14	-	-	-	-
Issuance under stock plans, net of a tax benefit \$55, \$23 and \$55 for 2017, 2016 and 2015, respectively	33	-	33	-	-	-
Common stock repurchases, (in shares)	(96)	(96)	-	-	(96)	-
Common stock repurchases	(1,892)	0	-	-	(1,892)	-
Ending Balance at Oct. 30, 2016	7,217	11	6,809	15,252	(14,740)	(115)
Ending Balance, (in shares) at Oct. 30, 2016	-	1,078	-	-	889	-
Increase (Decrease) in Stockholders' Equity [Roll Forward]						
Net income	3,434	-	-	3,434	-	-
Other comprehensive income (loss), net of tax	51	-	-	-	-	51
Dividends	(428)	-	-	(428)	-	-
Share-based compensation	220	-	220	-	-	-
Issuance under stock plans, net of a tax benefit, (in shares)	-	10	-	-	-	-
Issuance under stock plans, net of a tax benefit \$55, \$23 and \$55 for 2017, 2016 and 2015, respectively	27	-	27	-	-	-
Common stock repurchases, (in shares)	(28)	(28)	-	-	(28)	-
Common stock repurchases	(1,172)	0	-	-	(1,172)	-
Ending Balance at Oct. 29, 2017	\$ 9,349	\$ 11	\$ 7,056	\$ 18,258	\$ (15,912)	\$ (64)
Ending Balance, (in shares) at Oct. 29, 2017	-	1,060	-	-	917	-

Consolidated Statements of Stockholders' Equity (Parenthetical) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Statement of Stockholders' Equity [Abstract]			
Tax benefit included in issuance under stock plans	\$ 55	\$ 23	\$ 55

Consolidated Statements of Cash Flows (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Cash flows from operating activities:			
Net income	\$ 3,434	\$ 1,721	\$ 1,377
Adjustments required to reconcile net income to cash provided by operating activities:			
Depreciation and amortization	407	389	371
Excess tax benefits from share-based compensation	(55)	(23)	(56)
Deferred income taxes	(11)	21	(134)
Other	(9)	38	53
Share-based compensation	220	201	187
Changes in operating assets and liabilities, net of amounts acquired:			
Accounts receivable	(37)	(542)	(61)
Inventories	(879)	(216)	(266)
Other current and non-current assets	(157)	30	26
Accounts payable and accrued expenses	245	107	(133)
Customer deposits and deferred revenue	289	611	(175)
Income taxes payable	121	173	(24)
Other liabilities	41	(44)	(2)
Cash provided by operating activities	3,609	2,466	1,163
Cash flows from investing activities:			
Capital expenditures	(345)	(253)	(215)
Cash paid for acquisitions, net of cash acquired	(68)	(16)	(4)
Proceeds from sales and maturities of investments	2,743	1,234	1,100
Purchases of investments	(4,856)	(1,390)	(1,162)
Cash used in investing activities	(2,526)	(425)	(281)
Cash flows from financing activities:			
Debt borrowings, net of issuance costs	2,176	0	2,581
Debt repayments	(205)	(1,207)	0
Proceeds from common stock issuances	97	88	88
Common stock repurchases	(1,172)	(1,892)	(1,325)
Payments of dividends to stockholders	(430)	(444)	(487)
Excess tax benefits from share-based compensation	55	23	56
Cash provided by (used in) financing activities	521	(3,432)	913
Increase (decrease) in cash and cash equivalents	1,604	(1,391)	1,795
Cash and cash equivalents — beginning of year	3,406	4,797	3,002
Cash and cash equivalents — end of year	5,010	3,406	4,797
Supplemental cash flow information:			
Cash payments for income taxes	194	157	407
Cash refunds from income taxes	61	113	12
Cash payments for interest	\$ 186	\$ 151	\$ 92

Summary of Significant Accounting Policies	12 Months Ended
	Oct. 29, 2017
Accounting Policies [Abstract]	
Summary of Significant Accounting Policies	<p>Summary of Significant Accounting Policies</p> <p><i>Principles of Consolidation and Basis of Presentation</i></p> <p>The consolidated financial statements include the accounts of Applied Materials, Inc. and its subsidiaries (Applied or the Company) after elimination of intercompany balances and transactions. All references to a fiscal year apply to Applied's fiscal year which ends on the last Sunday in October. Fiscal 2017, 2016 and 2015 contained 52, 53, and 52 weeks, respectively. Each fiscal quarter of 2017 and 2015 contained 13 weeks. The first fiscal quarter of 2016 contained 14 weeks, while the second, third and fourth quarters of fiscal 2016 contained 13 weeks.</p> <p>Certain prior year amounts have been reclassified to conform to current year presentation.</p> <p><i>Use of Estimates</i></p> <p>The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make judgments, estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ materially from those estimates. On an ongoing basis, Applied evaluates its estimates, including those related to accounts receivable and sales allowances, fair values of financial instruments, inventories, intangible assets and goodwill, useful lives of intangible assets and property and equipment, fair values of share-based awards, and income taxes, among others. Applied bases its estimates on historical experience and on various other assumptions that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities.</p> <p><i>Cash Equivalents</i></p> <p>All highly-liquid investments with a remaining maturity of three months or less at the time of purchase are considered to be cash equivalents. Cash equivalents consist primarily of investments in institutional money market funds.</p> <p><i>Investments</i></p> <p>All of Applied's investments, except equity investments held in privately-held companies, are classified as available-for-sale at the respective balance sheet dates. Investments classified as available-for-sale are recorded at fair value based upon quoted market prices, and any temporary difference between the cost and fair value of an investment is presented as a separate component of accumulated other comprehensive income (loss). The specific identification method is used to determine the gains and losses on investments. Interest earned on cash and investments, as well as realized gains and losses on sale of securities, are included in interest and other income, net in the accompanying Consolidated Statements of Operations.</p> <p>Equity investments in privately-held companies are generally accounted for under the cost method of accounting and are periodically assessed for other-than-temporary impairment when an event or circumstance indicates that an other-than-temporary decline in value may have occurred.</p> <p><i>Allowance for Doubtful Accounts</i></p> <p>Applied maintains an allowance for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. This allowance is based on historical experience, credit evaluations, specific customer collection history and any customer-specific issues Applied has identified. Changes in circumstances, such as an unexpected material adverse change in a major customer's ability to meet its financial obligation to Applied or its payment trends, may require Applied to further adjust its estimates of the recoverability of amounts due to Applied. Bad debt expense and any reversals are recorded in marketing and selling expenses in the Consolidated Statement of Operations.</p> <p><i>Inventories</i></p> <p>Inventories are stated at the lower of cost or market, with cost determined on a first-in, first-out (FIFO) basis. Applied adjusts inventory carrying value for estimated obsolescence equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions. Applied fully writes down inventories and</p>

noncancelable purchase orders for inventory deemed obsolete. Applied performs periodic reviews of inventory items to identify excess inventories on hand by comparing on-hand balances to anticipated usage using recent historical activity as well as anticipated or forecasted demand. If estimates of customer demand diminish further or market conditions become less favorable than those projected by Applied, additional inventory adjustments may be required.

Property, Plant and Equipment

Property, plant and equipment is stated at cost. Depreciation is provided over the estimated useful lives of the assets using the straight-line method. Estimated useful lives for financial reporting purposes are as follows: buildings and improvements, 3 to 30 years; demonstration and manufacturing equipment, 3 to 5 years; software, 3 to 5 years; and furniture, fixtures and other equipment, 3 to 15 years. Land improvements are amortized over the shorter of 15 years or the estimated useful life. Leasehold improvements are amortized over the shorter of five years or the lease term.

Intangible Assets

Goodwill and indefinite-lived assets are not amortized, but are reviewed for impairment annually during the fourth quarter of each fiscal year and whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. Purchased technology and other intangible assets are presented at cost, net of accumulated amortization, and are amortized over their estimated useful lives of 1 to 15 years using the straight-line method.

Long-Lived Assets

Applied reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of these assets or asset group may not be recoverable. Applied assesses these assets for impairment based on estimated future cash flows from these assets.

Research, Development and Engineering Costs

Research, development and engineering costs are expensed as incurred.

Sales and Value Added Taxes

Taxes collected from customers and remitted to governmental authorities are presented on a net basis in the accompanying Consolidated Statements of Operations.

Warranty

Applied provides for the estimated cost of warranty when revenue is recognized. Estimated warranty costs are determined by analyzing specific product, current and historical configuration statistics and regional warranty support costs. Applied's warranty obligation is affected by product and component failure rates, material usage and labor costs incurred in correcting product failures during the warranty period. If actual warranty costs differ substantially from Applied's estimates, revisions to the estimated warranty liability would be required.

Income Taxes

Applied recognizes a current tax liability for the estimated amount of income tax payable on tax returns for the current fiscal year. Deferred tax assets and liabilities are recognized for the estimated future tax effects of temporary differences between the book and tax bases of assets and liabilities. Deferred tax assets are also recognized for net operating loss and tax credit carryovers. Deferred tax assets are offset by a valuation allowance to the extent it is more likely than not that they are not expected to be realized.

Applied recognizes tax benefits from uncertain tax positions only if it is more likely than not that the tax position will be sustained upon examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized from such positions are estimated based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. Any changes in judgment related to uncertain tax positions are recognized in the Consolidated Statement of Operations in the quarter in which such change occurs. Interest and penalties related to uncertain tax positions are recognized in Applied's provision for income taxes.

Revenue Recognition

Applied recognizes revenue when all four revenue recognition criteria have been met:

Applied recognizes revenue when all four revenue recognition criteria have been met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; seller's price to buyer is fixed or determinable; and collectability is probable. Applied's shipping terms are customarily FOB Applied shipping point or equivalent terms. Applied's revenue recognition policy generally results in revenue recognition at the following points: (1) for all transactions where legal title passes to the customer upon shipment or delivery, Applied recognizes revenue upon passage of title for all products that have been demonstrated to meet product specifications prior to shipment; the portion of revenue associated with certain installation-related tasks is deferred, and that revenue is recognized upon completion of the installation-related tasks; (2) for products that have not been demonstrated to meet product specifications prior to shipment, revenue is recognized at customer technical acceptance; (3) for transactions where legal title does not pass at shipment or delivery, revenue is recognized when legal title passes to the customer, which is generally at customer technical acceptance; and (4) for arrangements containing multiple elements, the revenue relating to the undelivered elements is deferred using the relative selling price method utilizing estimated sales prices until delivery of the deferred elements. Applied limits the amount of revenue recognition for delivered elements to the amount that is not contingent on the future delivery of products or services, future performance obligations or subject to customer-specified return or adjustment. In cases where Applied has sold products that have been demonstrated to meet product specifications prior to shipment, Applied believes that at the time of delivery, it has an enforceable claim to amounts recognized as revenue. Spare parts revenue is generally recognized upon shipment, and services revenue is generally recognized over the period that the services are provided.

When a sales arrangement contains multiple elements, such as hardware and services and/or software products, Applied allocates revenue to each element based on a selling price hierarchy. The selling price for a deliverable is based on its vendor specific objective evidence (VSOE) if available, third party evidence (TPE) if VSOE is not available, or estimated selling price (ESP) if neither VSOE nor TPE is available. Applied generally utilizes the ESP due to the nature of its products. In multiple element arrangements where more-than-incidental software deliverables are included, revenue is allocated to each separate unit of accounting for each of the non-software deliverables and to the software deliverables as a group using the relative selling prices of each of the deliverables in the arrangement based on the aforementioned selling price hierarchy. If the arrangement contains more than one software deliverable, the arrangement consideration allocated to the software deliverables as a group is then allocated to each software deliverable using the guidance for recognizing software revenue.

Derivative Financial Instruments

Applied uses financial instruments, such as forward exchange and currency option contracts, to hedge a portion of, but not all, existing and anticipated foreign currency denominated transactions typically expected to occur within 24 months. The purpose of Applied's foreign currency management is to mitigate the effect of exchange rate fluctuations on certain foreign currency denominated revenues, costs and eventual cash flows. In certain cases, Applied also uses interest rate swap or lock agreements to hedge against the variability of cash flows due to changes in the benchmark interest rate of fixed rate debt. The terms of derivative financial instruments used for hedging purposes are generally consistent with the timing of the transactions being hedged. All of Applied's derivative financial instruments are recorded at fair value based upon quoted market prices for comparable instruments. For derivative instruments designated and qualifying as cash flow hedges, the effective portion of the gain or loss on these hedges is reported as a component of accumulated other comprehensive income (loss) in stockholders' equity, and is reclassified into earnings when the hedged transaction affects earnings. If the transaction being hedged fails to occur, or if a portion of any derivative is ineffective, the gain or loss on the associated financial instrument is recorded promptly in earnings. For derivative instruments used to hedge existing foreign currency denominated assets or liabilities, the gain or loss on these hedges is recorded promptly in earnings to offset the changes in the fair value of the assets or liabilities being hedged. Applied does not use derivative financial instruments for trading or speculative purposes.

Foreign Currencies

As of October 29, 2017, all of Applied's subsidiaries use the United States dollar as their functional currency. Accordingly, assets and liabilities of these subsidiaries are remeasured using exchange rates in effect at the end of the period, except for non-monetary assets, such as inventories and property, plant and equipment, which are remeasured using historical exchange rates. Foreign currency-denominated revenues and costs are remeasured using average exchange rates for the period, except for costs related to those balance sheet items that are remeasured using historical

exchange rates. The resulting remeasurement gains and losses are included in general and administrative expenses in the Consolidated Statements of Operations as incurred.

Concentrations of Credit Risk

Financial instruments that potentially subject Applied to significant concentrations of credit risk consist principally of cash equivalents, investments, trade accounts receivable and derivative financial instruments used in hedging activities. Applied invests in a variety of financial instruments, such as, but not limited to, certificates of deposit, corporate and municipal bonds, United States Treasury and agency securities, and asset-backed and mortgage-backed securities, and, by policy, limits the amount of credit exposure with any one financial institution or commercial issuer. Applied performs ongoing credit evaluations of its customers' financial condition and generally requires no collateral to secure accounts receivable. Applied maintains an allowance reserve for potentially uncollectible accounts receivable based on its assessment of the collectability of accounts receivable. Applied regularly reviews the allowance by considering factors such as historical experience, credit quality, age of the accounts receivable balances, and current economic conditions that may affect a customer's ability to pay. In addition, Applied utilizes letters of credit to mitigate credit risk when considered appropriate. Applied is exposed to credit-related losses in the event of nonperformance by counterparties to derivative financial instruments, but does not expect any counterparties to fail to meet their obligations. In some instances, Applied has entered into security arrangements which require the counterparties to post collateral to further mitigate credit exposure.

Recent Accounting Pronouncements

Accounting Standards Adopted

Debt Issuance Costs. In April 2015, the Financial Accounting Standard Board (FASB) issued authoritative guidance that requires debt issuance costs to be presented in the balance sheet as a direct deduction from the carrying amount of the related debt liability, consistent with debt discounts. Effective in the first quarter of fiscal 2017, Applied adopted the authoritative guidance retrospectively. The adoption of this guidance did not have a significant impact on Applied's consolidated financial statements. See Note 10 of Notes to Consolidated Financial Statements for additional discussion.

Fair Value Disclosures. In May 2015, the FASB issued authoritative guidance to remove the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value per share practical expedient. The new guidance also removes the requirement of certain disclosures for all investments that are eligible to be measured at fair value using the net asset value per share practical expedient. The guidance became effective for Applied in the first quarter of fiscal 2017, with retrospective application. The adoption of this guidance only impacts disclosures in Applied's annual consolidated financial statements.

Intangibles: Internal-Use Software. In April 2015, the FASB issued authoritative guidance for customers about whether a cloud computing arrangement includes a software license. If a cloud computing arrangement includes a software license, then the customer should account for the software license element of the arrangement consistent with the acquisition of other software licenses. If a cloud computing arrangement does not include a software license, the customer should account for the arrangement as a service contract. This guidance did not change accounting for service contracts. Applied adopted this guidance effective in the first quarter of fiscal 2017 prospectively to all arrangements entered into or materially modified after the effective date. The adoption of this guidance did not have a significant impact on Applied's consolidated financial statements.

Accounting Standards Not Yet Adopted

Derivatives and Hedging. In August 2017, the FASB issued authoritative guidance that modifies the recognition and presentation of hedge accounting to better align an entity's risk management strategies and financial reporting for hedging relationships. The authoritative guidance expands the application of hedge accounting for non-financial and financial risk components and eases certain hedge effectiveness assessment requirements. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2020, with early adoption permitted. Applied is currently evaluating the effect of this new guidance on Applied's consolidated financial statements.

Share-Based Compensation: Modification Accounting. In May 2017, the FASB issued an

update to clarify when to account for a change to the terms or conditions of a share-based payment award as a modification. Under the new guidance, modification accounting is required only if the fair value, the vesting conditions, or the classification of the award changes as a result of the change in terms or conditions. This authoritative guidance will be applied prospectively to awards modified following adoption and will be effective for Applied in the first quarter of fiscal 2019 with early adoption permitted. The impact of the adoption of this guidance will depend on whether the Company makes any future modifications of share-based payment awards.

Receivables: Nonrefundable Fees and Other Costs. In March 2017, the FASB issued authoritative guidance that will shorten the amortization period for certain callable debt securities held at a premium to the earliest call date to more closely align with expectations incorporated in market pricing. This authoritative guidance will be effective for Applied in the first quarter of fiscal 2020 on a modified retrospective basis, with early adoption permitted. Applied is currently evaluating the impact of adopting this new accounting guidance on Applied's consolidated financial statements.

Retirement Benefits. In March 2017, the FASB issued authoritative guidance which requires companies to present the service cost component of net benefit cost in the same line items in which they report compensation cost. The other components of net benefit cost are required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations, if one is presented. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2019 on a retrospective basis, with early adoption permitted. The adoption of this guidance is only expected to result in reclassification of other components of net benefit costs outside of income from operations and is not expected to have a significant impact on Applied's consolidated financial statements.

Goodwill Impairment. In January 2017, the FASB issued authoritative guidance that simplifies the process required to test goodwill for impairment. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2021. Early adoption is permitted. The adoption of this guidance is not expected to have a significant impact on Applied's consolidated financial statements.

Business Combinations. In January 2017, the FASB issued authoritative guidance that clarifies the definition of a business to help companies evaluate whether acquisition or disposal transactions should be accounted for as asset groups or as businesses. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2019 on a prospective basis, with early adoption permitted. The impact of the adoption depends on the facts and circumstances of future acquisition or disposal transactions.

Income Taxes: Intra-Entity Asset Transfers. In October 2016, the FASB issued authoritative guidance that requires entities to recognize at the transaction date the income tax consequences of intercompany asset transfers other than inventory. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2019, with early adoption permitted. Applied is currently evaluating the effect of this new guidance on Applied's consolidated financial statements.

Classification of Certain Cash Receipts and Cash Payments. In August 2016, the FASB issued authoritative guidance which addresses classification of certain cash receipts and cash payments related to the statement of cash flows. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2019. The adoption of this guidance is not expected to have a significant impact on Applied's consolidated financial statements.

Financial Instruments: Credit Losses. In June 2016, the FASB issued authoritative guidance that modifies the impairment model for certain financial assets by requiring use of an expected loss methodology, which will result in more timely recognition of credit losses. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2021. Early adoption is permitted beginning in the first quarter of fiscal 2020. Applied is currently evaluating the effect of this new guidance on Applied's consolidated financial statements.

Share-Based Compensation. In March 2016, the FASB issued authoritative guidance that simplifies several aspects of the accounting for share-based payment transactions, including the income tax consequences, forfeitures, classification of awards as either equity or liabilities, and classification on the statement of cash flows. Applied plans to adopt the authoritative guidance effective in the first quarter of fiscal 2018. Upon adoption, Applied will elect to continue to estimate forfeitures expected to occur to determine the amount of compensation cost to be recognized in each period. The new standard will result in the recognition of excess tax benefits for income taxes rather than paid-in capital prospectively, which is expected to increase volatility in Applied's results of operations. Applied will elect to apply the presentation requirements for cash flows related

results of operations. Applied will elect to apply the presentation requirements for cash flows related to excess tax benefits retrospectively. The presentation requirements for cash flows related to employee taxes paid for withheld shares will be presented as a financing activity retrospectively, as required. Applied expects cash flow from operations to increase, with a corresponding decrease in cash flow from financing activity as a result of the changes in the cash flow presentation.

Leases. In February 2016, the FASB issued authoritative guidance for lease accounting, which requires lessees to recognize lease assets and liabilities on the balance sheet for certain lease arrangements that are classified as operating leases under the previous standard, and to provide for enhanced disclosures. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2020 and should be applied using a modified retrospective approach. Early adoption is permitted. Applied is currently evaluating the effect of this new guidance on Applied's consolidated financial statements.

Financial Instruments: Classification and Measurement. In January 2016, the FASB issued authoritative guidance that requires equity investments that do not result in consolidation, and are not accounted for under the equity method, to be measured at fair value, and requires recognition of any changes in fair value in net income unless the investments qualify for a new practicability exception. For financial liabilities measured at fair value, the change in fair value caused by a change in instrument-specific credit risk will be required to be presented separately in other comprehensive income. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2019. Early adoption is permitted only for the provisions related to the recognition of changes in fair value of financial liabilities caused by instrument-specific credit risk. Applied is currently evaluating the effect of this new guidance on Applied's consolidated financial statements.

Inventory Measurement. In July 2015, the FASB issued authoritative guidance that requires inventory to be measured at the lower of cost and net realizable value instead of at lower of cost or market. This guidance does not apply to inventory that is measured using last-in, first out (LIFO) or the retail inventory method but applies to all other inventory including those measured using first-in, first-out (FIFO) or the average cost method. Applied will adopt this authoritative guidance in the first quarter of fiscal 2018 prospectively to measurement of inventory after the effective date. The adoption of this guidance is not expected to have a significant impact on Applied's consolidated financial statements.

Revenue Recognition. In May 2014, the FASB issued authoritative guidance that requires revenue recognition to depict the transfer of promised goods or services to a customer in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services, and requires certain additional disclosures. This new standard will supersede most current revenue recognition guidance, including industry-specific guidance. Entities will have the option of using either a full retrospective or modified retrospective approach to adopting the guidance. In August 2015, the FASB issued an amendment to defer the effective date by one year and allow entities to early adopt no earlier than the original effective date. With this amendment, the guidance will be effective for Applied in the first quarter of fiscal 2019, which is the Company's planned adoption date. Applied currently anticipates adopting this new guidance using the full retrospective approach, although this continues to be assessed as part of the overall evaluation.

In fiscal 2016, Applied established a project steering committee and cross-functional implementation team to identify potential differences that would result from applying the requirements of the new standard to Applied's revenue contracts. In addition, the implementation team is also responsible for identifying and implementing changes to business processes, systems and controls to support recognition and disclosure under the new standard. While the Company's evaluation of the impact of this new guidance is not complete, Applied currently expects the timing of revenue recognition for certain products to be earlier than under current revenue recognition guidance. Applied will continue to complete its evaluation of the effect of this new guidance on Applied's financial position, results of operations and its ongoing financial reporting, and its preliminary assessments are subject to change.

Earnings Per Share	12 Months Ended		
	Oct. 29, 2017		
Earnings Per Share [Abstract]			
Earnings Per Share	Earnings Per Share		
Basic earnings per share is determined using the weighted average number of common shares outstanding during the period. Diluted earnings per share is determined using the weighted average number of common shares and potential common shares (representing the dilutive effect of stock options, restricted stock units, and employee stock purchase plan shares) outstanding during the period. Applied’s net income has not been adjusted for any period presented for purposes of computing basic or diluted earnings per share due to the Company’s non-complex capital structure.			
Fiscal Year	2017	2016	2015
(In millions, except per share amounts)			
Numerator:			
Net income	\$ 3,434	\$ 1,721	\$ 1,377
Denominator:			
Weighted average common shares outstanding	1,073	1,107	1,214
Effect of dilutive stock options, restricted stock units and employee stock purchase plan shares	11	9	12
Denominator for diluted earnings per share	1,084	1,116	1,226
Basic earnings per share	\$ 3.20	\$ 1.56	\$ 1.13
Diluted earnings per share	\$ 3.17	\$ 1.54	\$ 1.12
Potentially dilutive securities	—	—	—
Potentially dilutive securities attributable to outstanding stock options and restricted stock units are excluded from the calculation of diluted earnings per share where the combined exercise price, average unamortized fair value and assumed tax benefits upon the exercise of options and the vesting of restricted stock units are greater than the average market price of Applied common stock, and therefore their inclusion would be anti-dilutive.			

Cash, Cash Equivalents and Investments	12 Months Ended			
	Oct. 29, 2017			
Cash and Cash Equivalents [Abstract]				
Cash, Cash Equivalents and Investments	Cash, Cash Equivalents and Investments			
	Summary of Cash, Cash Equivalents and Investments			
	The following tables summarize Applied's cash, cash equivalents and investments by security type:			
<u>October 29, 2017</u>	<u>Cost</u>	<u>Gross Unrealized Gains</u>	<u>Gross Unrealized Losses</u>	<u>Estimated Fair Value</u>
	(In millions)			
Cash	\$ 1,346	\$ —	\$ —	\$ 1,346
Cash equivalents:				
Money market funds	2,658	—	—	2,658
U.S. Treasury and agency securities	15	—	—	15
Non-U.S. government securities*	55	—	—	55
Municipal securities	341	—	—	341
Commercial paper, corporate bonds and medium-term notes	595	—	—	595
Total Cash equivalents	3,664	—	—	3,664
Total Cash and Cash equivalents	\$ 5,010	\$ —	\$ —	\$ 5,010
Short-term and long-term investments:				
U.S. Treasury and agency securities	\$ 667	\$ —	\$ 1	\$ 666
Non-U.S. government securities*	161	—	—	161
Municipal securities	1,007	—	—	1,007
Commercial paper, corporate bonds and medium-term notes	1,024	1	1	1,024
Asset-backed and mortgage-backed securities	379	—	1	378
Total fixed income securities	3,238	1	3	3,236
Publicly traded equity securities	22	78	1	99
Equity investments in privately-held companies	74	—	—	74
Total short-term and long-term investments	\$ 3,334	\$ 79	\$ 4	\$ 3,409
Total Cash, Cash equivalents and Investments	\$ 8,344	\$ 79	\$ 4	\$ 8,419

* Includes agency debt securities guaranteed by non-U.S. governments, which consist of Canada and Germany.

<u>October 30, 2016</u>	<u>Cost</u>	<u>Gross Unrealized Gains</u>	<u>Gross Unrealized Losses</u>	<u>Estimated Fair Value</u>
	(In millions)			
Cash	\$ 1,103	\$ —	\$ —	\$ 1,103
Cash equivalents:				
Money market funds	1,889	—	—	1,889
U.S. Treasury and agency securities	10	—	—	10
Non-U.S. government securities	10	—	—	10
Municipal securities	253	—	—	253
Commercial paper, corporate bonds and medium-term notes	141	—	—	141
Total Cash equivalents	\$ 2,303	\$ —	\$ —	\$ 2,303

Total Cash equivalents	\$ 2,000	\$	\$	\$ 2,000
Total Cash and Cash equivalents	\$ 3,406	\$ —	\$ —	\$ 3,406
Short-term and long-term investments:				
U.S. Treasury and agency securities	\$ 195	\$ —	\$ —	\$ 195
Non-U.S. government securities*	5	—	—	5
Municipal securities	408	—	—	408
Commercial paper, corporate bonds and medium-term notes	273	1	—	274
Asset-backed and mortgage-backed securities	253	1	1	253
Total fixed income securities	1,134	2	1	1,135
Publicly traded equity securities	26	44	3	67
Equity investments in privately-held companies	70	—	—	70
Total short-term and long-term investments	\$ 1,230	\$ 46	\$ 4	\$ 1,272
Total Cash, Cash equivalents and Investments	\$ 4,636	\$ 46	\$ 4	\$ 4,678

* Includes agency debt securities guaranteed by non-U.S. governments, which consist of Canada and Germany.

Maturities of Investments

The following table summarizes the contractual maturities of Applied's investments at October 29, 2017:

	Cost	Estimated Fair Value
(In millions)		
Due in one year or less	\$ 2,219	\$ 2,219
Due after one through five years	640	640
No single maturity date**	475	550
	\$ 3,334	\$ 3,409

** Securities with no single maturity date include publicly-traded and privately-held equity securities, and asset-backed and mortgage-backed securities.

Gains and Losses on Investments

Gross realized gains and losses on sales of investments for each fiscal year were as follows:

	2017	2016	2015
(In millions)			
Gross realized gains	\$ 14	\$ 10	\$ 9
Gross realized losses	\$ 1	\$ 2	\$ 3

At October 29, 2017, gross unrealized losses related to Applied's investment portfolio were not material. Applied regularly reviews its investment portfolio to identify and evaluate investments that have indications of possible impairment. Factors considered in determining whether an unrealized loss is considered to be temporary, or other-than-temporary and therefore impaired, include: the length of time and extent to which fair value has been lower than the cost basis; the financial condition, credit quality and near-term prospects of the investee; and whether it is more likely than not that Applied will be required to sell the security prior to recovery. Generally, the contractual terms of investments in marketable securities do not permit settlement at prices less than the amortized cost of the investments. Applied determined that the gross unrealized losses on its marketable fixed income securities at October 29, 2017, October 30, 2016 and October 25, 2015

were temporary in nature and therefore it did not recognize any impairment of its marketable fixed income securities for fiscal 2017, 2016 or 2015. During fiscal 2017, 2016 and 2015, Applied determined that certain of its equity investments were other-than-temporarily impaired and, accordingly, recognized impairment charges of \$10 million, \$8 million and \$9 million, respectively. These impairment charges are included in interest and other income, net in the Consolidated Statement of Operations.

Unrealized gains and temporary losses on investments classified as available-for-sale are included within accumulated other comprehensive income (loss), net of any related tax effect. Upon realization, those amounts are reclassified from accumulated other comprehensive income (loss) to results of operations.

Fair Value Measurements	12 Months Ended		
	Oct. 29, 2017		

Fair Value Disclosures [Abstract]

Fair Value Measurements

Fair Value Measurements

Applied's financial assets are measured and recorded at fair value, except for equity investments in privately-held companies. These equity investments are generally accounted for under the cost method of accounting and are periodically assessed for other-than-temporary impairment when events or circumstances indicate that an other-than-temporary decline in value may have occurred. Applied's nonfinancial assets, such as goodwill, intangible assets, and property, plant and equipment, are recorded at cost and are assessed for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable.

Fair Value Hierarchy

Applied uses the following fair value hierarchy, which prioritizes the inputs to valuation techniques used to measure fair value into three levels and bases the categorization within the hierarchy upon the lowest level of input that is available and significant to the fair value measurement:

- Level 1 — Quoted prices in active markets for identical assets or liabilities;
- Level 2 — Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and
- Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Applied's investments consist primarily of debt securities that are classified as available-for-sale and recorded at their fair values. In determining the fair value of investments, Applied uses pricing information from pricing services that value securities based on quoted market prices and models that utilize observable market inputs. In the event a fair value estimate is unavailable from a pricing service, Applied generally obtains non-binding price quotes from brokers. Applied then reviews the information provided by the pricing services or brokers to determine the fair value of its short-term and long-term investments. In addition, to validate pricing information obtained from pricing services, Applied periodically performs supplemental analysis on a sample of securities. Applied reviews any significant unanticipated differences identified through this analysis to determine the appropriate fair value.

Investments with remaining effective maturities of 12 months or less from the balance sheet date are classified as short-term investments. Investments with remaining effective maturities of more than 12 months from the balance sheet date are classified as long-term investments. As of October 29, 2017, substantially all of Applied's available-for-sale, short-term and long-term investments were recognized at fair value that was determined based upon observable inputs.

Assets Measured at Fair Value on a Recurring Basis

Financial assets (excluding cash balances) measured at fair value on a recurring basis are summarized below:

	October 29, 2017			October 30, 2016		
	Level 1	Level 2	Total	Level 1	Level 2	Total
(In millions)						
Assets:						
Money market funds	\$2,658	\$ —	\$2,658	\$1,889	\$ —	\$1,889
U.S. Treasury and agency securities	192	489	681	107	98	205
Non-U.S. government securities	—	216	216	—	15	15
Municipal securities	—	1,348	1,348	—	661	661
Commercial paper, corporate bonds and medium-term notes	—	1,619	1,619	—	415	415
Asset-backed and mortgage-backed securities	—	378	378	—	253	253

Publicly traded equity securities	99	—	99	67	—	67
Total	\$ 2,949	\$ 4,050	\$ 6,999	\$ 2,063	\$ 1,442	\$ 3,505

There were no transfers between Level 1 and Level 2 fair value measurements during fiscal 2017 and 2016, and Applied did not have any financial assets measured at fair value on a recurring basis within Level 3 fair value measurements as of October 29, 2017 or October 30, 2016.

Assets and Liabilities Measured at Fair Value on a Non-recurring Basis

Equity investments in privately-held companies are generally accounted for under the cost method of accounting and are periodically assessed for other-than-temporary impairment when an event or circumstance indicates that an other-than-temporary decline in value may have occurred. If Applied determines that an other-than-temporary impairment has occurred, the investment will be written down to its estimated fair value based on available information, such as pricing in recent rounds of financing, current cash positions, earnings and cash flow forecasts, recent operational performance and any other readily available market data. Equity investments in privately-held companies totaled \$74 million at October 29, 2017, of which \$65 million of investments were accounted for under the cost method of accounting and \$9 million of investments had been measured at fair value on a non-recurring basis within Level 3 fair value measurements due to an other-than-temporary decline in value. Equity investments in privately-held companies totaled \$70 million at October 30, 2016, of which \$62 million of investments were accounted for under the cost method of accounting and \$8 million of investments had been measured at fair value on a non-recurring basis within Level 3 fair value measurements due to an other-than-temporary decline in value.

During fiscal 2017, 2016 and 2015, Applied determined that certain of its equity investments were other-than-temporarily impaired and, accordingly, recognized impairment charges of \$10 million, \$8 million and \$9 million, respectively.

Other

The carrying amounts of Applied's financial instruments, including cash and cash equivalents, accounts receivable, notes payable - short term, and accounts payable and accrued expenses, approximate fair value due to their short maturities. At October 29, 2017, the carrying amount of long-term debt was \$5.3 billion, and the estimated fair value was \$5.8 billion. At October 30, 2016, the carrying amount of long-term debt was \$3.1 billion, and the estimated fair value was \$3.5 billion. The estimated fair value of long-term debt is determined by Level 2 inputs and is based primarily on quoted market prices for the same or similar issues. See Note 10 of the Notes to the Consolidated Financial Statements for further detail of existing debt.

Derivative Instruments and Hedging Activities	12 Months Ended
	Oct. 29, 2017
Derivative Instruments and Hedging Activities Disclosure [Abstract]	
Derivative Instruments and Hedging Activities	<p>Derivative Instruments and Hedging Activities</p> <p><i>Derivative Financial Instruments</i></p> <p>Applied conducts business in a number of foreign countries, with certain transactions denominated in local currencies, such as the Japanese yen, euro, Israeli shekel and Taiwanese dollar. Applied uses derivative financial instruments, such as forward exchange contracts and currency option contracts, to hedge certain forecasted foreign currency denominated transactions expected to occur typically within the next 24 months. The purpose of Applied's foreign currency management is to mitigate the effect of exchange rate fluctuations on certain foreign currency denominated revenues, costs and eventual cash flows. The terms of currency instruments used for hedging purposes are generally consistent with the timing of the transactions being hedged.</p> <p>During fiscal 2015, Applied entered into and settled a series of forward-starting interest rate swap agreements, with a total notional amount of \$600 million, to hedge against the variability of benchmark interest rates prior to the issuance of the debt. These instruments were designated as cash flow hedges at inception and settled in conjunction with the issuance of debt in September 2015. The \$20 million loss from the settlement of the interest rate swap agreement, which was included in accumulated other comprehensive income (AOCI) in stockholders' equity, is being amortized to interest expense over the term of the senior unsecured 10-year notes issued in September 2015.</p> <p>During fiscal 2017, Applied entered into and settled interest rate lock agreements, with a total notional amount of \$700 million to hedge against the variability of benchmark interest rates prior to the issuance of the debt. These instruments were designated as cash flow hedges at inception and settled in conjunction with the issuance of debt in March 2017. The \$14 million loss from the settlement of the interest rate lock agreement, which was included in AOCI in stockholders' equity, is being amortized to interest expense over the term of the senior unsecured 10-year notes issued in March 2017.</p> <p>Applied does not use derivative financial instruments for trading or speculative purposes. Derivative instruments and hedging activities, including foreign currency exchange and interest rate contracts, are recognized on the balance sheet at fair value. Changes in the fair value of derivatives that do not qualify for hedge treatment, as well as the ineffective portion of any hedges, are recognized currently in earnings. All of Applied's derivative financial instruments are recorded at their fair value in other current assets or in accounts payable and accrued expenses.</p> <p>Hedges related to anticipated transactions are designated and documented at the inception of the hedge as cash flow hedges and foreign exchange derivatives are typically entered into once per month. Cash flow hedges are evaluated for effectiveness quarterly. The effective portion of the gain or loss on these hedges is reported as a component of AOCI in stockholders' equity and is reclassified into earnings when the hedged transaction affects earnings. The majority of the after-tax net income or loss related to foreign exchange derivative instruments included in AOCI at October 29, 2017 is expected to be reclassified into earnings within 12 months. Changes in the fair value of currency forward exchange and option contracts due to changes in time value are excluded from the assessment of effectiveness. Both ineffective hedge amounts and hedge components excluded from the assessment of effectiveness are recognized in earnings. If the transaction being hedged is no longer probable to occur, or if a portion of any derivative is deemed to be ineffective, Applied promptly recognizes the gain or loss on the associated financial instrument in earnings. The amount recognized due to discontinuance of cash flow hedges that were probable not to occur by the end of the originally specified time period was a loss of \$8 million for fiscal 2016 and were not significant for fiscal years 2017 and 2015.</p> <p>Additionally, forward exchange contracts are generally used to hedge certain foreign currency denominated assets or liabilities. These derivatives are typically entered into once per month and are not designated for hedge accounting treatment. Accordingly, changes in the fair value of these hedges are recorded in earnings to offset the changes in the fair value of the assets or liabilities being hedged.</p> <p>In September 2013, Applied and Tokyo Electron Limited (TEL) entered into a Business Combination Agreement. Applied purchased foreign exchange option contracts to limit its foreign exchange risk associated with the then-anticipated business combination. These derivatives did not qualify for hedge accounting treatment and were marked to market at the end of each reporting period with gains and losses recorded as part of operating expenses. Due to the termination of the</p>

then-anticipated business combination with TEL on April 26, 2015, these foreign exchange option contracts were sold during the third quarter of fiscal 2015. Applied recorded a gain of \$89 million in fiscal 2015, related to these contracts. The cash flow impacts of these derivatives have been classified as operating cash flows in the Consolidated Statements of Cash Flows.

The fair values of foreign exchange derivative instruments at October 29, 2017 and October 30, 2016 were not material.

The effects of derivative instruments and hedging activities on the Consolidated Statements of Operations were as follows:

Derivatives in Cash Flow Hedging Relationships	Location of Gain or (Loss)	Effective Portion		Ineffective Portion and Amount Excluded from Effectiveness Testing
		Gain or (Loss)	Gain or (Loss) Reclassified from AOCI into Income	Gain or (Loss) Recognized in Income
(In millions)				
2017				
Foreign exchange contracts	AOCI	\$ 35	\$ —	\$ —
Foreign exchange contracts	Cost of products sold	—	7	(3)
Foreign exchange contracts	General and administrative	—	7	(2)
Interest rate swaps	AOCI	(14)	—	—
Interest rate swaps	Interest expense	—	(3)	—
Total		\$ 21	\$ 11	\$ (5)
2016				
Foreign exchange contracts	AOCI	\$ (53)	\$ —	\$ —
Foreign exchange contracts	Cost of products sold	—	(46)	2
Foreign exchange contracts	General and administrative	—	—	(11)
Interest rate swaps	Interest expense	—	(2)	—
Total		\$ (53)	\$ (48)	\$ (9)
2015				
Foreign exchange contracts	AOCI	\$ 6	\$ —	\$ —
Foreign exchange contracts	Cost of products sold	—	15	(4)
Foreign exchange contracts	General and administrative	—	(6)	(2)
Interest rate swaps	AOCI	(20)	—	—
Total		\$ (14)	\$ 9	\$ (6)

Derivatives Not Designated as Hedging Instruments	Location of Gain or (Loss) Recognized in Income	Amount of Gain or (Loss) Recognized in Income		
		2017	2016	2015

Foreign exchange contracts	terminated business combination	\$	—	\$	—	\$	89
Foreign exchange contracts	General and administrative		39		(75)		21
Total		\$	39	\$	(75)	\$	110

Credit Risk Contingent Features

If Applied's credit rating were to fall below investment grade, it would be in violation of credit risk contingent provisions of the derivative instruments discussed above, and certain counterparties to the derivative instruments could request immediate payment on derivative instruments in net liability positions. The aggregate fair value of all derivative instruments with credit-risk related contingent features that were in a net liability position was immaterial as of October 29, 2017 and October 30, 2016.

Entering into derivative contracts with banks exposes Applied to credit-related losses in the event of the banks' nonperformance. However, Applied's exposure is not considered significant.

Accounts Receivable, Net	12 Months Ended
	Oct. 29, 2017

Receivables [Abstract]

Accounts Receivable, Net

Accounts Receivable, Net

Applied has agreements with various financial institutions to sell accounts receivable and discount promissory notes from selected customers. Applied sells its accounts receivable without recourse. Applied, from time to time, also discounts letters of credit issued by customers through various financial institutions. The discounting of letters of credit depends on many factors, including the willingness of financial institutions to discount the letters of credit and the cost of such arrangements.

Applied sold \$746 million and \$75 million of accounts receivable during fiscal 2017 and 2016, respectively. There was no accounts receivable sold during fiscal 2015. Applied did not discount letters of credit issued by customers or discount promissory notes during fiscal 2017, 2016 or 2015. Financing charges on the sale of receivables and discounting of letters of credit are included in interest expense in the accompanying Consolidated Statements of Operations and were not material for all years presented.

Accounts receivable are presented net of allowance for doubtful accounts of \$34 million and \$51 million at October 29, 2017 and October 30, 2016, respectively. Changes in allowance for doubtful accounts in each fiscal year were as follows:

	2017	2016	2015
	(In millions)		
Beginning balance	\$ 51	\$ 49	\$ 58
Provision	—	3	—
Deductions ¹	(17)	(1)	(9)
Ending balance	\$ 34	\$ 51	\$ 49

¹ Fiscal 2017, 2016 and 2015 deductions primarily represent releases of allowance for doubtful accounts credited to expense as a result of an overall lower risk profile of Applied's customers and cash collections.

Applied sells its products principally to manufacturers within the semiconductor and display industries. While Applied believes that its allowance for doubtful accounts is adequate and represents its best estimate as of October 29, 2017, it continues to closely monitor customer liquidity and industry and economic conditions, which may result in changes to Applied's estimates.

Balance Sheet Detail	12 Months Ended	
	Oct. 29, 2017	

Organization, Consolidation and Presentation of Financial Statements [Abstract]

Balance Sheet Detail

Balance Sheet Detail

	October 29, 2017	October 30, 2016
(In millions)		
Inventories		
Customer service spares	\$ 595	\$ 452
Raw materials	603	474
Work-in-process	468	393
Finished goods	1,264	731
	<u>\$ 2,930</u>	<u>\$ 2,050</u>

Included in finished goods inventory is \$331 million at October 29, 2017 and \$190 million at October 30, 2016, of newly-introduced systems at customer locations where the sales transaction did not meet Applied's revenue recognition criteria as set forth in Note 1. Finished goods inventory includes \$281 million and \$197 million of evaluation inventory at October 29, 2017 and October 30, 2016, respectively.

	October 29, 2017	October 30, 2016
(In millions)		
Other Current Assets		
Prepaid income taxes and income taxes receivable	\$ 57	\$ 87
Prepaid expenses and other	317	188
	<u>\$ 374</u>	<u>\$ 275</u>

	Useful Life	October 29, 2017	October 30, 2016
	(In years)	(In millions)	
Property, Plant and Equipment, Net			
Land and improvements		\$ 160	\$ 159
Buildings and improvements	3-30	1,315	1,261
Demonstration and manufacturing equipment	3-5	1,129	992
Furniture, fixtures and other equipment	3-15	572	547
Construction in progress		135	84
Gross property, plant and equipment		3,311	3,043
Accumulated depreciation		(2,245)	(2,106)
		\$ 1,066	\$ 937

Depreciation expense was \$214 million, \$200 million and \$185 million for fiscal 2017, 2016 and 2015 respectively.

In November 2017, Applied acquired additional property for \$100 million in cash to support the Company's growth.

	October 29, 2017	October 30, 2016
(In millions)		
Accounts Payable, Notes Payable and Accrued Expenses		
Accounts payable	\$ 945	\$ 813
Notes payable, short-term	—	200
Compensation and employee benefits	666	517
Warranty	199	153
Dividends payable	106	108
Income taxes payable	112	101
Other accrued taxes	70	50
Interest payable	38	31
Other	314	283
	<u>\$ 2,450</u>	<u>\$ 2,256</u>

	October 29, 2017	October 30, 2016
(In millions)		
Customer Deposits and Deferred Revenue		
Customer deposits	\$ 381	\$ 471
Deferred revenue	1,284	905
	<u>\$ 1,665</u>	<u>\$ 1,376</u>

Applied typically receives deposits on future deliverables from customers in the Display and Adjacent Markets segment and, in certain instances, may also receive deposits from customers in the Applied Global Services segment.

	October 29, 2017	October 30, 2016
(In millions)		
Other Liabilities		
Income taxes payable	\$ 392	\$ 337
Defined and postretirement benefit plans	160	182
Other	99	77
	<u>\$ 651</u>	<u>\$ 596</u>

Business Combinations	12 Months Ended																			
	Oct. 29, 2017																			
Business Combinations [Abstract]																				
Business Combinations	<p>Business Combinations</p> <p>During fiscal 2017, Applied completed three acquisitions to complement Applied's existing product offerings and to provide opportunities for future growth within Applied's Display and Adjacent Markets and Applied Global Services segments.</p> <p>Pro forma results of operations for these acquisitions have not been presented because they are not material to Applied's consolidated results of operations. The acquired businesses are included in the results for the Display and Adjacent Markets and Applied Global Services segments.</p> <p>The following table represents the preliminary aggregated purchase price allocation for acquisitions completed in fiscal year 2017:</p> <table> <tr> <th></th><th colspan="2">Estimated Fair Values</th></tr> <tr> <th></th><th colspan="2">(In millions)</th></tr> <tr> <td>Fair value of net assets acquired</td><td>\$</td><td>23</td></tr> <tr> <td>Goodwill</td><td></td><td>55</td></tr> <tr> <td>Purchased technology</td><td></td><td>31</td></tr> <tr> <td>Purchase price allocated</td><td>\$</td><td>109</td></tr> </table> <p>Intangible assets are being amortized on a straight-line basis over an estimated weighted-average useful life of 3.5 years. Total transaction costs related to these acquisitions were not material and were expensed as incurred in general and administrative expenses in the Consolidated Statement of Operations.</p>			Estimated Fair Values			(In millions)		Fair value of net assets acquired	\$	23	Goodwill		55	Purchased technology		31	Purchase price allocated	\$	109
	Estimated Fair Values																			
	(In millions)																			
Fair value of net assets acquired	\$	23																		
Goodwill		55																		
Purchased technology		31																		
Purchase price allocated	\$	109																		

Goodwill, Purchased Technology and Other Intangible Assets	12 Months Ended		
	Oct. 29, 2017		

Goodwill and Intangible Assets Disclosure [Abstract]

Goodwill, Purchased Technology and Other Intangible Assets

Goodwill, Purchased Technology and Other Intangible Assets

Goodwill and Purchased Intangible Assets

Applied's methodology for allocating the purchase price relating to purchase acquisitions is determined through established and generally accepted valuation techniques. Goodwill is measured as the excess of the purchase price over the sum of the amounts assigned to tangible and identifiable intangible assets acquired less liabilities assumed. Applied assigns assets acquired (including goodwill) and liabilities assumed to one or more reporting units as of the date of acquisition. Typically, acquisitions relate to a single reporting unit and thus do not require the allocation of goodwill to multiple reporting units. If the products obtained in an acquisition are assigned to multiple reporting units, the goodwill is distributed to the respective reporting units as part of the purchase price allocation process.

Goodwill and purchased intangible assets with indefinite useful lives are not amortized, but are reviewed for impairment annually during the fourth quarter of each fiscal year and whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. The process of evaluating the potential impairment of goodwill and intangible assets requires significant judgment, especially in emerging markets. Applied regularly monitors current business conditions and considers other factors including, but not limited to, adverse industry or economic trends, restructuring actions and lower projections of profitability that may impact future operating results.

To test goodwill for impairment, Applied first performs a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. If it is concluded that this is the case, Applied then performs the two-step goodwill impairment test. Otherwise, the two-step goodwill impairment test is not required. Under the two-step goodwill impairment test, Applied would in the first step compare the estimated fair value of each reporting unit to its carrying value. Applied determines the fair value of each of its reporting units based on a weighting of income and market approaches. If the carrying value of a reporting unit exceeds its fair value, Applied would then perform the second step of the impairment test in order to determine the implied fair value of the reporting unit's goodwill. If Applied determines that the carrying value of a reporting unit's goodwill exceeds its implied fair value, Applied would record an impairment charge equal to the difference.

As of October 29, 2017, Applied's reporting units included Transistor and Interconnect Group, Patterning and Packaging Group, and Imaging and Process Control Group, which combined to form the Semiconductor Systems reporting segment, Applied Global Services, and Display and Adjacent Markets. There were no changes in Applied's reporting units during fiscal 2017.

In the fourth quarter of fiscal 2017, Applied performed a qualitative assessment to test goodwill for all of its reporting units for impairment. Applied determined that it was more likely than not that each of its reporting units' fair values exceeded their respective carrying values and that it was not necessary to perform the two-step goodwill impairment test for any of its reporting units.

The evaluation of goodwill and intangible assets for impairment requires the exercise of significant judgment. In the event of future changes in business conditions, Applied will be required to reassess and update its forecasts and estimates used in future impairment analyses. If the results of these future analyses are lower than current estimates, a material impairment charge may result at that time.

Details of goodwill and other indefinite-lived intangible assets were as follows:

	October 29, 2017			October 30, 2016		
	Goodwill	Other Intangible Assets	Total	Goodwill	Other Intangible Assets	Total
(In millions)						
Semiconductor Systems	\$ 2,151	\$ —	\$ 2,151	\$ 2,151	\$ —	\$ 2,151
Applied Global Services	1,018	—	1,018	1,010	5	1,015
Display and Adjacent Markets	199	—	199	155	20	175
Carrying amount	\$ 3,368	\$ —	\$ 3,368	\$ 3,316	\$ 25	\$ 3,341

From time to time, Applied makes acquisitions of and investments in companies related to existing or new markets for Applied. During fiscal 2017, goodwill and other indefinite lived intangible assets increased by \$27 million primarily due to acquisitions in the Display and Adjacent Markets and Applied Global Services segments, partially offset by decreases in indefinite-lived intangible assets due to commercialization of in-process technologies in the Display and Applied Global Services segments. See Note 8, Business Combinations, for further details.

Other intangible assets that are not subject to amortization consist primarily of in-process technology, which will be subject to amortization upon commercialization. The fair value assigned to in-process technology was determined using the income approach taking into account estimates and judgments regarding risks inherent in the development process, including the likelihood of achieving technological success and market acceptance. If an in-process technology project is abandoned, the acquired technology attributable to the project will be written-off.

A summary of Applied's purchased technology and intangible assets is set forth below:

	October 29, 2017	October 30, 2016
	(In millions)	
Purchased technology, net	\$ 288	\$ 409
Intangible assets - finite-lived, net	124	141
Intangible assets - indefinite-lived	—	25
Total	\$ 412	\$ 575

Finite-Lived Purchased Intangible Assets

Applied amortizes purchased intangible assets with finite lives using the straight-line method over the estimated economic lives of the assets, ranging from 1 to 15 years.

Applied evaluates long-lived assets for impairment whenever events or changes in circumstances indicate the carrying value of an asset group may not be recoverable. Applied assesses the fair value of the assets based on the amount of the undiscounted future cash flow that the assets are expected to generate and recognizes an impairment loss when estimated undiscounted future cash flow expected to result from the use of the asset, plus net proceeds expected from disposition of the asset, if any, are less than the carrying value of the asset. When Applied identifies an impairment, Applied reduces the carrying value of the group of assets to comparable market values, when available and appropriate, or to its estimated fair value based on a discounted cash flow approach.

Intangible assets, such as purchased technology, are generally recorded in connection with a business acquisition. The value assigned to intangible assets is usually based on estimates and judgments regarding expectations for the success and life cycle of products and technology acquired. Applied evaluates the useful lives of its intangible assets each reporting period to determine whether events and circumstances require revising the remaining period of amortization. In addition, Applied reviews intangible assets for impairment when events or changes in circumstances indicate their carrying value may not be recoverable. Management considers such indicators as significant differences in actual product acceptance from the estimates, changes in the competitive and economic environments, technological advances, and changes in cost structure.

Details of finite-lived intangible assets were as follows:

	October 29, 2017			October 30, 2016		
	Purchased Technology	Other Intangible Assets	Total	Purchased Technology	Other Intangible Assets	Total
	(In millions)					
Gross carrying amount:						
Semiconductor Systems	\$ 1,449	\$ 252	\$ 1,701	\$ 1,449	\$ 252	\$ 1,701
Applied Global Services	33	44	77	28	44	72
Display and Adjacent Markets	163	38	201	115	36	151

Corporate and Other	—	9	9	1	9	10
Gross carrying amount	\$ 1,645	\$ 343	\$ 1,988	\$ 1,593	\$ 341	\$ 1,934
Accumulated amortization:						
Semiconductor Systems	\$ (1,210)	\$ (131)	\$ (1,341)	\$ (1,043)	\$ (113)	\$ (1,156)
Applied Global Services	(28)	(44)	(72)	(27)	(44)	(71)
Display and Adjacent Markets	(119)	(35)	(154)	(113)	(34)	(147)
Corporate and Other	—	(9)	(9)	(1)	(9)	(10)
Accumulated amortization	\$ (1,357)	\$ (219)	\$ (1,576)	\$ (1,184)	\$ (200)	\$ (1,384)
Carrying amount	\$ 288	\$ 124	\$ 412	\$ 409	\$ 141	\$ 550

Details of amortization expense for each fiscal year by segment were as follows:

	2017	2016	2015
(In millions)			
Semiconductor Systems	\$ 185	\$ 185	\$ 179
Applied Global Services	1	1	1
Display and Adjacent Markets	7	—	3
Corporate and Other	—	3	3
Total	\$ 193	\$ 189	\$ 186

Amortization expense for each fiscal year was charged to the following categories:

	2017	2016	2015
(In millions)			
Cost of products sold	\$ 173	\$ 167	\$ 163
Research, development and engineering	1	2	1
Marketing and selling	19	20	20
General and administrative	—	—	2
Total	\$ 193	\$ 189	\$ 186

As of October 29, 2017, future estimated amortization expense is expected to be as follows:

	Amortization Expense
	(In millions)
2018	198
2019	57
2020	52
2021	40
2022	65
Total	\$ 412

Borrowing Facilities and Debt	12 Months Ended			
	Oct. 29, 2017			
Debt Disclosure [Abstract]				
Borrowing Facilities and Debt	Borrowing Facilities and Debt			
<p>Applied has credit facilities for unsecured borrowings in various currencies of up to \$1.6 billion, of which \$1.5 billion is comprised of a committed revolving credit agreement with a group of banks that is scheduled to expire in September 2021. This agreement provides for borrowings in United States dollars at interest rates keyed to one of various benchmark rates selected by Applied for each advance, plus a margin based on Applied’s public debt rating and includes financial and other covenants. Remaining credit facilities in the amount of approximately \$70 million are with Japanese banks. Applied’s ability to borrow under these facilities is subject to bank approval at the time of the borrowing request, and any advances will be at rates indexed to the banks’ prime reference rate denominated in Japanese yen. No amounts were outstanding under any of these facilities at both October 29, 2017 and October 30, 2016, and Applied has not utilized these credit facilities. In fiscal 2011, Applied established a short-term commercial paper program of up to \$1.5 billion. At October 29, 2017 and October 30, 2016, Applied did not have any commercial paper outstanding.</p> <p>In March 2017, Applied issued senior unsecured notes in the aggregate principal amount of \$2.2 billion and in May 2017, used a portion of the net proceeds to redeem the outstanding \$200 million in principal amount of its 7.125% senior notes due in October 2017.</p> <p>Debt outstanding as of October 29, 2017 and October 30, 2016 was as follows:</p>				
	Principal Amount		Effective Interest Rate	Interest Pay Dates
	October 29, 2017	October 30, 2016		
	(In millions)			
Short-term debt:				
7.125% Senior Notes Due 2017	\$ —	\$ 200	7.190%	April 15, October 15
Total short-term debt	—	200		
Long-term debt:				
2.625% Senior Notes Due 2020	600	600	2.640%	April 1, October 1
4.300% Senior Notes Due 2021	750	750	4.326%	June 15, December 15
3.900% Senior Notes Due 2025	700	700	3.944%	April 1, October 1
3.300% Senior Notes Due 2027	1,200	—	3.342%	April 1, October 1
5.100% Senior Notes Due 2035	500	500	5.127%	April 1, October 1
5.850% Senior Notes Due 2041	600	600	5.879%	June 15, December 15
4.350% Senior Notes Due 2047	1,000	—	4.361%	April 1, October 1
	5,350	3,150		
Total unamortized discount	(12)	(7)		
Total unamortized debt issuance costs ¹	(34)	(18)		
Total long-term debt	5,304	3,125		
Total debt	\$ 5,304	\$ 3,325		
¹ Balances reflect the effects of the retrospective adoption of the authoritative guidance in the first quarter of fiscal 2017, which required debt issuance costs to be presented as a direct reduction from the carrying amount of the related debt liability. These amounts for fiscal 2016 were originally recorded under Other Assets.				

Stockholders' Equity, Comprehensive Income and Share-Based Compensation	12 Months Ended				
	Oct. 29, 2017				
Equity [Abstract]					
Stockholders' Equity, Comprehensive Income and Share-Based Compensation	Stockholders' Equity, Comprehensive Income and Share-Based Compensation				
	<i>Accumulated Other Comprehensive Income (Loss)</i>				
	Changes in the components of AOCI, net of tax, were as follows:				
	Unrealized Gain (Loss) on Investments, Net	Unrealized Gain (Loss) on Derivative Instruments Qualifying as Cash Flow Hedges	Defined and Postretirement Benefit Plans	Cumulative Translation Adjustments	Total
	(In millions)				
Balance at October 26, 2014	\$ 24	\$ —	\$ (105)	\$ 5	(76)
Other comprehensive income (loss) before reclassifications	(11)	(9)	(5)	—	(25)
Amounts reclassified out of accumulated other comprehensive income	1	(6)	5	9	9
Other comprehensive income (loss), net of tax	(10)	(15)	—	9	(16)
Balance at October 25, 2015	\$ 14	\$ (15)	\$ (105)	\$ 14	\$ (92)
Other comprehensive income (loss) before reclassifications	14	(33)	(42)	—	(61)
Amounts reclassified out of AOCI	2	30	6	—	38
Other comprehensive income (loss), net of tax	16	(3)	(36)	—	(23)
Balance at October 30, 2016	\$ 30	\$ (18)	\$ (141)	\$ 14	\$ (115)
Other comprehensive income before reclassifications	24	13	29	—	66
Amounts reclassified out of AOCI	(1)	(6)	(8)	—	(15)
Other comprehensive income, net of tax	23	7	21	—	51
Balance at October 29, 2017	\$ 53	\$ (11)	\$ (120)	\$ 14	\$ (64)

The tax effects on net income of amounts reclassified from AOCI for fiscal 2016 was \$22 million. The tax effects on net income of amounts reclassified from AOCI for the fiscal years 2017 and 2015, were not material.

Stock Repurchase Programs

In June 2016, Applied's Board of Directors approved a common stock repurchase program authorizing up to \$2.0 billion in repurchases, which followed the completion of a \$3.0 billion common stock repurchase program approved in April 2015. In September 2017, Applied's Board of Directors approved an additional common stock repurchase program authorizing up to an additional \$3.0 billion in repurchases. At October 29, 2017, \$3.6 billion remained available for future stock repurchases under these repurchase programs.

The following table summarizes Applied's stock repurchases for each fiscal year:

	2017	2016	2015
	(In millions, except per share amounts)		
Shares of common stock repurchased	28	96	76

Cost of stock repurchased	\$ 1,172	\$ 1,002	\$ 1,225
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Cost of stock repurchased	\$	1,172	\$	1,032	\$	1,323
Average price paid per share	\$	42.08	\$	19.82	\$	17.33

Applied records treasury stock purchases under the cost method using the first-in, first-out (FIFO) method. Upon reissuance of treasury stock, amounts in excess of the acquisition cost are credited to additional paid in capital. If Applied reissues treasury stock at an amount below its acquisition cost and additional paid in capital associated with prior treasury stock transactions is insufficient to cover the difference between the acquisition cost and the reissue price, this difference is recorded against retained earnings.

Dividends

During each of fiscal 2017, 2016 and 2015, Applied's Board of Directors declared quarterly cash dividends in the amount of \$0.10 per share. Dividends paid during fiscal 2017, 2016 and 2015 amounted to \$430 million, \$444 million and \$487 million, respectively. Applied currently anticipates that cash dividends will continue to be paid on a quarterly basis, although the declaration of any future cash dividend is at the discretion of the Board of Directors and will depend on Applied's financial condition, results of operations, capital requirements, business conditions and other factors, as well as a determination by the Board of Directors that cash dividends are in the best interests of Applied's stockholders.

Share-Based Compensation

Applied has a stockholder-approved equity plan, the Employee Stock Incentive Plan, which permits grants to employees of share-based awards, including stock options, restricted stock, restricted stock units, performance shares and performance units. In addition, the plan provides for the automatic grant of restricted stock units to non-employee directors and permits the grant of share-based awards to non-employee directors and consultants. Share-based awards made under the plan may be subject to accelerated vesting under certain circumstances in the event of a change in control of Applied. Applied also has two Employee Stock Purchase Plans, one generally for United States employees and a second for employees of international subsidiaries (collectively, ESPP), which enable eligible employees to purchase Applied common stock.

Applied recognized share-based compensation expense related to stock options, ESPP shares, restricted stock, restricted stock units, performance shares and performance units, and related tax benefits for each fiscal year as follows:

	2017	2016	2015
	(In millions)		
Share-based compensation	\$ 220	\$ 201	\$ 187
Tax benefit recognized	\$ 60	\$ 63	\$ 52

The effect of share-based compensation on the results of operations for each fiscal year was as follows:

	2017	2016	2015
	(In millions)		
Cost of products sold	\$ 69	\$ 62	\$ 57
Research, development, and engineering	83	76	69
Marketing and selling	28	26	26
General and administrative	40	37	35
Total share-based compensation	\$ 220	\$ 201	\$ 187

The cost associated with share-based awards that are subject solely to time-based vesting requirements, less expected forfeitures, is recognized over the awards' service period for the entire award on a straight-line basis. The cost associated with performance-based equity awards is recognized for each tranche over the service period, based on an assessment of the likelihood that the applicable performance goals will be achieved.

At October 29, 2017, Applied had \$324 million in total unrecognized compensation expense, net of estimated forfeitures, related to grants of share-based awards and shares issued under Applied's ESPP, which will be recognized over a weighted average period of 2.4 years. At October 29, 2017, there were 91 million shares available for grants of share-based awards under the Employee Stock Incentive Plan, and an additional 20 million shares available for issuance under the ESPP.

Stock Options

Stock options are rights to purchase, at future dates, shares of Applied common stock. The exercise price of each stock option equals the fair market value of Applied common stock on the date of grant. Options typically vest over three to four years, subject to the grantee's continued service with Applied through the scheduled vesting date, and expire no later than seven years from the grant date. There were no stock options granted during fiscal 2017, 2016 and 2015. Outstanding stock options at the end of fiscal 2017 were not material to the consolidated financial statements.

Restricted Stock Units, Restricted Stock, Performance Shares and Performance Units

Restricted stock units are converted into shares of Applied common stock upon vesting on a one-for-one basis. Restricted stock has the same rights as other issued and outstanding shares of Applied common stock except these shares generally have no right to dividends and are held in escrow until the award vests. Performance shares and performance units are awards that result in a payment to a grantee, generally in shares of Applied common stock on a one-for-one basis, if performance goals and/or other vesting criteria established by the Human Resources and Compensation Committee of Applied's Board of Directors are achieved or the awards otherwise vest. Restricted stock units, restricted stock, performance shares and performance units typically vest over four years and vesting is usually subject to the grantee's continued service with Applied and, in some cases, achievement of specified performance goals. The compensation expense related to the service-based awards is determined using the fair market value of Applied common stock on the date of the grant, and the compensation expense is recognized over the vesting period.

Certain executive officers were granted awards that are subject to the achievement of specified performance goals (performance-based awards). These awards become eligible to vest only if performance goals are achieved and will vest only if the grantee remains employed by Applied through each applicable vesting date. The fair value of these awards is estimated on the date of grant. If the goals are achieved, the awards will vest, provided that the grantee remains employed by Applied through each scheduled vesting date. If the performance goals are not met as of the end of the performance period, no compensation expense is recognized and any previously recognized compensation expense is reversed. The expected cost is based on the awards that are probable to vest and is reflected over the service period and reduced for estimated forfeitures.

For performance-based awards granted in fiscal 2017, certain awards require the achievement of positive adjusted operating profit and vest ratably over three years. Other awards require the achievement of targeted levels of adjusted operating profit margin and wafer fabrication equipment market share, and the number of shares that may vest in full after three years ranges from 0% to 200% of the target amount. Performance-based awards granted in fiscal 2016 and fiscal 2015 require the achievement of targeted levels of adjusted annual operating profit margin, and additional shares become eligible for time-based vesting if Applied achieves certain levels of total shareholder return relative to a peer group, comprised of companies in the Standard & Poor's 500 Information Technology Index, measured at the end of a two-year period.

A summary of the changes in restricted stock units, restricted stock, performance shares and performance units outstanding under Applied's equity compensation plans is presented below:

	Shares	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
(In millions, except per share amounts)				
Non-vested restricted stock units, restricted stock, performance shares and performance units at October 26, 2014	33	\$ 12.59	2.3 years	\$ 698
Granted	10	\$ 22.60		

Vested	(15)	\$	12.04		
Canceled	(1)	\$	14.98		
Non-vested restricted stock units, restricted stock, performance shares and performance units at October 25, 2015	27	\$	16.41	2.2 years	\$ 440
Granted	11	\$	18.54		
Vested	(11)	\$	14.25		
Canceled	(2)	\$	17.57		
Non-vested restricted stock units, restricted stock, performance shares and performance units at October 30, 2016	25	\$	18.28	2.3 years	\$ 718
Granted	8	\$	31.79		
Vested	(10)	\$	16.50		
Canceled	(1)	\$	21.25		
Non-vested restricted stock units, restricted stock, performance shares and performance units at October 29, 2017	22	\$	23.96	2.2 years	\$ 1,239
Non-vested restricted stock units, restricted stock, performance shares and performance units expected to vest	20	\$	23.30	2.0 years	\$ 1,107

At October 29, 2017, 1 million additional performance-based awards could be earned based upon achievement of certain levels of specified performance goals.

Employee Stock Purchase Plans

Under the ESPP, substantially all employees may purchase Applied common stock through payroll deductions at a price equal to 85 percent of the lower of the fair market value of Applied common stock at the beginning or end of each 6-month purchase period, subject to certain limits. Applied issued 3 million, 6 million and 5 million shares during fiscal 2017, 2016 and 2015, respectively, under the ESPP. Compensation expense is calculated using the fair value of the employees' purchase rights under the Black-Scholes model. Underlying assumptions used in the model are outlined in the following table:

	2017	2016	2015
ESPP:			
Dividend yield	0.99%	1.76%	2.20%
Expected volatility	26.3%	29.3%	31.8%
Risk-free interest rate	0.92%	0.47%	0.19%
Expected life (in years)	0.5	0.5	0.5
Weighted average estimated fair value	\$9.14	\$5.48	\$4.55

Employee Benefit Plans	12 Months Ended
	Oct. 29, 2017
Retirement Benefits [Abstract]	
Employee Benefit Plans	Employee Benefit Plans
	<i>Employee Bonus Plans</i>
	Applied has various employee bonus plans. A discretionary bonus plan provides for the distribution of a percentage of pre-tax income to Applied employees who are not participants in other performance-based incentive plans, up to a maximum percentage of eligible compensation. Other plans provide for bonuses to Applied's executives and other key contributors based on the achievement of profitability and/or other specified performance criteria. Charges under these plans for fiscal 2017, 2016 and 2015 were \$449 million, \$312 million and \$307 million, respectively.
	<i>Employee Savings and Retirement Plan</i>
	Applied's Employee Savings and Retirement Plan (the 401(k) Plan) is qualified under Sections 401(a) and (k) of the Internal Revenue Code (the Code). Eligible employees may make salary deferral and catch-up contributions under the 401(k) Plan on a pre-tax basis and on a Roth basis, subject to an annual dollar limit established by the Code. Applied matches 100% of participant salary and/or Roth deferral contributions up to the first 3% of eligible contribution and then 50% of every dollar between 4% and 6% of eligible contribution. Applied does not make matching contributions on any catch-up contributions made by participants. Plan participants who were employed by Applied or any of its affiliates became 100% vested in their Applied matching contribution account balances. Applied's matching contributions under the 401(k) Plan were approximately \$38 million for each of fiscal 2017 and 2016, and \$35 million, net of \$1 million in forfeitures for fiscal 2015.
	<i>Defined Benefit Pension Plans of Foreign Subsidiaries and Other Post-Retirement Benefits</i>
	Several of Applied's foreign subsidiaries have defined benefit pension plans covering substantially all of their eligible employees. Benefits under these plans are typically based on years of service and final average compensation levels. The plans are managed in accordance with applicable local statutes and practices. Applied deposits funds for certain of these plans with insurance companies, pension trustees, government-managed accounts, and/or accrues the expense for the unfunded portion of the benefit obligation on its Consolidated Financial Statements. Applied's practice is to fund the various pension plans in amounts sufficient to meet the minimum requirements as established by applicable local governmental oversight and taxing authorities. Depending on the design of the plan, local custom and market circumstances, the liabilities of a plan may exceed qualified plan assets. The differences between the aggregate projected benefit obligations and aggregate plan assets of these plans have been recorded as liabilities by Applied and are included in other liabilities and accrued expenses in the Consolidated Balance Sheets.
	Through December 31, 2017, Applied also sponsors a U.S. post-retirement plan that provides covered medical and vision benefits to certain eligible retirees who are at least age 55 and whose years of service plus their age equals at least 65 at their date of retirement and who have elected coverage for 2017. An eligible retiree also may elect coverage for an eligible spouse or domestic partner who is not eligible for Medicare. Coverage under the plan generally ends for both the retiree and spouse or domestic partner upon becoming eligible for Medicare, and will end entirely for all participants when the plan terminates on December 31, 2017. In addition, Applied also has a post-retirement benefit plan as a result of the acquisition of Varian. Applied's liability under these post-retirement plans, which was included in other liabilities in the Consolidated Balance Sheets, were \$1 million at each of October 29, 2017 and October 30, 2016.
	A summary of the changes in benefit obligations and plan assets, which includes post-retirement benefits, for each fiscal year is presented below:

Plan participants' contributions	2	1	1
Actuarial (gain) loss	(35)	77	12
Curtailments, settlements and special termination benefits	(1)	(6)	(1)
Foreign currency exchange rate changes	34	(42)	(39)
Benefits paid	(12)	(10)	(9)
Plan amendments and business combinations	—	(22)	—
Ending projected benefit obligation	\$ 506	\$ 495	\$ 471
Ending accumulated benefit obligation	\$ 472	\$ 460	\$ 434
Range of assumptions to determine benefit obligations			
Discount rate	0.5% - 3.4%	0.5% - 3.1%	0.9% - 4.4%
Rate of compensation increase	2.2% - 3.5%	1.6% - 3.6%	1.9% - 3.6%
Change in plan assets			
Beginning fair value of plan assets	\$ 310	\$ 281	\$ 268
Return on plan assets	18	37	19
Employer contributions	16	50	21
Plan participants' contributions	2	1	1
Foreign currency exchange rate changes	28	(45)	(18)
Divestitures, settlements and business combinations	(1)	(4)	(1)
Benefits paid	(12)	(10)	(9)
Ending fair value of plan assets	\$ 361	\$ 310	\$ 281
Funded status	\$ (145)	\$ (185)	\$ (190)
Amounts recognized in the consolidated balance sheets			
Noncurrent asset	\$ 17	\$ 11	\$ 19
Current liability	(1)	(2)	(3)
Noncurrent liability	(161)	(194)	(206)
Total	\$ (145)	\$ (185)	\$ (190)
Estimated amortization from accumulated other comprehensive loss into net periodic benefit cost over the next fiscal period			
Actuarial loss	\$ 6	\$ 6	\$ 6
Prior service credit	(4)	(16)	(1)
Total	\$ 2	\$ (10)	\$ 5
Amounts recognized in accumulated other comprehensive loss			
Net actuarial loss	\$ 141	\$ 186	\$ 135
Prior service credit	(4)	(21)	—
Total	\$ 137	\$ 165	\$ 135
Plans with projected benefit obligations in excess of plan assets			
Projected benefit obligation	\$ 326	\$ 341	\$ 308
Fair value of plan assets	\$ 142	\$ 145	\$ 98
Plans with accumulated benefit obligations in excess of plan assets			
Accumulated benefit obligation	\$ 293	\$ 307	\$ 274
Fair value of plan assets	\$ 142	\$ 145	\$ 98

	2017	2016
Plan assets — allocation		
Equity securities	47%	42%
Debt securities	39%	40%
Insurance contracts	11%	12%
Other investments	3%	4%
Cash	—%	2%

The following table presents a summary of the ending fair value of the plan assets:

	October 29, 2017				October 30, 2016			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
(In millions)								
Equity securities	\$ 83	\$ —	\$ —	\$ 83	\$ 59	\$ —	\$ —	\$ 59
Debt securities	16	—	—	16	12	—	—	12
Insurance contracts	—	—	38	38	—	—	38	38
Other investments	—	13	—	13	—	12	—	12
Cash	2	—	—	2	8	—	—	8
Total assets at fair value	101	13	38	152	79	12	38	129
Assets measured at net asset value ¹				209				181
Total				<u>\$ 361</u>				<u>\$ 310</u>

¹ Balances reflect the investments that are measured at fair value using the net asset value per share practical expedient and have not been categorized in the fair value hierarchy. Certain prior year amounts were reclassified to conform to current year presentation.

The following table presents the activity in Level 3 instruments for each fiscal year:

	2017	2016
(In millions)		
Balance, beginning of year	\$ 38	\$ 40
Actual return on plan assets:		
Relating to assets still held at reporting date	(3)	(1)
Purchases, sales, settlements, net	1	—
Currency impact	2	(1)
Balance, end of year	<u>\$ 38</u>	<u>\$ 38</u>

Applied's investment strategy for its defined benefit plans is to invest plan assets in a prudent manner, maintaining well-diversified portfolios with the long-term objective of meeting the obligations of the plans as they come due. Asset allocation decisions are typically made by plan fiduciaries with input from Applied's international pension committee. Applied's asset allocation strategy incorporates a sufficient equity exposure in order for the plans to benefit from the expected better long-term performance of equities relative to the plans' liabilities. Applied retains investment managers, where appropriate, to manage the assets of the plans. Performance of investment managers is monitored by plan fiduciaries with the assistance of local investment consultants. The investment managers make investment decisions within the guidelines set forth by plan fiduciaries. Risk management practices include diversification across asset classes and investment styles, and periodic rebalancing toward target asset allocation ranges. Investment managers may use derivative instruments for efficient portfolio management purposes. Plan assets do not include any of Applied's own equity or debt securities.

A summary of the components of net periodic benefit costs and the weighted average

assumptions used for net periodic benefit cost calculations for each fiscal year is presented below:

	2017	2016	2015
	(In millions, except percentages)		
Components of net periodic benefit cost			
Service cost	\$ 13	\$ 13	\$ 15
Interest cost	10	13	13
Expected return on plan assets	(18)	(14)	(15)
Amortization of actuarial loss and prior service credit	(10)	3	7
Settlement and curtailment loss	—	(5)	(1)
Net periodic benefit cost (income)	<u>\$ (5)</u>	<u>\$ 10</u>	<u>\$ 19</u>
Weighted average assumptions			
Discount rate	1.88%	2.82%	3.00%
Expected long-term return on assets	5.38%	5.38%	5.62%
Rate of compensation increase	2.69%	2.71%	2.74%

Asset return assumptions are derived based on actuarial and statistical methodologies, from analysis of long-term historical data relevant to the country in which each plan is in effect and the investments applicable to the corresponding plan. The discount rate for each plan was derived by reference to appropriate benchmark yields on high quality corporate bonds, allowing for the approximate duration of both plan obligations and the relevant benchmark yields.

Future expected benefit payments for the pension plans and the post-retirement plan over the next ten fiscal years are as follows:

	Benefit Payments
	(In millions)
2018	\$ 11
2019	11
2020	11
2021	12
2022	12
2023-2027	72
	<u>\$ 129</u>

Company contributions to these plans for fiscal 2018 are expected to be approximately \$11 million.

Executive Deferred Compensation Plans

Applied sponsors two unfunded deferred compensation plans, the Executive Deferred Compensation Plan (Predecessor EDCP) and the 2016 Deferred Compensation Plan (2016 DCP) (formerly known as the 2005 Executive Deferred Compensation Plan), under which certain employees may elect to defer a portion of their following year's eligible earnings. The Predecessor EDCP was frozen as of December 31, 2004 such that no new deferrals could be made under the plan after that date and the plan would qualify for "grandfather" relief under Section 409A of the Code. The Predecessor EDCP participant accounts continue to be maintained under the plan and credited with deemed interest. The 2016 DCP was originally implemented by Applied effective as of January 1, 2005, and amended and restated as of October 12, 2015, and is intended to comply with the requirements of Section 409A of the Code. In addition, Applied also sponsors a non-qualified deferred compensation plan as a result of the acquisition of Varian. Amounts payable, including accrued deemed interest, totaled \$63 million and \$40 million at October 29, 2017 and October 30, 2016, respectively, which were included in other liabilities in the Consolidated Balance Sheets.

Income Taxes	12 Months Ended		
	Oct. 29, 2017		

Income Tax Disclosure [Abstract]

Income Taxes

Income Taxes

The components of income before income taxes for each fiscal year were as follows:

	2017	2016	2015
	(In millions)		
U.S.	\$ 514	\$ 199	\$ 629
Foreign	3,217	1,814	969
	<u>\$ 3,731</u>	<u>\$ 2,013</u>	<u>\$ 1,598</u>

The components of the provision for income taxes for each fiscal year were as follows:

	2017	2016	2015
	(In millions)		
Current:			
U.S.	\$ 67	\$ (36)	\$ 134
Foreign	233	351	199
State	9	(2)	18
	<u>309</u>	<u>313</u>	<u>351</u>
Deferred:			
U.S.	(11)	55	(194)
Foreign	(7)	(89)	69
State	6	13	(5)
	<u>(12)</u>	<u>(21)</u>	<u>(130)</u>
	<u>\$ 297</u>	<u>\$ 292</u>	<u>\$ 221</u>

A reconciliation between the statutory U.S. federal income tax rate of 35 percent and Applied's actual effective income tax rate for each fiscal year is presented below:

	2017	2016	2015
Tax provision at U.S. statutory rate	35.0 %	35.0 %	35.0 %
Resolutions of prior years' income tax filings	(1.9)	3.9	(4.9)
Effect of foreign operations taxed at various rates	(24.9)	(24.1)	(16.3)
State income taxes, net of federal benefit	0.3	0.6	0.9
Research and other tax credits	(0.7)	(1.3)	(0.2)
U.S. domestic production deduction	(0.2)	(0.2)	(0.6)
Share-based compensation	0.4	0.4	0.8
Other	—	0.2	(0.9)
	<u>8.0 %</u>	<u>14.5 %</u>	<u>13.8 %</u>

The effective tax rate for fiscal 2017 was lower than fiscal 2016 primarily due to the recognition of previously unrecognized foreign tax credits and changes in the geographical composition of income. In addition, the effective tax rate in fiscal 2016 included unfavorable resolutions and changes related to income tax liabilities for uncertain tax positions as well as the reinstatement of the U.S. federal R&D tax credit retroactive to its expiration in December of 2015, neither of which reoccurred in fiscal 2017.

The effective tax rate for fiscal 2016 was higher than fiscal 2015 primarily due to resolutions and changes related to income tax liabilities for uncertain tax positions, partially offset by changes in the geographical composition of income. The effective tax rate for fiscal 2015 included an adjustment

the geographical composition of income. The effective tax rate for fiscal 2015 included an adjustment to decrease provision for income taxes of \$28 million primarily to correct an error in the recognition of cost of sales in the U.S. related to intercompany sales. The impact of the adjustment to fiscal 2015 was determined to be immaterial on the originating periods and fiscal 2015.

In the reconciliation between the statutory U.S. federal income tax rate and the effective income tax rate, the effect of foreign operations taxed at various rates represents the difference between an income tax provision at the U.S. federal statutory income tax rate and the recorded income tax provision, with the difference expressed as a percentage of worldwide income before income taxes. This effect is substantially related to the tax effect of pre-tax income in jurisdictions with lower statutory tax rates. The foreign operations with the most significant effective tax rate impact are Singapore and Israel. The statutory tax rates for fiscal 2017 for Singapore and Israel are 17% and 24%, respectively. Applied has been granted conditional reduced tax rates for both jurisdictions that expire in fiscal 2026 and fiscal 2021, respectively, excluding potential renewals and subject to certain conditions with which Applied expects to comply. The tax benefit arising from these tax rates was \$452 million for fiscal 2017 or \$0.42 per diluted share.

Deferred tax assets and liabilities are recognized for the estimated future tax effects of temporary differences between the book and tax bases of assets and liabilities. Deferred tax assets are also recognized for net operating loss and tax credit carryovers. Deferred tax assets are offset by a valuation allowance to the extent it is more likely than not that they are not expected to be realized. The components of deferred income tax assets and liabilities were as follows:

	October 29, 2017	October 30, 2016
(In millions)		
Deferred tax assets:		
Allowance for doubtful accounts	\$ 13	\$ 20
Inventory reserves and basis difference	156	151
Installation and warranty reserves	1	3
Accrued liabilities	31	53
Deferred revenue	15	17
Tax credits	317	210
Deferred compensation	81	45
Share-based compensation	53	55
Other	67	176
Gross deferred tax assets	734	730
Valuation allowance	(227)	(207)
Total deferred tax assets	507	523
Deferred tax liabilities:		
Fixed assets	(36)	(29)
Intangible assets	(76)	(81)
Undistributed foreign earnings	(11)	(42)
Foreign exchange	(4)	—
Total gross deferred tax liabilities	(127)	(152)
Net deferred tax assets	\$ 380	\$ 371

The following table presents a summary of non-current deferred tax assets and liabilities:

	October 29, 2017	October 30, 2016
(In millions)		
Non-current deferred tax asset	\$ 385	\$ 372
Non-current deferred tax liability	(5)	(1)
	\$ 380	\$ 371

A valuation allowance is provided to reflect the estimated future tax cost of deferred tax assets that

A valuation allowance is recorded to reflect the estimated amount of net deferred tax assets that may not be realized. Changes in the valuation allowance in each fiscal year were as follows:

	2017	2016	2015
	(In millions)		
Beginning balance	\$ 207	\$ 207	\$ 173
Increases	20	27	40
Decreases	—	(27)	(6)
Ending balance	\$ 227	\$ 207	\$ 207

For fiscal 2017, U.S. income taxes have not been provided for approximately \$8.2 billion of cumulative undistributed earnings of several foreign subsidiaries. Applied intends to indefinitely reinvest these earnings in foreign operations. If these earnings were distributed to the U.S. in the form of dividends or otherwise, or if the shares of the relevant foreign subsidiaries were sold or otherwise transferred, Applied would be subject to additional U.S. income taxes (subject to an adjustment for foreign tax credits) and foreign withholding taxes. Determination of the amount of unrecognized deferred income tax liability related to these earnings is not practicable.

At October 29, 2017, Applied has state research and development tax credit carryforwards of \$221 million, including \$199 million of credits that are carried over until exhausted and \$22 million that are carried over for 15 years and begin to expire in fiscal 2025. Applied has net operating loss carryforwards in state jurisdictions of \$3 million which begin to expire in fiscal 2018. Management believes it is more likely than not that all net operating loss and tax credit carryforwards at October 29, 2017, net of valuation allowance, will be utilized.

Applied's income taxes payable have been reduced by the tax benefits associated with share-based compensation. These benefits, credited directly to additional paid-in capital with a corresponding reduction to taxes payable, amounted to \$55 million, \$23 million and \$56 million for fiscal 2017, 2016 and 2015, respectively.

Applied maintains liabilities for uncertain tax positions. These liabilities involve considerable judgment and estimation and are continuously monitored by management based on the best information available. Gross unrecognized tax benefits are classified as non-current income taxes payable in other liabilities in the Consolidated Balance Sheets. A reconciliation of the beginning and ending balances of gross unrecognized tax benefits in each fiscal year is as follows:

	2017	2016	2015
	(In millions)		
Beginning balance of gross unrecognized tax benefits	\$ 320	\$ 177	\$ 134
Settlements with tax authorities	(42)	(25)	(16)
Lapses of statutes of limitation	(15)	(2)	(1)
Increases in tax positions for current year	95	62	43
Increases in tax positions for prior years	33	109	21
Decreases in tax positions for prior years	—	(1)	(4)
Ending balance of gross unrecognized tax benefits	\$ 391	\$ 320	\$ 177

In the provision for income taxes in the Consolidated Statements of Operations, a tax expense of \$17 million, a tax expense of \$24 million, and a tax benefit of \$6 million, were realized in fiscal 2017, 2016 and 2015, respectively, related to interest and penalties on unrecognized tax benefits. The liability for interest and penalties for fiscal 2017, 2016 and 2015 was \$46 million, \$33 million and \$14 million, respectively, and was classified as non-current income taxes payable.

Included in the balance of unrecognized tax benefits for fiscal 2017, 2016 and 2015 are \$284 million, \$302 million, and \$167 million, respectively, of tax benefits that, if recognized, would affect the effective tax rate. During the next twelve months, it is reasonably possible that existing liabilities for unrecognized tax benefits could be reduced by approximately \$116 million as a result of negotiations with taxing authorities and the expiration of statutes of limitation.

In fiscal 2017, Applied paid \$29 million, including interest and penalties, as a result of a

settlement of fiscal 2011 in Italy. This settlement resulted in the recognition of a tax expense of \$6 million. In fiscal 2016, Applied accrued \$25 million, including interest and penalties, as a result of a settlement of fiscal 2011 through fiscal 2015 in Switzerland. This settlement resulted in the recognition of a tax expense of \$19 million. In fiscal 2015, Applied paid \$19 million, including interest and penalties, as a result of a settlement of fiscal 2009 through fiscal 2011 in Italy and paid \$2 million, including interest, as a result of a settlement of fiscal 2013 in Switzerland related to Varian. These settlements resulted in the recognition of a tax benefit of \$10 million.

A number of Applied's tax returns remain subject to examination by taxing authorities. These include U.S. returns for fiscal 2010 and later years, and foreign tax returns for fiscal 2009 and later years.

The timing of the resolution of income tax examinations, as well as the amounts and timing of various tax payments that may be part of the settlement process, is highly uncertain. This could cause fluctuations in Applied's financial condition and results of operations. Applied continues to have ongoing negotiations with various taxing authorities throughout the year.

Warranty, Guarantees, Commitments and Contingencies	12 Months Ended		
	Oct. 29, 2017		
Commitments and Contingencies Disclosure [Abstract]			
Warranty, Guarantees, Commitments and Contingencies	Warranty, Guarantees, Commitments and Contingencies		
	Leases		
	Applied leases some of its facilities and equipment under non-cancelable operating leases and has options to renew most leases, with rentals to be negotiated. Total rent expense for fiscal 2017, 2016 and 2015, was \$34 million, \$38 million and \$32 million, respectively.		
	As of October 29, 2017, future minimum lease payments are expected to be as follows:		
		Lease Payments	
		(In millions)	
Fiscal			
2018		\$	33
2019			24
2020			16
2021			10
2022			7
Thereafter			11
		\$	101
	Warranty		
	Changes in the warranty reserves during each fiscal year were as follows:		
		2017	2016
			2015
		(In millions)	
Beginning balance	\$	153	\$ 126 \$ 113
Provisions for warranty		166	135 127
Changes in reserves related to preexisting warranty		1	(12) (10)
Consumption of reserves		(121)	(96) (104)
Ending balance	\$	199	\$ 153 \$ 126
	Applied products are generally sold with a warranty for a 12-month period following installation. The provision for the estimated cost of warranty is recorded when revenue is recognized. Parts and labor are covered under the terms of the warranty agreement. The warranty provision is based on historical experience by product, configuration and geographic region. Quarterly warranty consumption is generally associated with sales that occurred during the preceding four quarters, and quarterly warranty provisions are generally related to the current quarter's sales.		
	Guarantees		
	In the ordinary course of business, Applied provides standby letters of credit or other guarantee instruments to third parties as required for certain transactions initiated by either Applied or its subsidiaries. As of October 29, 2017, the maximum potential amount of future payments that Applied could be required to make under these guarantee agreements was approximately \$57 million. Applied has not recorded any liability in connection with these guarantee agreements beyond that required to appropriately account for the underlying transaction being guaranteed. Applied does not believe, based on historical experience and information currently available, that it is probable that any amounts will be required to be paid under these guarantee agreements.		
	Applied also has agreements with various banks to facilitate subsidiary banking operations worldwide, including overdraft arrangements, issuance of bank guarantees, and letters of credit. As of October 29, 2017, Applied has provided parent guarantees to banks for approximately \$140 million to cover these arrangements.		

Legal Matters

Korea Criminal Proceedings

In 2010, the Seoul Eastern District Court began hearings on indictments brought by the Seoul Prosecutor's Office for the Eastern District of Korea (the Prosecutor's Office) alleging that employees of several companies improperly received and used confidential information belonging to Samsung Electronics Co., Ltd. (Samsung), a major Applied customer based in Korea. The individuals charged included the former head of Applied Materials Korea (AMK), who at the time of the indictment was a vice president of Applied Materials, Inc., and certain other AMK employees. Neither Applied nor any of its subsidiaries was named as a party to the proceedings. Hearings on these matters concluded in November 2012 and the Court issued its decision on February 7, 2013. As part of the ruling, nine AMK employees (including the former head of AMK) were acquitted of all charges, while one AMK employee was found guilty on some of the charges and received a suspended jail sentence. The Prosecutor's Office and various individuals appealed the matter to the High Court. On June 20, 2014, the High Court rendered its decision, finding all defendants not guilty, including all ten AMK employees. Following appeal, on November 14, 2017, the Korean Supreme Court affirmed the decision of the High Court, and no further proceedings are expected on this matter.

Other Matters

From time to time, Applied receives notification from third parties, including customers and suppliers, seeking indemnification, litigation support, payment of money or other actions by Applied in connection with claims made against them. In addition, from time to time, Applied receives notification from third parties claiming that Applied may be or is infringing or misusing their intellectual property or other rights. Applied also is subject to various other legal proceedings and claims, both asserted and unasserted, that arise in the ordinary course of business.

Although the outcome of the above-described matters, claims and proceedings cannot be predicted with certainty, Applied does not believe that any will have a material effect on its consolidated financial condition or results of operations.

Industry Segment Operations	12 Months Ended					
	Oct. 29, 2017					
Segment Reporting [Abstract]						
Industry Segment Operations	<p>Industry Segment Operations</p> <p>Applied's three reportable segments are: Semiconductor Systems, Applied Global Services, and Display and Adjacent Markets. As defined under the accounting literature, Applied's chief operating decision-maker has been identified as the President and Chief Executive Officer, who reviews operating results to make decisions about allocating resources and assessing performance for the entire Company. Segment information is presented based upon Applied's management organization structure as of October 29, 2017 and the distinctive nature of each segment. Future changes to this internal financial structure may result in changes to Applied's reportable segments.</p> <p>The Semiconductor Systems reportable segment is comprised primarily of semiconductor capital equipment for etch, rapid thermal processing, deposition, chemical mechanical planarization, metrology and inspection, wafer packaging, and ion implantation.</p> <p>The Applied Global Services segment provides integrated solutions to optimize equipment and fab performance and productivity, including spares, upgrades, services, certain remanufactured earlier generation equipment and factory automation software for semiconductor, display and other products.</p> <p>The Display and Adjacent Markets segment includes products for manufacturing liquid crystal displays (LCDs), organic light-emitting diodes (OLEDs), equipment upgrades and flexible coating systems and other display technologies for TVs, personal computers, smart phones, and other consumer-oriented devices.</p> <p>Each operating segment is separately managed and has separate financial results that are reviewed by Applied's chief operating decision-maker. Each reportable segment contains closely related products that are unique to the particular segment. Segment operating income is determined based upon internal performance measures used by Applied's chief operating decision-maker. The chief operating decision-maker does not evaluate operating segments using total asset information.</p> <p>Applied derives the segment results directly from its internal management reporting system. The accounting policies Applied uses to derive reportable segment results are substantially the same as those used for external reporting purposes. Management measures the performance of each reportable segment based upon several metrics including orders, net sales and operating income. Management uses these results to evaluate the performance of, and to assign resources to, each of the reportable segments.</p> <p>The Corporate and Other category includes revenues from products, as well as costs of products sold, for fabricating solar photovoltaic cells and modules, and certain operating expenses that are not allocated to its reportable segments and are managed separately at the corporate level. These operating expenses include costs related to share-based compensation; certain management, finance, legal, human resources, and research, development and engineering functions provided at the corporate level; and unabsorbed information technology and occupancy. In addition, Applied does not allocate to its reportable segments restructuring and asset impairment charges and any associated adjustments related to restructuring actions, unless these actions pertain to a specific reportable segment. Segment operating income also excludes interest income/expense and other financial charges and income taxes. Management does not consider the unallocated costs in measuring the performance of the reportable segments.</p> <p>Information for each reportable segment for and as of the end of each fiscal year were as follows:</p>					
	Net Sales	Operating Income (Loss)	Depreciation/ Amortization	Capital Expenditures	Accounts Receivable	Inventories
	(In millions)					
2017:						
Semiconductor Systems	\$ 9,517	\$ 3,173	\$ 286	\$ 150	\$ 1,626	\$ 1,760
Applied Global Services	3,017	817	15	21	564	762

Display and Adjacent Markets	1,900	502	12	17	190	367
Corporate and Other	103	(624)	94	157	(42)	41
Total	<u>\$ 14,537</u>	<u>\$ 3,868</u>	<u>\$ 407</u>	<u>\$ 345</u>	<u>\$ 2,338</u>	<u>\$ 2,930</u>
2016:						
Semiconductor Systems	\$ 6,873	\$ 1,807	\$ 277	\$ 114	\$ 1,524	\$ 1,188
Applied Global Services	2,589	682	12	14	559	594
Display and Adjacent Markets	1,206	245	5	6	238	215
Corporate and Other	157	(582)	95	119	(42)	53
Total	<u>\$ 10,825</u>	<u>\$ 2,152</u>	<u>\$ 389</u>	<u>\$ 253</u>	<u>\$ 2,279</u>	<u>\$ 2,050</u>
2015:						
Semiconductor Systems	\$ 6,135	\$ 1,410	\$ 268	\$ 115	\$ 1,160	\$ 1,079
Applied Global Services	2,447	630	10	12	483	555
Display and Adjacent Markets	944	191	6	13	129	176
Corporate and Other	133	(538)	87	75	(33)	23
Total	<u>\$ 9,659</u>	<u>\$ 1,693</u>	<u>\$ 371</u>	<u>\$ 215</u>	<u>\$ 1,739</u>	<u>\$ 1,833</u>

The reconciling items included in Corporate and Other were as follows:

	2017	2016	2015
	(In millions)		
Unallocated net sales	\$ 103	\$ 157	\$ 133
Unallocated cost of products sold and expenses	(507)	(538)	(523)
Share-based compensation	(220)	(201)	(187)
Certain items associated with terminated business combination	—	—	(50)
Gain on derivatives associated with terminated business combination	—	—	89
Total	<u>\$ (624)</u>	<u>\$ (582)</u>	<u>\$ (538)</u>

For geographical reporting, revenue by geographic location is determined by the location of customers' facilities to which products were shipped. Long-lived assets consist primarily of property, plant and equipment and are attributed to the geographic location in which they are located. Net sales and long-lived assets by geographic region for and as of each fiscal year were as follows:

	2017	2016	2015
	(In millions)		
Net sales:			
United States	\$ 1,474	\$ 1,143	\$ 1,630
Korea	4,052	1,883	1,654
Taiwan	3,291	2,843	2,600
China	2,746	2,259	1,623
Japan	1,518	1,279	1,078
Europe	816	615	642
Southeast Asia	640	602	422

Southeast Asia	2017	2016	2015
Total outside United States	13,063	9,682	8,029
Consolidated total	\$ 14,537	\$ 10,825	\$ 9,659
		October 29, 2017	October 30, 2016
(In millions)			
Long-lived assets:			
United States	\$ 915	\$ 798	
Korea	21	12	
Taiwan	50	34	
China	47	44	
Japan	8	8	
Europe	47	34	
Southeast Asia	98	85	
Total outside United States	271	217	
Consolidated total	\$ 1,186	\$ 1,015	

The following customers accounted for at least 10 percent of Applied's net sales in each fiscal year, which were for products and services in multiple reportable segments:

	2017	2016	2015
Samsung Electronics Co., Ltd.	23%	13%	18%
Taiwan Semiconductor Manufacturing Company Limited	15%	16%	15%
Intel Corporation	*	11%	*
Micron Technology, Inc.	*	11%	*

* Less than 10%

Unaudited Quarterly Consolidated Financial Data	12 Months Ended				
	Oct. 29, 2017				
Quarterly Financial Information Disclosure [Abstract]					
Unaudited Quarterly Consolidated Financial Data	Unaudited Quarterly Consolidated Financial Data				
	Fiscal Quarter				
	First	Second	Third	Fourth	Fiscal Year
	(In millions, except per share amounts)				
2017:					
Net sales	\$ 3,278	\$ 3,546	\$ 3,744	\$ 3,969	\$ 14,537
Gross profit	\$ 1,445	\$ 1,600	\$ 1,700	\$ 1,787	\$ 6,532
Net income	\$ 703	\$ 824	\$ 925	\$ 982	\$ 3,434
Earnings per diluted share	\$ 0.65	\$ 0.76	\$ 0.85	\$ 0.91	\$ 3.17
2016:					
Net sales	\$ 2,257	\$ 2,450	\$ 2,821	\$ 3,297	\$ 10,825
Gross profit	\$ 916	\$ 1,004	\$ 1,192	\$ 1,399	\$ 4,511
Net income	\$ 286	\$ 320	\$ 505	\$ 610	\$ 1,721
Earnings per diluted share	\$ 0.25	\$ 0.29	\$ 0.46	\$ 0.56	\$ 1.54

Summary of Significant Accounting Policies (Policies)	12 Months Ended
	Oct. 29, 2017
Accounting Policies [Abstract]	
Principles of Consolidation and Basis of Presentation	<p><i>Principles of Consolidation and Basis of Presentation</i></p> <p>The consolidated financial statements include the accounts of Applied Materials, Inc. and its subsidiaries (Applied or the Company) after elimination of intercompany balances and transactions. All references to a fiscal year apply to Applied's fiscal year which ends on the last Sunday in October. Fiscal 2017, 2016 and 2015 contained 52, 53, and 52 weeks, respectively. Each fiscal quarter of 2017 and 2015 contained 13 weeks. The first fiscal quarter of 2016 contained 14 weeks, while the second, third and fourth quarters of fiscal 2016 contained 13 weeks.</p> <p>Certain prior year amounts have been reclassified to conform to current year presentation.</p>
Use of Estimates	<p><i>Use of Estimates</i></p> <p>The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make judgments, estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ materially from those estimates. On an ongoing basis, Applied evaluates its estimates, including those related to accounts receivable and sales allowances, fair values of financial instruments, inventories, intangible assets and goodwill, useful lives of intangible assets and property and equipment, fair values of share-based awards, and income taxes, among others. Applied bases its estimates on historical experience and on various other assumptions that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities.</p>
Cash Equivalents	<p><i>Cash Equivalents</i></p> <p>All highly-liquid investments with a remaining maturity of three months or less at the time of purchase are considered to be cash equivalents. Cash equivalents consist primarily of investments in institutional money market funds.</p>
Investments	<p><i>Investments</i></p> <p>All of Applied's investments, except equity investments held in privately-held companies, are classified as available-for-sale at the respective balance sheet dates. Investments classified as available-for-sale are recorded at fair value based upon quoted market prices, and any temporary difference between the cost and fair value of an investment is presented as a separate component of accumulated other comprehensive income (loss). The specific identification method is used to determine the gains and losses on investments. Interest earned on cash and investments, as well as realized gains and losses on sale of securities, are included in interest and other income, net in the accompanying Consolidated Statements of Operations.</p> <p>Equity investments in privately-held companies are generally accounted for under the cost method of accounting and are periodically assessed for other-than-temporary impairment when an event or circumstance indicates that an other-than-temporary decline in value may have occurred.</p> <p>Applied regularly reviews its investment portfolio to identify and evaluate investments that have indications of possible impairment. Factors considered in determining whether an unrealized loss is considered to be temporary, or other-than-temporary and therefore impaired, include: the length of time and extent to which fair value has been lower than the cost basis; the financial condition, credit quality and near-term prospects of the investee; and whether it is more likely than not that Applied will be required to sell the security prior to recovery. Generally, the contractual terms of investments in marketable securities do not permit settlement at prices less than the amortized cost of the investments.</p>
Allowances for Doubtful Accounts	<p><i>Allowance for Doubtful Accounts</i></p> <p>Applied maintains an allowance for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. This allowance is based on historical experience, credit evaluations, specific customer collection history and any customer-specific issues Applied has identified. Changes in circumstances, such as an unexpected material adverse change in a major customer's ability to meet its financial obligation to Applied or its payment trends, may require Applied to further adjust its estimates of the recoverability of amounts due to Applied. Bad</p>

debt expense and any reversals are recorded in marketing and selling expenses in the Consolidated Statement of Operations.

Inventories	<p><i>Inventories</i></p> <p>Inventories are stated at the lower of cost or market, with cost determined on a first-in, first-out (FIFO) basis. Applied adjusts inventory carrying value for estimated obsolescence equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions. Applied fully writes down inventories and noncancelable purchase orders for inventory deemed obsolete. Applied performs periodic reviews of inventory items to identify excess inventories on hand by comparing on-hand balances to anticipated usage using recent historical activity as well as anticipated or forecasted demand. If estimates of customer demand diminish further or market conditions become less favorable than those projected by Applied, additional inventory adjustments may be required.</p>
Property, Plant and Equipment	<p><i>Property, Plant and Equipment</i></p> <p>Property, plant and equipment is stated at cost. Depreciation is provided over the estimated useful lives of the assets using the straight-line method. Estimated useful lives for financial reporting purposes are as follows: buildings and improvements, 3 to 30 years; demonstration and manufacturing equipment, 3 to 5 years; software, 3 to 5 years; and furniture, fixtures and other equipment, 3 to 15 years. Land improvements are amortized over the shorter of 15 years or the estimated useful life. Leasehold improvements are amortized over the shorter of five years or the lease term.</p>
Intangible Assets	<p><i>Intangible Assets</i></p> <p>Goodwill and indefinite-lived assets are not amortized, but are reviewed for impairment annually during the fourth quarter of each fiscal year and whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. Purchased technology and other intangible assets are presented at cost, net of accumulated amortization, and are amortized over their estimated useful lives of 1 to 15 years using the straight-line method.</p>
Long-Lived Assets	<p><i>Long-Lived Assets</i></p> <p>Applied reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of these assets or asset group may not be recoverable. Applied assesses these assets for impairment based on estimated future cash flows from these assets.</p>
Research, Development and Engineering Costs	<p><i>Research, Development and Engineering Costs</i></p> <p>Research, development and engineering costs are expensed as incurred.</p>
Sales and Value Added Taxes	<p><i>Sales and Value Added Taxes</i></p> <p>Taxes collected from customers and remitted to governmental authorities are presented on a net basis in the accompanying Consolidated Statements of Operations.</p>
Warranty	<p><i>Warranty</i></p> <p>Applied provides for the estimated cost of warranty when revenue is recognized. Estimated warranty costs are determined by analyzing specific product, current and historical configuration statistics and regional warranty support costs. Applied's warranty obligation is affected by product and component failure rates, material usage and labor costs incurred in correcting product failures during the warranty period. If actual warranty costs differ substantially from Applied's estimates, revisions to the estimated warranty liability would be required.</p>
Income Taxes	<p><i>Income Taxes</i></p> <p>Applied recognizes a current tax liability for the estimated amount of income tax payable on tax returns for the current fiscal year. Deferred tax assets and liabilities are recognized for the estimated future tax effects of temporary differences between the book and tax bases of assets and liabilities. Deferred tax assets are also recognized for net operating loss and tax credit carryovers. Deferred tax assets are offset by a valuation allowance to the extent it is more likely than not that they are not expected to be realized.</p> <p>Applied recognizes tax benefits from uncertain tax positions only if it is more likely than not</p>

that the tax position will be sustained upon examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized from such positions are estimated based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. Any changes in judgment related to uncertain tax positions are recognized in the Consolidated Statement of Operations in the quarter in which such change occurs. Interest and penalties related to uncertain tax positions are recognized in Applied's provision for income taxes.

Revenue Recognition

Revenue Recognition

Applied recognizes revenue when all four revenue recognition criteria have been met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; seller's price to buyer is fixed or determinable; and collectability is probable. Applied's shipping terms are customarily FOB Applied shipping point or equivalent terms. Applied's revenue recognition policy generally results in revenue recognition at the following points: (1) for all transactions where legal title passes to the customer upon shipment or delivery, Applied recognizes revenue upon passage of title for all products that have been demonstrated to meet product specifications prior to shipment; the portion of revenue associated with certain installation-related tasks is deferred, and that revenue is recognized upon completion of the installation-related tasks; (2) for products that have not been demonstrated to meet product specifications prior to shipment, revenue is recognized at customer technical acceptance; (3) for transactions where legal title does not pass at shipment or delivery, revenue is recognized when legal title passes to the customer, which is generally at customer technical acceptance; and (4) for arrangements containing multiple elements, the revenue relating to the undelivered elements is deferred using the relative selling price method utilizing estimated sales prices until delivery of the deferred elements. Applied limits the amount of revenue recognition for delivered elements to the amount that is not contingent on the future delivery of products or services, future performance obligations or subject to customer-specified return or adjustment. In cases where Applied has sold products that have been demonstrated to meet product specifications prior to shipment, Applied believes that at the time of delivery, it has an enforceable claim to amounts recognized as revenue. Spare parts revenue is generally recognized upon shipment, and services revenue is generally recognized over the period that the services are provided.

When a sales arrangement contains multiple elements, such as hardware and services and/or software products, Applied allocates revenue to each element based on a selling price hierarchy. The selling price for a deliverable is based on its vendor specific objective evidence (VSOE) if available, third party evidence (TPE) if VSOE is not available, or estimated selling price (ESP) if neither VSOE nor TPE is available. Applied generally utilizes the ESP due to the nature of its products. In multiple element arrangements where more-than-incidental software deliverables are included, revenue is allocated to each separate unit of accounting for each of the non-software deliverables and to the software deliverables as a group using the relative selling prices of each of the deliverables in the arrangement based on the aforementioned selling price hierarchy. If the arrangement contains more than one software deliverable, the arrangement consideration allocated to the software deliverables as a group is then allocated to each software deliverable using the guidance for recognizing software revenue.

Derivative Financial Instruments

Derivative Financial Instruments

Applied uses financial instruments, such as forward exchange and currency option contracts, to hedge a portion of, but not all, existing and anticipated foreign currency denominated transactions typically expected to occur within 24 months. The purpose of Applied's foreign currency management is to mitigate the effect of exchange rate fluctuations on certain foreign currency denominated revenues, costs and eventual cash flows. In certain cases, Applied also uses interest rate swap or lock agreements to hedge against the variability of cash flows due to changes in the benchmark interest rate of fixed rate debt. The terms of derivative financial instruments used for hedging purposes are generally consistent with the timing of the transactions being hedged. All of Applied's derivative financial instruments are recorded at fair value based upon quoted market prices for comparable instruments. For derivative instruments designated and qualifying as cash flow hedges, the effective portion of the gain or loss on these hedges is reported as a component of accumulated other comprehensive income (loss) in stockholders' equity, and is reclassified into earnings when the hedged transaction affects earnings. If the transaction being hedged fails to occur, or if a portion of any derivative is ineffective, the gain or loss on the associated financial instrument is recorded promptly in earnings. For derivative instruments used to hedge existing foreign currency denominated assets or liabilities, the gain or loss on these hedges is recorded promptly in earnings to offset the changes in the fair value of the assets or liabilities being hedged. Applied does not use derivative financial instruments for trading or speculative purposes.

derivative financial instruments for trading or speculative purposes.

Applied conducts business in a number of foreign countries, with certain transactions denominated in local currencies, such as the Japanese yen, euro, Israeli shekel and Taiwanese dollar. Applied uses derivative financial instruments, such as forward exchange contracts and currency option contracts, to hedge certain forecasted foreign currency denominated transactions expected to occur typically within the next 24 months. The purpose of Applied's foreign currency management is to mitigate the effect of exchange rate fluctuations on certain foreign currency denominated revenues, costs and eventual cash flows. The terms of currency instruments used for hedging purposes are generally consistent with the timing of the transactions being hedged.

Applied does not use derivative financial instruments for trading or speculative purposes. Derivative instruments and hedging activities, including foreign currency exchange and interest rate contracts, are recognized on the balance sheet at fair value. Changes in the fair value of derivatives that do not qualify for hedge treatment, as well as the ineffective portion of any hedges, are recognized currently in earnings. All of Applied's derivative financial instruments are recorded at their fair value in other current assets or in accounts payable and accrued expenses.

Hedges related to anticipated transactions are designated and documented at the inception of the hedge as cash flow hedges and foreign exchange derivatives are typically entered into once per month. Cash flow hedges are evaluated for effectiveness quarterly. The effective portion of the gain or loss on these hedges is reported as a component of AOCI in stockholders' equity and is reclassified into earnings when the hedged transaction affects earnings. The majority of the after-tax net income or loss related to foreign exchange derivative instruments included in AOCI at October 29, 2017 is expected to be reclassified into earnings within 12 months. Changes in the fair value of currency forward exchange and option contracts due to changes in time value are excluded from the assessment of effectiveness. Both ineffective hedge amounts and hedge components excluded from the assessment of effectiveness are recognized in earnings. If the transaction being hedged is no longer probable to occur, or if a portion of any derivative is deemed to be ineffective, Applied promptly recognizes the gain or loss on the associated financial instrument in earnings. The amount recognized due to discontinuance of cash flow hedges that were probable not to occur by the end of the originally specified time period was a loss of \$8 million for fiscal 2016 and were not significant for fiscal years 2017 and 2015.

Additionally, forward exchange contracts are generally used to hedge certain foreign currency denominated assets or liabilities. These derivatives are typically entered into once per month and are not designated for hedge accounting treatment. Accordingly, changes in the fair value of these hedges are recorded in earnings to offset the changes in the fair value of the assets or liabilities being hedged.

Foreign Currencies

Foreign Currencies

As of October 29, 2017, all of Applied's subsidiaries use the United States dollar as their functional currency. Accordingly, assets and liabilities of these subsidiaries are remeasured using exchange rates in effect at the end of the period, except for non-monetary assets, such as inventories and property, plant and equipment, which are remeasured using historical exchange rates. Foreign currency-denominated revenues and costs are remeasured using average exchange rates for the period, except for costs related to those balance sheet items that are remeasured using historical exchange rates. The resulting remeasurement gains and losses are included in general and administrative expenses in the Consolidated Statements of Operations as incurred.

Concentrations of Credit Risk

Concentrations of Credit Risk

Financial instruments that potentially subject Applied to significant concentrations of credit risk consist principally of cash equivalents, investments, trade accounts receivable and derivative financial instruments used in hedging activities. Applied invests in a variety of financial instruments, such as, but not limited to, certificates of deposit, corporate and municipal bonds, United States Treasury and agency securities, and asset-backed and mortgage-backed securities, and, by policy, limits the amount of credit exposure with any one financial institution or commercial issuer. Applied performs ongoing credit evaluations of its customers' financial condition and generally requires no collateral to secure accounts receivable. Applied maintains an allowance reserve for potentially uncollectible accounts receivable based on its assessment of the collectability of accounts receivable. Applied regularly reviews the allowance by considering factors such as historical experience, credit quality, age of the accounts receivable balances, and current economic conditions that may affect a customer's ability to pay. In addition, Applied utilizes letters of credit to mitigate credit risk when considered appropriate. Applied is exposed to credit-related losses in the event of nonperformance by counterparties to derivative financial instruments, but does not expect any counterparties to fail to

counterparties to derivative financial instruments, but does not expect any counterparties to fail to meet their obligations. In some instances, Applied has entered into security arrangements which require the counterparties to post collateral to further mitigate credit exposure.

Recent Accounting Pronouncements

Recent Accounting Pronouncements

Accounting Standards Adopted

Debt Issuance Costs. In April 2015, the Financial Accounting Standard Board (FASB) issued authoritative guidance that requires debt issuance costs to be presented in the balance sheet as a direct deduction from the carrying amount of the related debt liability, consistent with debt discounts. Effective in the first quarter of fiscal 2017, Applied adopted the authoritative guidance retrospectively. The adoption of this guidance did not have a significant impact on Applied's consolidated financial statements. See Note 10 of Notes to Consolidated Financial Statements for additional discussion.

Fair Value Disclosures. In May 2015, the FASB issued authoritative guidance to remove the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value per share practical expedient. The new guidance also removes the requirement of certain disclosures for all investments that are eligible to be measured at fair value using the net asset value per share practical expedient. The guidance became effective for Applied in the first quarter of fiscal 2017, with retrospective application. The adoption of this guidance only impacts disclosures in Applied's annual consolidated financial statements.

Intangibles: Internal-Use Software. In April 2015, the FASB issued authoritative guidance for customers about whether a cloud computing arrangement includes a software license. If a cloud computing arrangement includes a software license, then the customer should account for the software license element of the arrangement consistent with the acquisition of other software licenses. If a cloud computing arrangement does not include a software license, the customer should account for the arrangement as a service contract. This guidance did not change accounting for service contracts. Applied adopted this guidance effective in the first quarter of fiscal 2017 prospectively to all arrangements entered into or materially modified after the effective date. The adoption of this guidance did not have a significant impact on Applied's consolidated financial statements.

Accounting Standards Not Yet Adopted

Derivatives and Hedging. In August 2017, the FASB issued authoritative guidance that modifies the recognition and presentation of hedge accounting to better align an entity's risk management strategies and financial reporting for hedging relationships. The authoritative guidance expands the application of hedge accounting for non-financial and financial risk components and eases certain hedge effectiveness assessment requirements. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2020, with early adoption permitted. Applied is currently evaluating the effect of this new guidance on Applied's consolidated financial statements.

Share-Based Compensation: Modification Accounting. In May 2017, the FASB issued an update to clarify when to account for a change to the terms or conditions of a share-based payment award as a modification. Under the new guidance, modification accounting is required only if the fair value, the vesting conditions, or the classification of the award changes as a result of the change in terms or conditions. This authoritative guidance will be applied prospectively to awards modified following adoption and will be effective for Applied in the first quarter of fiscal 2019 with early adoption permitted. The impact of the adoption of this guidance will depend on whether the Company makes any future modifications of share-based payment awards.

Receivables: Nonrefundable Fees and Other Costs. In March 2017, the FASB issued authoritative guidance that will shorten the amortization period for certain callable debt securities held at a premium to the earliest call date to more closely align with expectations incorporated in market pricing. This authoritative guidance will be effective for Applied in the first quarter of fiscal 2020 on a modified retrospective basis, with early adoption permitted. Applied is currently evaluating the impact of adopting this new accounting guidance on Applied's consolidated financial statements.

Retirement Benefits. In March 2017, the FASB issued authoritative guidance which requires companies to present the service cost component of net benefit cost in the same line items in which they report compensation cost. The other components of net benefit cost are required to be presented

in the income statement separately from the service cost component and outside a subtotal of income from operations, if one is presented. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2019 on a retrospective basis, with early adoption permitted. The adoption of this guidance is only expected to result in reclassification of other components of net benefit costs outside of income from operations and is not expected to have a significant impact on Applied's consolidated financial statements.

Goodwill Impairment. In January 2017, the FASB issued authoritative guidance that simplifies the process required to test goodwill for impairment. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2021. Early adoption is permitted. The adoption of this guidance is not expected to have a significant impact on Applied's consolidated financial statements.

Business Combinations. In January 2017, the FASB issued authoritative guidance that clarifies the definition of a business to help companies evaluate whether acquisition or disposal transactions should be accounted for as asset groups or as businesses. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2019 on a prospective basis, with early adoption permitted. The impact of the adoption depends on the facts and circumstances of future acquisition or disposal transactions.

Income Taxes: Intra-Entity Asset Transfers. In October 2016, the FASB issued authoritative guidance that requires entities to recognize at the transaction date the income tax consequences of intercompany asset transfers other than inventory. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2019, with early adoption permitted. Applied is currently evaluating the effect of this new guidance on Applied's consolidated financial statements.

Classification of Certain Cash Receipts and Cash Payments. In August 2016, the FASB issued authoritative guidance which addresses classification of certain cash receipts and cash payments related to the statement of cash flows. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2019. The adoption of this guidance is not expected to have a significant impact on Applied's consolidated financial statements.

Financial Instruments: Credit Losses. In June 2016, the FASB issued authoritative guidance that modifies the impairment model for certain financial assets by requiring use of an expected loss methodology, which will result in more timely recognition of credit losses. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2021. Early adoption is permitted beginning in the first quarter of fiscal 2020. Applied is currently evaluating the effect of this new guidance on Applied's consolidated financial statements.

Share-Based Compensation. In March 2016, the FASB issued authoritative guidance that simplifies several aspects of the accounting for share-based payment transactions, including the income tax consequences, forfeitures, classification of awards as either equity or liabilities, and classification on the statement of cash flows. Applied plans to adopt the authoritative guidance effective in the first quarter of fiscal 2018. Upon adoption, Applied will elect to continue to estimate forfeitures expected to occur to determine the amount of compensation cost to be recognized in each period. The new standard will result in the recognition of excess tax benefits in provision for income taxes rather than paid-in capital prospectively, which is expected to increase volatility in Applied's results of operations. Applied will elect to apply the presentation requirements for cash flows related to excess tax benefits retrospectively. The presentation requirements for cash flows related to employee taxes paid for withheld shares will be presented as a financing activity retrospectively, as required. Applied expects cash flow from operations to increase, with a corresponding decrease in cash flow from financing activity as a result of the changes in the cash flow presentation.

Leases. In February 2016, the FASB issued authoritative guidance for lease accounting, which requires lessees to recognize lease assets and liabilities on the balance sheet for certain lease arrangements that are classified as operating leases under the previous standard, and to provide for enhanced disclosures. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2020 and should be applied using a modified retrospective approach. Early adoption is permitted. Applied is currently evaluating the effect of this new guidance on Applied's consolidated financial statements.

Financial Instruments: Classification and Measurement. In January 2016, the FASB issued authoritative guidance that requires equity investments that do not result in consolidation, and are not accounted for under the equity method, to be measured at fair value, and requires recognition of any changes in fair value in net income unless the investments qualify for a new practicability exception.

For financial liabilities measured at fair value, the change in fair value caused by a change in instrument-specific credit risk will be required to be presented separately in other comprehensive income. The authoritative guidance will be effective for Applied in the first quarter of fiscal 2019. Early adoption is permitted only for the provisions related to the recognition of changes in fair value of financial liabilities caused by instrument-specific credit risk. Applied is currently evaluating the effect of this new guidance on Applied's consolidated financial statements.

Inventory Measurement. In July 2015, the FASB issued authoritative guidance that requires inventory to be measured at the lower of cost and net realizable value instead of at lower of cost or market. This guidance does not apply to inventory that is measured using last-in, first out (LIFO) or the retail inventory method but applies to all other inventory including those measured using first-in, first-out (FIFO) or the average cost method. Applied will adopt this authoritative guidance in the first quarter of fiscal 2018 prospectively to measurement of inventory after the effective date. The adoption of this guidance is not expected to have a significant impact on Applied's consolidated financial statements.

Revenue Recognition. In May 2014, the FASB issued authoritative guidance that requires revenue recognition to depict the transfer of promised goods or services to a customer in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services, and requires certain additional disclosures. This new standard will supersede most current revenue recognition guidance, including industry-specific guidance. Entities will have the option of using either a full retrospective or modified retrospective approach to adopting the guidance. In August 2015, the FASB issued an amendment to defer the effective date by one year and allow entities to early adopt no earlier than the original effective date. With this amendment, the guidance will be effective for Applied in the first quarter of fiscal 2019, which is the Company's planned adoption date. Applied currently anticipates adopting this new guidance using the full retrospective approach, although this continues to be assessed as part of the overall evaluation.

In fiscal 2016, Applied established a project steering committee and cross-functional implementation team to identify potential differences that would result from applying the requirements of the new standard to Applied's revenue contracts. In addition, the implementation team is also responsible for identifying and implementing changes to business processes, systems and controls to support recognition and disclosure under the new standard. While the Company's evaluation of the impact of this new guidance is not complete, Applied currently expects the timing of revenue recognition for certain products to be earlier than under current revenue recognition guidance. Applied will continue to complete its evaluation of the effect of this new guidance on Applied's financial position, results of operations and its ongoing financial reporting, and its preliminary assessments are subject to change.

Fair Value Measurements

Fair Value Measurements

Applied's financial assets are measured and recorded at fair value, except for equity investments in privately-held companies. These equity investments are generally accounted for under the cost method of accounting and are periodically assessed for other-than-temporary impairment when events or circumstances indicate that an other-than-temporary decline in value may have occurred. Applied's nonfinancial assets, such as goodwill, intangible assets, and property, plant and equipment, are recorded at cost and are assessed for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable.

Fair Value Hierarchy

Applied uses the following fair value hierarchy, which prioritizes the inputs to valuation techniques used to measure fair value into three levels and bases the categorization within the hierarchy upon the lowest level of input that is available and significant to the fair value measurement:

- Level 1 — Quoted prices in active markets for identical assets or liabilities;
- Level 2 — Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and
- Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Applied's investments consist primarily of debt securities that are classified as available-for-sale and recorded at their fair values. In determining the fair value of investments, Applied uses pricing information from pricing services that value securities based on quoted market prices and models that utilize observable market inputs. In the event a fair value estimate is unavailable from a pricing service, Applied generally obtains non-binding price quotes from brokers. Applied then reviews the information provided by the pricing services or brokers to determine the fair value of its short-term and long-term investments. In addition, to validate pricing information obtained from pricing services, Applied periodically performs supplemental analysis on a sample of securities. Applied reviews any significant unanticipated differences identified through this analysis to determine the appropriate fair value.

Investments with remaining effective maturities of 12 months or less from the balance sheet date are classified as short-term investments. Investments with remaining effective maturities of more than 12 months from the balance sheet date are classified as long-term investments. As of October 29, 2017, substantially all of Applied's available-for-sale, short-term and long-term investments were recognized at fair value that was determined based upon observable inputs.

Goodwill and Purchased Intangible Assets

Goodwill and Purchased Intangible Assets

Applied's methodology for allocating the purchase price relating to purchase acquisitions is determined through established and generally accepted valuation techniques. Goodwill is measured as the excess of the purchase price over the sum of the amounts assigned to tangible and identifiable intangible assets acquired less liabilities assumed. Applied assigns assets acquired (including goodwill) and liabilities assumed to one or more reporting units as of the date of acquisition. Typically, acquisitions relate to a single reporting unit and thus do not require the allocation of goodwill to multiple reporting units. If the products obtained in an acquisition are assigned to multiple reporting units, the goodwill is distributed to the respective reporting units as part of the purchase price allocation process.

Goodwill and purchased intangible assets with indefinite useful lives are not amortized, but are reviewed for impairment annually during the fourth quarter of each fiscal year and whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. The process of evaluating the potential impairment of goodwill and intangible assets requires significant judgment, especially in emerging markets. Applied regularly monitors current business conditions and considers other factors including, but not limited to, adverse industry or economic trends, restructuring actions and lower projections of profitability that may impact future operating results.

To test goodwill for impairment, Applied first performs a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. If it is concluded that this is the case, Applied then performs the two-step goodwill impairment test. Otherwise, the two-step goodwill impairment test is not required. Under the two-step goodwill impairment test, Applied would in the first step compare the estimated fair value of each reporting unit to its carrying value. Applied determines the fair value of each of its reporting units based on a weighting of income and market approaches. If the carrying value of a reporting unit exceeds its fair value, Applied would then perform the second step of the impairment test in order to determine the implied fair value of the reporting unit's goodwill. If Applied determines that the carrying value of a reporting unit's goodwill exceeds its implied fair value, Applied would record an impairment charge equal to the difference.

Finite-Lived Purchased Intangible Assets

Finite-Lived Purchased Intangible Assets

Applied amortizes purchased intangible assets with finite lives using the straight-line method over the estimated economic lives of the assets, ranging from 1 to 15 years.

Applied evaluates long-lived assets for impairment whenever events or changes in circumstances indicate the carrying value of an asset group may not be recoverable. Applied assesses the fair value of the assets based on the amount of the undiscounted future cash flow that the assets are expected to generate and recognizes an impairment loss when estimated undiscounted future cash flow expected to result from the use of the asset, plus net proceeds expected from disposition of the asset, if any, are less than the carrying value of the asset. When Applied identifies an impairment, Applied reduces the carrying value of the group of assets to comparable market values, when available and appropriate, or to its estimated fair value based on a discounted cash flow approach.

Intangible assets, such as purchased technology, are generally recorded in connection with a business acquisition. The value assigned to intangible assets is usually based on estimates and judgments regarding expectations for the success and life cycle of products and technology acquired. Applied evaluates the useful lives of its intangible assets each reporting period to determine whether

Applied evaluates the useful lives of its intangible assets each reporting period to determine whether events and circumstances require revising the remaining period of amortization. In addition, Applied reviews intangible assets for impairment when events or changes in circumstances indicate their carrying value may not be recoverable. Management considers such indicators as significant differences in actual product acceptance from the estimates, changes in the competitive and economic environments, technological advances, and changes in cost structure.

Treasury Stock

Applied records treasury stock purchases under the cost method using the first-in, first-out (FIFO) method. Upon reissuance of treasury stock, amounts in excess of the acquisition cost are credited to additional paid in capital. If Applied reissues treasury stock at an amount below its acquisition cost and additional paid in capital associated with prior treasury stock transactions is insufficient to cover the difference between the acquisition cost and the reissue price, this difference is recorded against retained earnings.

Earnings Per Share (Tables)	12 Months Ended			
	Oct. 29, 2017			
Earnings Per Share [Abstract]				
Elements used in computing both basic and diluted net earnings per share	Applied's net income has not been adjusted for any period presented for purposes of computing basic or diluted earnings per share due to the Company's non-complex capital structure.			
	Fiscal Year	2017	2016	2015
		(In millions, except per share amounts)		
	Numerator:			
	Net income	\$ 3,434	\$ 1,721	\$ 1,377
	Denominator:			
	Weighted average common shares outstanding	1,073	1,107	1,214
	Effect of dilutive stock options, restricted stock units and employee stock purchase plan shares	11	9	12
	Denominator for diluted earnings per share	1,084	1,116	1,226
	Basic earnings per share	\$ 3.20	\$ 1.56	\$ 1.13
	Diluted earnings per share	\$ 3.17	\$ 1.54	\$ 1.12
	Potentially dilutive securities	—	—	—

Cash, Cash Equivalents and Investments (Tables)	12 Months Ended			
	Oct. 29, 2017			
Cash and Cash Equivalents [Abstract]				
Summary of cash, cash equivalents and investments	The following tables summarize Applied's cash, cash equivalents and investments by security type:			
<u>October 29, 2017</u>	<u>Cost</u>	<u>Gross Unrealized Gains</u>	<u>Gross Unrealized Losses</u>	<u>Estimated Fair Value</u>
(In millions)				
Cash	\$ 1,346	\$ —	\$ —	\$ 1,346
Cash equivalents:				
Money market funds	2,658	—	—	2,658
U.S. Treasury and agency securities	15	—	—	15
Non-U.S. government securities*	55	—	—	55
Municipal securities	341	—	—	341
Commercial paper, corporate bonds and medium-term notes	595	—	—	595
Total Cash equivalents	3,664	—	—	3,664
Total Cash and Cash equivalents	\$ 5,010	\$ —	\$ —	\$ 5,010
Short-term and long-term investments:				
U.S. Treasury and agency securities	\$ 667	\$ —	\$ 1	\$ 666
Non-U.S. government securities*	161	—	—	161
Municipal securities	1,007	—	—	1,007
Commercial paper, corporate bonds and medium-term notes	1,024	1	1	1,024
Asset-backed and mortgage-backed securities	379	—	1	378
Total fixed income securities	3,238	1	3	3,236
Publicly traded equity securities	22	78	1	99
Equity investments in privately-held companies	74	—	—	74
Total short-term and long-term investments	\$ 3,334	\$ 79	\$ 4	\$ 3,409
Total Cash, Cash equivalents and Investments	\$ 8,344	\$ 79	\$ 4	\$ 8,419

* Includes agency debt securities guaranteed by non-U.S. governments, which consist of Canada and Germany.

<u>October 30, 2016</u>	<u>Cost</u>	<u>Gross Unrealized Gains</u>	<u>Gross Unrealized Losses</u>	<u>Estimated Fair Value</u>
(In millions)				
Cash	\$ 1,103	\$ —	\$ —	\$ 1,103
Cash equivalents:				
Money market funds	1,889	—	—	1,889
U.S. Treasury and agency securities	10	—	—	10
Non-U.S. government securities	10	—	—	10
Municipal securities	253	—	—	253
Commercial paper, corporate bonds and medium-term notes	141	—	—	141
Total Cash equivalents	\$ 2,303	\$ —	\$ —	\$ 2,303
Total Cash and Cash equivalents	\$ 3,406	\$ —	\$ —	\$ 3,406

Short-term and long-term investments:

Short-term and long-term investments:

U.S. Treasury and agency securities	\$ 195	\$ —	\$ —	\$ 195
Non-U.S. government securities*	5	—	—	5
Municipal securities	408	—	—	408
Commercial paper, corporate bonds and medium-term notes	273	1	—	274
Asset-backed and mortgage-backed securities	253	1	1	253
Total fixed income securities	1,134	2	1	1,135
Publicly traded equity securities	26	44	3	67
Equity investments in privately-held companies	70	—	—	70
Total short-term and long-term investments	\$ 1,230	\$ 46	\$ 4	\$ 1,272
Total Cash, Cash equivalents and Investments	\$ 4,636	\$ 46	\$ 4	\$ 4,678

* Includes agency debt securities guaranteed by non-U.S. governments, which consist of Canada and Germany.

Contractual maturities of investments

The following table summarizes the contractual maturities of Applied's investments at October 29, 2017:

	Cost	Estimated Fair Value
	(In millions)	
Due in one year or less	\$ 2,219	\$ 2,219
Due after one through five years	640	640
No single maturity date**	475	550
	\$ 3,334	\$ 3,409

** Securities with no single maturity date include publicly-traded and privately-held equity securities, and asset-backed and mortgage-backed securities.

Schedule of gross realized gains and losses on sales of investments

Gross realized gains and losses on sales of investments for each fiscal year were as follows:

	2017	2016	2015
	(In millions)		
Gross realized gains	\$ 14	\$ 10	\$ 9
Gross realized losses	\$ 1	\$ 2	\$ 3

Derivative Instruments and Hedging Activities (Tables)	12 Months Ended				
	Oct. 29, 2017				
Derivative Instruments and Hedging Activities Disclosure [Abstract]					
Effect of derivative instruments on the consolidated statement of operations	The effects of derivative instruments and hedging activities on the Consolidated Statements of Operations were as follows:				

Accounts Receivable, Net (Tables)	12 Months Ended		
	Oct. 29, 2017		
Receivables [Abstract]			
Changes in allowance for doubtful accounts	Changes in allowance for doubtful accounts in each fiscal year were as follows:		
	2017	2016	2015
	(In millions)		
Beginning balance	\$ 51	\$ 49	\$ 58
Provision	—	3	—
Deductions ¹	(17)	(1)	(9)
Ending balance	\$ 34	\$ 51	\$ 49
¹ Fiscal 2017, 2016 and 2015 deductions primarily represent releases of allowance for doubtful accounts credited to expense as a result of an overall lower risk profile of Applied's customers and cash collections.			

Balance Sheet Detail (Tables)	12 Months Ended		
	Oct. 29, 2017		
Organization, Consolidation and Presentation of Financial Statements [Abstract]			
Inventories		October 29, 2017	October 30, 2016
		(In millions)	
	Inventories		
	Customer service spares	\$ 595	\$ 452
	Raw materials	603	474
	Work-in-process	468	393
	Finished goods	1,264	731
		<u>\$ 2,930</u>	<u>\$ 2,050</u>
Other current assets		October 29, 2017	October 30, 2016
		(In millions)	
	Other Current Assets		
	Prepaid income taxes and income taxes receivable	\$ 57	\$ 87
	Prepaid expenses and other	317	188
		<u>\$ 374</u>	<u>\$ 275</u>
Property, plant and equipment, net		October 29, 2017	October 30, 2016
		Useful Life	
		(In years)	(In millions)
	Property, Plant and Equipment, Net		
	Land and improvements	\$ 160	\$ 159
	Buildings and improvements 3-30	1,315	1,261
	Demonstration and manufacturing equipment 3-5	1,129	992
	Furniture, fixtures and other equipment 3-15	572	547
	Construction in progress	135	84
	Gross property, plant and equipment	<u>3,311</u>	<u>3,043</u>
	Accumulated depreciation	<u>(2,245)</u>	<u>(2,106)</u>
		<u>\$ 1,066</u>	<u>\$ 937</u>
Accounts payable, notes payable and accrued expenses		October 29, 2017	October 30, 2016
		(In millions)	
	Accounts Payable, Notes Payable and Accrued Expenses		
	Accounts payable	\$ 945	\$ 813
	Notes payable, short-term	—	200
	Compensation and employee benefits	666	517
	Warranty	199	153
	Dividends payable	106	108
	Income taxes payable	112	101
	Other accrued taxes	70	50
	Interest payable	38	31
	Other	314	283
		<u>\$ 2,450</u>	<u>\$ 2,256</u>
Customer deposits and deferred revenue			

		<u>October 29, 2017</u>	<u>October 30, 2016</u>
		(In millions)	
	Customer Deposits and Deferred Revenue		
	Customer deposits	\$ 381	\$ 471
	Deferred revenue	1,284	905
		<u>\$ 1,665</u>	<u>\$ 1,376</u>
Other liabilities		<u>October 29, 2017</u>	<u>October 30, 2016</u>
		(In millions)	
	Other Liabilities		
	Income taxes payable	\$ 392	\$ 337
	Defined and postretirement benefit plans	160	182
	Other	99	77
		<u>\$ 651</u>	<u>\$ 596</u>

Business Combinations (Tables)	12 Months Ended	
	Oct. 29, 2017	
Business Combinations [Abstract]		
Schedule of Recognized Identified Assets Acquired and Liabilities Assumed	The following table represents the preliminary aggregated purchase price allocation for acquisitions completed in fiscal year 2017:	
		Estimated Fair Values
		(In millions)
Fair value of net assets acquired	\$	23
Goodwill		55
Purchased technology		31
Purchase price allocated	\$	109

Goodwill, Purchased Technology and Other Intangible Assets (Tables)	12 Months Ended					
	Oct. 29, 2017					
Goodwill and Intangible Assets Disclosure [Abstract]						
Goodwill and Indefinite-lived intangible assets	Details of goodwill and other indefinite-lived intangible assets were as follows:					
	October 29, 2017			October 30, 2016		
	Goodwill	Other Intangible Assets	Total	Goodwill	Other Intangible Assets	Total
	(In millions)					
Semiconductor Systems	\$ 2,151	\$ —	\$ 2,151	\$ 2,151	\$ —	\$ 2,151
Applied Global Services	1,018	—	1,018	1,010	5	1,015
Display and Adjacent Markets	199	—	199	155	20	175
Carrying amount	\$ 3,368	\$ —	\$ 3,368	\$ 3,316	\$ 25	\$ 3,341
Summary of purchased technology and intangible assets	A summary of Applied’s purchased technology and intangible assets is set forth below:					
				October 29, 2017	October 30, 2016	
				(In millions)		
	Purchased technology, net			\$ 288	\$ 409	
	Intangible assets - finite-lived, net			124	141	
	Intangible assets - indefinite-lived			—	25	
	Total			\$ 412	\$ 575	
Finite-lived intangible assets	Details of finite-lived intangible assets were as follows:					
	October 29, 2017			October 30, 2016		
	Purchased Technology	Other Intangible Assets	Total	Purchased Technology	Other Intangible Assets	Total
	(In millions)					
Gross carrying amount:						
Semiconductor Systems	\$ 1,449	\$ 252	\$ 1,701	\$ 1,449	\$ 252	\$ 1,701
Applied Global Services	33	44	77	28	44	72
Display and Adjacent Markets	163	38	201	115	36	151
Corporate and Other	—	9	9	1	9	10
Gross carrying amount	\$ 1,645	\$ 343	\$ 1,988	\$ 1,593	\$ 341	\$ 1,934
Accumulated amortization:						
Semiconductor Systems	\$ (1,210)	\$ (131)	\$ (1,341)	\$ (1,043)	\$ (113)	\$ (1,156)
Applied Global Services	(28)	(44)	(72)	(27)	(44)	(71)
Display and Adjacent Markets	(119)	(35)	(154)	(113)	(34)	(147)
Corporate and Other	—	(9)	(9)	(1)	(9)	(10)
Accumulated amortization	\$ (1,357)	\$ (219)	\$ (1,576)	\$ (1,184)	\$ (200)	\$ (1,384)
Carrying amount	\$ 288	\$ 124	\$ 412	\$ 409	\$ 141	\$ 550
Summary of amortization expense	Details of amortization expense for each fiscal year by segment were as follows:					
				2017	2016	2015
	(In millions)					
	Semiconductor Systems			\$ 185	\$ 185	\$ 179

	Applied Global Services	1	1	1
	Display and Adjacent Markets	7	—	3
	Corporate and Other	—	3	3
	Total	<u>\$ 193</u>	<u>\$ 189</u>	<u>\$ 186</u>
Schedule of categories amortization expense was charged to	Amortization expense for each fiscal year was charged to the following categories:			
		<u>2017</u>	<u>2016</u>	<u>2015</u>
		(In millions)		
	Cost of products sold	\$ 173	\$ 167	\$ 163
	Research, development and engineering	1	2	1
	Marketing and selling	19	20	20
	General and administrative	—	—	2
	Total	<u>\$ 193</u>	<u>\$ 189</u>	<u>\$ 186</u>
Future estimated amortization expense	As of October 29, 2017, future estimated amortization expense is expected to be as follows:			
			Amortization Expense	
			(In millions)	
	2018			198
	2019			57
	2020			52
	2021			40
	2022			65
	Total		<u>\$</u>	<u>412</u>

Borrowing Facilities and Debt (Tables)	12 Months Ended			
	Oct. 29, 2017			
Debt Disclosure [Abstract]				
Debt Outstanding	Debt outstanding as of October 29, 2017 and October 30, 2016 was as follows:			
		Principal Amount		
		October 29, 2017	October 30, 2016	Effective Interest Rate
				Interest Pay Dates
	(In millions)			
Short-term debt:				
7.125% Senior Notes Due 2017	\$	—	\$ 200	7.190% April 15, October 15
Total short-term debt		—	200	
Long-term debt:				
2.625% Senior Notes Due 2020		600	600	2.640% April 1, October 1
4.300% Senior Notes Due 2021		750	750	4.326% June 15, December 15
3.900% Senior Notes Due 2025		700	700	3.944% April 1, October 1
3.300% Senior Notes Due 2027		1,200	—	3.342% April 1, October 1
5.100% Senior Notes Due 2035		500	500	5.127% April 1, October 1
5.850% Senior Notes Due 2041		600	600	5.879% June 15, December 15
4.350% Senior Notes Due 2047		1,000	—	4.361% April 1, October 1
		5,350	3,150	
Total unamortized discount		(12)	(7)	
Total unamortized debt issuance costs ¹		(34)	(18)	
Total long-term debt		5,304	3,125	
Total debt	\$	5,304	\$ 3,325	
¹ Balances reflect the effects of the retrospective adoption of the authoritative guidance in the first quarter of fiscal 2017, which required debt issuance costs to be presented as a direct reduction from the carrying amount of the related debt liability. These amounts for fiscal 2016 were originally recorded under Other Assets.				

Stockholders' Equity, Comprehensive Income and Share-Based Compensation (Tables)	12 Months Ended				
	Oct. 29, 2017				
Equity [Abstract]					
Components of accumulated other comprehensive loss, after-tax basis	Changes in the components of AOCI, net of tax, were as follows:				
	Unrealized Gain (Loss) on Investments, Net	Unrealized Gain (Loss) on Derivative Instruments Qualifying as Cash Flow Hedges	Defined and Postretirement Benefit Plans	Cumulative Translation Adjustments	Total
	(In millions)				
Balance at October 26, 2014	\$ 24	\$ —	\$ (105)	\$ 5	(76)
Other comprehensive income (loss) before reclassifications	(11)	(9)	(5)	—	(25)
Amounts reclassified out of accumulated other comprehensive income	1	(6)	5	9	9
Other comprehensive income (loss), net of tax	(10)	(15)	—	9	(16)
Balance at October 25, 2015	\$ 14	\$ (15)	\$ (105)	\$ 14	(92)
Other comprehensive income (loss) before reclassifications	14	(33)	(42)	—	(61)
Amounts reclassified out of AOCI	2	30	6	—	38
Other comprehensive income (loss), net of tax	16	(3)	(36)	—	(23)
Balance at October 30, 2016	\$ 30	\$ (18)	\$ (141)	\$ 14	(115)
Other comprehensive income before reclassifications	24	13	29	—	66
Amounts reclassified out of AOCI	(1)	(6)	(8)	—	(15)
Other comprehensive income, net of tax	23	7	21	—	51
Balance at October 29, 2017	\$ 53	\$ (11)	\$ (120)	\$ 14	(64)
Summary of stock repurchases	The following table summarizes Applied's stock repurchases for each fiscal year:				
		2017	2016	2015	
		(In millions, except per share amounts)			
Shares of common stock repurchased		28	96	76	
Cost of stock repurchased	\$	1,172	\$ 1,892	\$ 1,325	
Average price paid per share	\$	42.08	\$ 19.82	\$ 17.33	
Total share-based compensation and related tax benefits	Applied recognized share-based compensation expense related to stock options, ESPP shares, restricted stock, restricted stock units, performance shares and performance units, and related tax benefits for each fiscal year as follows:				
		2017	2016	2015	
		(In millions)			
Share-based compensation	\$	220	\$ 201	\$ 187	
Tax benefit recognized	\$	60	\$ 63	\$ 52	
Effect of share-based compensation on	The effect of share-based compensation on the results of operations for each fiscal year was as				

the results of operations by expense type	The effect of share-based compensation on the results of operations for each fiscal year was as follows:			
		2017	2016	2015
		(In millions)		
	Cost of products sold	\$ 69	\$ 62	\$ 57
	Research, development, and engineering	83	76	69
	Marketing and selling	28	26	26
	General and administrative	40	37	35
	Total share-based compensation	<u>\$ 220</u>	<u>\$ 201</u>	<u>\$ 187</u>

Restricted stock units and restricted stock activity

A summary of the changes in restricted stock units, restricted stock, performance shares and performance units outstanding under Applied's equity compensation plans is presented below:

	Shares	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
(In millions, except per share amounts)				
Non-vested restricted stock units, restricted stock, performance shares and performance units at October 26, 2014	33	\$ 12.59	2.3 years	\$ 698
Granted	10	\$ 22.60		
Vested	(15)	\$ 12.04		
Canceled	<u>(1)</u>	\$ 14.98		
Non-vested restricted stock units, restricted stock, performance shares and performance units at October 25, 2015	27	\$ 16.41	2.2 years	\$ 440
Granted	11	\$ 18.54		
Vested	(11)	\$ 14.25		
Canceled	<u>(2)</u>	\$ 17.57		
Non-vested restricted stock units, restricted stock, performance shares and performance units at October 30, 2016	25	\$ 18.28	2.3 years	\$ 718
Granted	8	\$ 31.79		
Vested	(10)	\$ 16.50		
Canceled	<u>(1)</u>	\$ 21.25		
Non-vested restricted stock units, restricted stock, performance shares and performance units at October 29, 2017	<u>22</u>	\$ 23.96	2.2 years	\$ 1,239
Non-vested restricted stock units, restricted stock, performance shares and performance units expected to vest	20	\$ 23.30	2.0 years	\$ 1,107

Significant valuation assumptions in relation to ESPP

Underlying assumptions used in the model are outlined in the following table:

	2017	2016	2015
ESPP:			
Dividend yield	0.99%	1.76%	2.20%
Expected volatility	26.3%	29.3%	31.8%
Risk-free interest rate	0.92%	0.47%	0.19%
Expected life (in years)	0.5	0.5	0.5
Weighted average estimated fair value	\$9.14	\$5.48	\$4.55

Employee Benefit Plans (Tables)	12 Months Ended		
	Oct. 29, 2017		
Retirement Benefits [Abstract]			
Changes in benefit obligations and plan assets including post-retirement benefits	A summary of the changes in benefit obligations and plan assets, which includes post-retirement benefits, for each fiscal year is presented below:		
	2017	2016	2015
	(In millions, except percentages)		
Change in projected benefit obligation			
Beginning projected benefit obligation	\$ 495	\$ 471	\$ 479
Service cost	13	13	15
Interest cost	10	13	13
Plan participants' contributions	2	1	1
Actuarial (gain) loss	(35)	77	12
Curtailments, settlements and special termination benefits	(1)	(6)	(1)
Foreign currency exchange rate changes	34	(42)	(39)
Benefits paid	(12)	(10)	(9)
Plan amendments and business combinations	—	(22)	—
Ending projected benefit obligation	\$ 506	\$ 495	\$ 471
Ending accumulated benefit obligation	\$ 472	\$ 460	\$ 434
Range of assumptions to determine benefit obligations			
Discount rate	0.5% - 3.4%	0.5% - 3.1%	0.9% - 4.4%
Rate of compensation increase	2.2% - 3.5%	1.6% - 3.6%	1.9% - 3.6%
Change in plan assets			
Beginning fair value of plan assets	\$ 310	\$ 281	\$ 268
Return on plan assets	18	37	19
Employer contributions	16	50	21
Plan participants' contributions	2	1	1
Foreign currency exchange rate changes	28	(45)	(18)
Divestitures, settlements and business combinations	(1)	(4)	(1)
Benefits paid	(12)	(10)	(9)
Ending fair value of plan assets	\$ 361	\$ 310	\$ 281
Funded status	\$ (145)	\$ (185)	\$ (190)
Amounts recognized in the consolidated balance sheets			
Noncurrent asset	\$ 17	\$ 11	\$ 19
Current liability	(1)	(2)	(3)
Noncurrent liability	(161)	(194)	(206)
Total	\$ (145)	\$ (185)	\$ (190)
Estimated amortization from accumulated other comprehensive loss into net periodic benefit cost over the next fiscal period			
Actuarial loss	\$ 6	\$ 6	\$ 6
Prior service credit	(4)	(16)	(1)
Total	\$ 2	\$ (10)	\$ 5
Amounts recognized in accumulated other comprehensive loss			

Net actuarial loss	\$	141	\$	186	\$	135
Prior service credit		(4)		(21)		—
Total	\$	137	\$	165	\$	135
Plans with projected benefit obligations in excess of plan assets						
Projected benefit obligation	\$	326	\$	341	\$	308
Fair value of plan assets	\$	142	\$	145	\$	98
Plans with accumulated benefit obligations in excess of plan assets						
Accumulated benefit obligation	\$	293	\$	307	\$	274
Fair value of plan assets	\$	142	\$	145	\$	98
		2017		2016		
Plan assets — allocation						
Equity securities		47%		42%		
Debt securities		39%		40%		
Insurance contracts		11%		12%		
Other investments		3%		4%		
Cash		—%		2%		

Summary of ending fair value of the plan assets

The following table presents a summary of the ending fair value of the plan assets:

	October 29, 2017				October 30, 2016			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
(In millions)								
Equity securities	\$ 83	\$ —	\$ —	\$ 83	\$ 59	\$ —	\$ —	\$ 59
Debt securities	16	—	—	16	12	—	—	12
Insurance contracts	—	—	38	38	—	—	38	38
Other investments	—	13	—	13	—	12	—	12
Cash	2	—	—	2	8	—	—	8
Total assets at fair value	101	13	38	152	79	12	38	129
Assets measured at net asset value ¹				209				181
Total				\$ 361				\$ 310

¹ Balances reflect the investments that are measured at fair value using the net asset value per share practical expedient and have not been categorized in the fair value hierarchy. Certain prior year amounts were reclassified to conform to current year presentation.

Activity in Level 3 instruments

The following table presents the activity in Level 3 instruments for each fiscal year:

	2017	2016
	(In millions)	
Balance, beginning of year	\$ 38	\$ 40
Actual return on plan assets:		
Relating to assets still held at reporting date	(3)	(1)
Purchases, sales, settlements, net	1	—
Currency impact	2	(1)
Balance, end of year	\$ 38	\$ 38

Schedule of net benefit costs and weighted average assumptions used

A summary of the components of net periodic benefit costs and the weighted average assumptions used for net periodic benefit cost calculations for each fiscal year is presented below:

	2017	2016	2015
	(In millions, except percentages)		
Components of net periodic benefit cost			
Service cost	\$ 13	\$ 13	\$ 15
Interest cost	10	13	13
Expected return on plan assets	(18)	(14)	(15)
Amortization of actuarial loss and prior service credit	(10)	3	7
Settlement and curtailment loss	—	(5)	(1)
Net periodic benefit cost (income)	<u>\$ (5)</u>	<u>\$ 10</u>	<u>\$ 19</u>
Weighted average assumptions			
Discount rate	1.88%	2.82%	3.00%
Expected long-term return on assets	5.38%	5.38%	5.62%
Rate of compensation increase	2.69%	2.71%	2.74%
Schedule of expected benefit payments	Future expected benefit payments for the pension plans and the post-retirement plan over the next ten fiscal years are as follows:		
	<u>Benefit Payments</u>		
	<u>(In millions)</u>		
2018	\$	11	
2019		11	
2020		11	
2021		12	
2022		12	
2023-2027		72	
	\$	<u>129</u>	

Income Taxes (Tables)		12 Months Ended			
		Oct. 29, 2017			
Income Tax Disclosure [Abstract]					
Components of income from operations before income taxes	The components of income before income taxes for each fiscal year were as follows:				
		2017	2016	2015	
		(In millions)			
	U.S.	\$ 514	\$ 199	\$ 629	
	Foreign	3,217	1,814	969	
		\$ 3,731	\$ 2,013	\$ 1,598	
Components of the provision for income taxes	The components of the provision for income taxes for each fiscal year were as follows:				
		2017	2016	2015	
		(In millions)			
	Current:				
	U.S.	\$ 67	\$ (36)	\$ 134	
	Foreign	233	351	199	
	State	9	(2)	18	
		309	313	351	
	Deferred:				
	U.S.	(11)	55	(194)	
	Foreign	(7)	(89)	69	
	State	6	13	(5)	
		(12)	(21)	(130)	
		\$ 297	\$ 292	\$ 221	
Effective income tax rate continuing operations tax rate reconciliation	A reconciliation between the statutory U.S. federal income tax rate of 35 percent and Applied's actual effective income tax rate for each fiscal year is presented below:				
		2017	2016	2015	
	Tax provision at U.S. statutory rate	35.0 %	35.0 %	35.0 %	
	Resolutions of prior years' income tax filings	(1.9)	3.9	(4.9)	
	Effect of foreign operations taxed at various rates	(24.9)	(24.1)	(16.3)	
	State income taxes, net of federal benefit	0.3	0.6	0.9	
	Research and other tax credits	(0.7)	(1.3)	(0.2)	
	U.S. domestic production deduction	(0.2)	(0.2)	(0.6)	
	Share-based compensation	0.4	0.4	0.8	
	Other	—	0.2	(0.9)	
		8.0 %	14.5 %	13.8 %	
	Components of deferred income tax assets and liabilities	The components of deferred income tax assets and liabilities were as follows:			
			October 29, 2017	October 30, 2016	
			(In millions)		
Deferred tax assets:					
Allowance for doubtful accounts		\$ 13	\$ 20		
Inventory reserves and basis difference		156	151		
Installation and warranty reserves		1	3		
Accrued liabilities		31	53		
Deferred revenue		15	17		

Tax credits	317	210
Deferred compensation	81	45
Share-based compensation	53	55
Other	67	176
Gross deferred tax assets	734	730
Valuation allowance	(227)	(207)
Total deferred tax assets	507	523
Deferred tax liabilities:		
Fixed assets	(36)	(29)
Intangible assets	(76)	(81)
Undistributed foreign earnings	(11)	(42)
Foreign exchange	(4)	—
Total gross deferred tax liabilities	(127)	(152)
Net deferred tax assets	\$ 380	\$ 371
The following table presents a summary of non-current deferred tax assets and liabilities:		
	October 29, 2017	October 30, 2016
	(In millions)	
Non-current deferred tax asset	\$ 385	\$ 372
Non-current deferred tax liability	(5)	(1)
	\$ 380	\$ 371

Summary of valuation allowance

A valuation allowance is recorded to reflect the estimated amount of net deferred tax assets that may not be realized. Changes in the valuation allowance in each fiscal year were as follows:

	2017	2016	2015
	(In millions)		
Beginning balance	\$ 207	\$ 207	\$ 173
Increases	20	27	40
Decreases	—	(27)	(6)
Ending balance	\$ 227	\$ 207	\$ 207

A reconciliation of gross unrecognized tax benefits

A reconciliation of the beginning and ending balances of gross unrecognized tax benefits in each fiscal year is as follows:

	2017	2016	2015
	(In millions)		
Beginning balance of gross unrecognized tax benefits	\$ 320	\$ 177	\$ 134
Settlements with tax authorities	(42)	(25)	(16)
Lapses of statutes of limitation	(15)	(2)	(1)
Increases in tax positions for current year	95	62	43
Increases in tax positions for prior years	33	109	21
Decreases in tax positions for prior years	—	(1)	(4)
Ending balance of gross unrecognized tax benefits	\$ 391	\$ 320	\$ 177

Warranty, Guarantees, Commitments and Contingencies (Tables)	12 Months Ended		
	Oct. 29, 2017		
Commitments and Contingencies Disclosure [Abstract]			
Future minimum lease payments	As of October 29, 2017, future minimum lease payments are expected to be as follows:		
		Lease Payments	
		(In millions)	
Fiscal			
2018		\$	33
2019			24
2020			16
2021			10
2022			7
Thereafter			11
		\$	101
Changes in the warranty reserves	Changes in the warranty reserves during each fiscal year were as follows:		
		2017	2016
			2015
		(In millions)	
Beginning balance	\$	153	\$ 126
Provisions for warranty		166	135
Changes in reserves related to preexisting warranty		1	(12)
Consumption of reserves		(121)	(96)
Ending balance	\$	199	\$ 153
			\$ 126

Industry Segment Operations (Tables)	12 Months Ended						
	Oct. 29, 2017						
Segment Reporting [Abstract]							
Net sales and operating income (loss) for each reportable segment	Information for each reportable segment for and as of the end of each fiscal year were as follows:						
	<u>Net Sales</u>	<u>Operating Income (Loss)</u>	<u>Depreciation/Amortization</u>	<u>Capital Expenditures</u>	<u>Accounts Receivable</u>	<u>Inventories</u>	
	(In millions)						
2017:							
Semiconductor Systems	\$ 9,517	\$ 3,173	\$ 286	\$ 150	\$ 1,626	\$ 1,760	
Applied Global Services	3,017	817	15	21	564	762	
Display and Adjacent Markets	1,900	502	12	17	190	367	
Corporate and Other	103	(624)	94	157	(42)	41	
Total	<u>\$ 14,537</u>	<u>\$ 3,868</u>	<u>\$ 407</u>	<u>\$ 345</u>	<u>\$ 2,338</u>	<u>\$ 2,930</u>	
2016:							
Semiconductor Systems	\$ 6,873	\$ 1,807	\$ 277	\$ 114	\$ 1,524	\$ 1,188	
Applied Global Services	2,589	682	12	14	559	594	
Display and Adjacent Markets	1,206	245	5	6	238	215	
Corporate and Other	157	(582)	95	119	(42)	53	
Total	<u>\$ 10,825</u>	<u>\$ 2,152</u>	<u>\$ 389</u>	<u>\$ 253</u>	<u>\$ 2,279</u>	<u>\$ 2,050</u>	
2015:							
Semiconductor Systems	\$ 6,135	\$ 1,410	\$ 268	\$ 115	\$ 1,160	\$ 1,079	
Applied Global Services	2,447	630	10	12	483	555	
Display and Adjacent Markets	944	191	6	13	129	176	
Corporate and Other	133	(538)	87	75	(33)	23	
Total	<u>\$ 9,659</u>	<u>\$ 1,693</u>	<u>\$ 371</u>	<u>\$ 215</u>	<u>\$ 1,739</u>	<u>\$ 1,833</u>	
Reconciliations of total segment operating income to Applied's consolidated operating income	The reconciling items included in Corporate and Other were as follows:						
				<u>2017</u>	<u>2016</u>	<u>2015</u>	
				(In millions)			
	Unallocated net sales			\$ 103	\$ 157	\$ 133	
	Unallocated cost of products sold and expenses			(507)	(538)	(523)	
	Share-based compensation			(220)	(201)	(187)	
	Certain items associated with terminated business combination			—	—	(50)	
	Gain on derivatives associated with terminated business combination			—	—	89	
	Total			<u>\$ (624)</u>	<u>\$ (582)</u>	<u>\$ (538)</u>	
Net sales and long-lived assets by geographic region	Net sales and long-lived assets by geographic region for and as of each fiscal year were as follows:						
				2017	2016	2015	

	(In millions)		
Net sales:			
United States	\$ 1,474	\$ 1,143	\$ 1,630
Korea	4,052	1,883	1,654
Taiwan	3,291	2,843	2,600
China	2,746	2,259	1,623
Japan	1,518	1,279	1,078
Europe	816	615	642
Southeast Asia	640	803	432
Total outside United States	13,063	9,682	8,029
Consolidated total	\$ 14,537	\$ 10,825	\$ 9,659

	October 29, 2017	October 30, 2016
(In millions)		
Long-lived assets:		
United States	\$ 915	\$ 798
Korea	21	12
Taiwan	50	34
China	47	44
Japan	8	8
Europe	47	34
Southeast Asia	98	85
Total outside United States	271	217
Consolidated total	\$ 1,186	\$ 1,015

Companies accounted for at least 10 percent of Applied's net sales

The following customers accounted for at least 10 percent of Applied's net sales in each fiscal year, which were for products and services in multiple reportable segments:

	2017	2016	2015
Samsung Electronics Co., Ltd.	23%	13%	18%
Taiwan Semiconductor Manufacturing Company Limited	15%	16%	15%
Intel Corporation	*	11%	*
Micron Technology, Inc.	*	11%	*

* Less than 10%

Unaudited Quarterly Consolidated Financial Data (Tables)	12 Months Ended																
	Oct. 29, 2017																
Quarterly Financial Information Disclosure [Abstract]																	
Unaudited Quarterly Consolidated Financial Data	Unaudited Quarterly Consolidated Financial Data																
	<table> <tr> <th></th><th colspan="4">Fiscal Quarter</th><th></th></tr> <tr> <th></th><th>First</th><th>Second</th><th>Third</th><th>Fourth</th><th>Fiscal Year</th></tr> </table>						Fiscal Quarter						First	Second	Third	Fourth	Fiscal Year
	Fiscal Quarter																
	First	Second	Third	Fourth	Fiscal Year												
	(In millions, except per share amounts)																
2017:																	
Net sales	\$ 3,278	\$ 3,546	\$ 3,744	\$ 3,969	\$ 14,537												
Gross profit	\$ 1,445	\$ 1,600	\$ 1,700	\$ 1,787	\$ 6,532												
Net income	\$ 703	\$ 824	\$ 925	\$ 982	\$ 3,434												
Earnings per diluted share	\$ 0.65	\$ 0.76	\$ 0.85	\$ 0.91	\$ 3.17												
2016:																	
Net sales	\$ 2,257	\$ 2,450	\$ 2,821	\$ 3,297	\$ 10,825												
Gross profit	\$ 916	\$ 1,004	\$ 1,192	\$ 1,399	\$ 4,511												
Net income	\$ 286	\$ 320	\$ 505	\$ 610	\$ 1,721												
Earnings per diluted share	\$ 0.25	\$ 0.29	\$ 0.46	\$ 0.56	\$ 1.54												

Summary of Significant Accounting Policies (Property Plant and Equipment Useful Life) (Details)	12 Months Ended
	Oct. 29, 2017
Minimum	
Property, Plant and Equipment [Line Items]	
Intangible assets estimated useful lives	1 year
Maximum	
Property, Plant and Equipment [Line Items]	
Intangible assets estimated useful lives	15 years
Building and improvements Minimum	
Property, Plant and Equipment [Line Items]	
Useful life	3 years
Building and improvements Maximum	
Property, Plant and Equipment [Line Items]	
Useful life	30 years
Demonstration and manufacturing equipment Minimum	
Property, Plant and Equipment [Line Items]	
Useful life	3 years
Demonstration and manufacturing equipment Maximum	
Property, Plant and Equipment [Line Items]	
Useful life	5 years
Software Minimum	
Property, Plant and Equipment [Line Items]	
Useful life	3 years
Software Maximum	
Property, Plant and Equipment [Line Items]	
Useful life	5 years
Furniture, fixtures and other equipment Minimum	
Property, Plant and Equipment [Line Items]	
Useful life	3 years
Furniture, fixtures and other equipment Maximum	
Property, Plant and Equipment [Line Items]	
Useful life	15 years
Land improvements Maximum	
Property, Plant and Equipment [Line Items]	
Term of amortization	15 years
Leasehold improvements Maximum	
Property, Plant and Equipment [Line Items]	
Term of amortization	5 years

Summary of Significant Accounting Policies (Derivative Financial Instruments) (Details)	12 Months Ended
	Oct. 29, 2017
Accounting Policies [Abstract]	
Time period for hedging of foreign currency transactions	24 months

[illegible]

Cash, Cash Equivalents and Investments (Cash, Cash Equivalents and Investments by Security Type) (Details) (USD \$) In Millions, unless otherwise specified	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015	Oct. 26, 2014
Schedule of Investment Income, Reported Amounts, by Category [Line Items]				
Cash	\$ 1,346	\$ 1,103	-	-
Total Cash equivalents	3,664	2,303	-	-
Total Cash and Cash equivalents	5,010	3,406	4,797	3,002
Short-term and long-term investments, Cost	3,334	1,230	-	-
Short-term and long-term investments, Gross Unrealized Gains	79	46	-	-
Short-term and long-term investments, Gross Unrealized Losses	4	4	-	-
Short-term and long-term investments, Estimated Fair Value	3,409	1,272	-	-
Equity investments in privately-held companies	74	70	-	-
Cash, Cash Equivalents and Investments, Cost	8,344	4,636	-	-
Cash, Cash Equivalents and Investments, Gross Unrealized Gains	79	46	-	-
Cash, Cash Equivalents and Investments, Gross Unrealized Losses	4	4	-	-
Cash, Cash Equivalents and Investments, Estimated Fair Value	8,419	4,678	-	-
Total fixed income securities				
Schedule of Investment Income, Reported Amounts, by Category [Line Items]				
Short-term and long-term investments, Cost	3,238	1,134	-	-
Short-term and long-term investments, Gross Unrealized Gains	1	2	-	-
Short-term and long-term investments, Gross Unrealized Losses	3	1	-	-
Short-term and long-term investments, Estimated Fair Value	3,236	1,135	-	-
U.S. Treasury and agency securities				
Schedule of Investment Income, Reported Amounts, by Category [Line Items]				
Short-term and long-term investments, Cost	667	195	-	-
Short-term and long-term investments, Gross Unrealized Gains	0	0	-	-
Short-term and long-term investments, Gross Unrealized Losses	1	0	-	-
Short-term and long-term investments, Estimated Fair Value	666	195	-	-
Non-U.S. government securities				
Schedule of Investment Income, Reported Amounts, by Category [Line Items]				
Short-term and long-term investments, Cost	161	5	-	-
Short-term and long-term investments, Gross Unrealized Gains	0	0	-	-
Short-term and long-term investments, Gross Unrealized Losses	0	0	-	-
Short-term and long-term investments, Estimated Fair Value	161	5	-	-
Municipal securities				
Schedule of Investment Income, Reported Amounts, by Category [Line Items]				
Short-term and long-term investments, Cost	1,007	408	-	-
Short-term and long-term investments, Gross Unrealized Gains	0	0	-	-

Short-term and long-term investments, Gross Unrealized Losses	0	0	-	-
Short-term and long-term investments, Estimated Fair Value	1,007	408	-	-
Commercial paper, corporate bonds and medium-term notes				
Schedule of Investment Income, Reported Amounts, by Category [Line Items]				
Short-term and long-term investments, Cost	1,024	273	-	-
Short-term and long-term investments, Gross Unrealized Gains	1	1	-	-
Short-term and long-term investments, Gross Unrealized Losses	1	0	-	-
Short-term and long-term investments, Estimated Fair Value	1,024	274	-	-
Asset-backed and mortgage-backed securities				
Schedule of Investment Income, Reported Amounts, by Category [Line Items]				
Short-term and long-term investments, Cost	379	253	-	-
Short-term and long-term investments, Gross Unrealized Gains	0	1	-	-
Short-term and long-term investments, Gross Unrealized Losses	1	1	-	-
Short-term and long-term investments, Estimated Fair Value	378	253	-	-
Publicly traded equity securities				
Schedule of Investment Income, Reported Amounts, by Category [Line Items]				
Short-term and long-term investments, Cost	22	26	-	-
Short-term and long-term investments, Gross Unrealized Gains	78	44	-	-
Short-term and long-term investments, Gross Unrealized Losses	1	3	-	-
Short-term and long-term investments, Estimated Fair Value	99	67	-	-
Money market funds				
Schedule of Investment Income, Reported Amounts, by Category [Line Items]				
Total Cash equivalents	2,658	1,889	-	-
U.S. Treasury and agency securities				
Schedule of Investment Income, Reported Amounts, by Category [Line Items]				
Total Cash equivalents	15	10	-	-
Non-U.S. government securities				
Schedule of Investment Income, Reported Amounts, by Category [Line Items]				
Total Cash equivalents	55	10	-	-
Municipal securities				
Schedule of Investment Income, Reported Amounts, by Category [Line Items]				
Total Cash equivalents	341	253	-	-
Commercial paper, corporate bonds and medium-term notes				
Schedule of Investment Income, Reported Amounts, by Category [Line Items]				
Total Cash equivalents	\$ 595	\$ 141	-	-

Cash, Cash Equivalents and Investments (Contractual Maturities) (Details) (USD \$) In Millions, unless otherwise specified	Oct. 29, 2017
Cash and Cash Equivalents [Abstract]	
Due in one year or less, Cost	\$ 2,219
Due after one through five years, Cost	640
No single maturity date, Cost	475
Investments maturities amortized, Cost	3,334
Due in one year or less, Estimated Fair Value	2,219
Due after one through five years, Estimated Fair Value	640
No single maturity date, Estimated Fair Value	550
Investments maturities, Estimated Fair Value	\$ 3,409

Cash, Cash Equivalents and Investments (Gains and Losses on Investments) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Gains and Losses on Investments			
Gross realized gains	\$ 14	\$ 10	\$ 9
Gross realized losses	\$ 1	\$ 2	\$ 3

Cash, Cash Equivalents and Investments (Narrative) (Details) (USD \$)	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Fixed income marketable securities			
Schedule of Investment Income, Reported Amounts, by Category [Line Items]			
Impairments of investments	\$ 0	\$ 0	\$ 0
Equity investments in privately-held companies			
Schedule of Investment Income, Reported Amounts, by Category [Line Items]			
Impairments of investments	\$ 10,000,000	\$ 8,000,000	\$ 9,000,000

Fair Value Measurements (Assets Measured at Fair Value on a Recurring Basis) (Details) (Fair Value, Measurements, Recurring, USD \$) In Millions, unless otherwise specified	Oct. 29, 2017	Oct. 30, 2016
Assets:		
Investment securities	\$ 6,999	\$ 3,505
Level 1		
Assets:		
Investment securities	2,949	2,063
Level 2		
Assets:		
Investment securities	4,050	1,442
Money market funds		
Assets:		
Investment securities	2,658	1,889
Money market funds Level 1		
Assets:		
Investment securities	2,658	1,889
Money market funds Level 2		
Assets:		
Investment securities	0	0
U.S. Treasury and agency securities		
Assets:		
Investment securities	681	205
U.S. Treasury and agency securities Level 1		
Assets:		
Investment securities	192	107
U.S. Treasury and agency securities Level 2		
Assets:		
Investment securities	489	98
Non-U.S. government securities		
Assets:		
Investment securities	216	15
Non-U.S. government securities Level 1		
Assets:		
Investment securities	0	0
Non-U.S. government securities Level 2		
Assets:		
Investment securities	216	15
Municipal securities		
Assets:		
Investment securities	1,348	661
Municipal securities Level 1		
Assets:		
Investment securities	0	0
Municipal securities Level 2		
Assets:		
Investment securities	1,348	661
Commercial paper, corporate bonds and medium-term notes		
Assets:		
Investment securities	1,619	415
Commercial paper, corporate bonds and medium-term notes Level 1		
Assets:		
Investment securities	0	0
Commercial paper, corporate bonds and medium-term notes Level 2		
Assets:		
Investment securities	1,619	415
Asset-backed and mortgage-backed securities		
Assets:		

Investment securities	378	253
Asset-backed and mortgage-backed securities Level 1		
Assets:		
Investment securities	0	0
Asset-backed and mortgage-backed securities Level 2		
Assets:		
Investment securities	378	253
Publicly traded equity securities		
Assets:		
Investment securities	99	67
Publicly traded equity securities Level 1		
Assets:		
Investment securities	99	67
Publicly traded equity securities Level 2		
Assets:		
Investment securities	\$ 0	\$ 0

Fair Value Measurements (Narrative) (Details) (USD \$)	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Schedule of Investment Income, Reported Amounts, by Category [Line Items]			
Fair value of transfers from Level 1 to Level 2	\$ 0	\$ 0	-
Fair value of transfers from Level 2 to Level 1	0	0	-
Equity investments in privately-held companies			
Schedule of Investment Income, Reported Amounts, by Category [Line Items]			
Impairments of investments	10,000,000	8,000,000	9,000,000
Reported Value Measurement			
Schedule of Investment Income, Reported Amounts, by Category [Line Items]			
Long-term debt value	5,300,000,000	3,100,000,000	-
Reported Value Measurement Short Term And Long Term Investments Equity investments in privately-held companies			
Schedule of Investment Income, Reported Amounts, by Category [Line Items]			
Equity investments in privately-held companies measured on non-recurring basis	74,000,000	70,000,000	-
Portion at Other than Fair Value Measurement Short Term And Long Term Investments Equity investments in privately-held companies			
Schedule of Investment Income, Reported Amounts, by Category [Line Items]			
Equity investments in privately-held companies measured on non-recurring basis	65,000,000	62,000,000	-
Estimate of Fair Value Measurement Level 2			
Schedule of Investment Income, Reported Amounts, by Category [Line Items]			
Long-term debt value	5,800,000,000	3,500,000,000	-
Estimate of Fair Value Measurement Short Term And Long Term Investments Equity investments in privately-held companies Fair Value, Measurements, Nonrecurring Level 3			
Schedule of Investment Income, Reported Amounts, by Category [Line Items]			
Equity investments in privately-held companies measured on non-recurring basis	\$ 9,000,000	\$ 8,000,000	-

Derivative Instruments and Hedging Activities (Narrative) (Details) (USD \$)	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Derivative [Line Items]			
Time period for hedging of foreign currency transactions	24 months	-	-
Gain or (Loss)	\$ 21,000,000	\$ (53,000,000)	\$ (14,000,000)
Amortization period for the loss on settlement of interest rate swap agreement	12 months	-	-
Loss recognized due to discontinuance of cash flow hedges that were not probable	-	8,000,000	-
Amount of Gain or (Loss) Recognized in Income	0	0	89,000,000
Tokyo Electron Limited Foreign exchange contracts			
Derivative [Line Items]			
Amount of Gain or (Loss) Recognized in Income	-	-	89,000,000
Interest Rate Contract			
Derivative [Line Items]			
Gain or (Loss)	(14,000,000)	-	(20,000,000)
Cash Flow Hedging Designated as Hedging Instrument Interest Rate Swap			
Derivative [Line Items]			
Notional amount	-	-	600,000,000
Cash Flow Hedging Designated as Hedging Instrument Interest Rate Contract			
Derivative [Line Items]			
Notional amount	700,000,000	-	-
Gain or (Loss)	\$ (14,000,000)	-	\$ (20,000,000)
Senior Notes Ten Year Senior Notes Issued September 2015			
Derivative [Line Items]			
Debt instrument term	10 years	-	-
Senior Notes Ten Year Senior Notes Issued March 2017			
Derivative [Line Items]			
Debt instrument term	10 years	-	-

Derivative Instruments and Hedging Activities (Derivatives in Cash Flow Hedging Relationships) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Derivative Instruments, Gain (Loss) [Line Items]			
Gain or (Loss)	\$ 21	\$ (53)	\$ (14)
Gain or (Loss) Reclassified from AOCI into Income	11	(48)	9
Gain or (Loss) Recognized in Income	(5)	(9)	(6)
Foreign exchange contracts			
Derivative Instruments, Gain (Loss) [Line Items]			
Gain or (Loss)	35	(53)	6
Gain or (Loss) Reclassified from AOCI into Income	0	0	0
Gain or (Loss) Recognized in Income	0	0	0
Foreign exchange contracts Cost of products sold			
Derivative Instruments, Gain (Loss) [Line Items]			
Gain or (Loss)	0	0	0
Gain or (Loss) Reclassified from AOCI into Income	7	(46)	15
Gain or (Loss) Recognized in Income	(3)	2	(4)
Foreign exchange contracts General and administrative			
Derivative Instruments, Gain (Loss) [Line Items]			
Gain or (Loss)	0	0	0
Gain or (Loss) Reclassified from AOCI into Income	7	0	(6)
Gain or (Loss) Recognized in Income	(2)	(11)	(2)
Interest Rate Contract			
Derivative Instruments, Gain (Loss) [Line Items]			
Gain or (Loss)	(14)	-	(20)
Gain or (Loss) Reclassified from AOCI into Income	0	-	0
Gain or (Loss) Recognized in Income	0	-	0
Interest Rate Contract Interest expense			
Derivative Instruments, Gain (Loss) [Line Items]			
Gain or (Loss)	0	0	-
Gain or (Loss) Reclassified from AOCI into Income	(3)	(2)	-
Gain or (Loss) Recognized in Income	\$ 0	\$ 0	-

Derivative Instruments and Hedging Activities (Derivatives Not Designated as Hedging Instruments) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Derivative Instruments, Gain (Loss) [Line Items]			
Amount of Gain or (Loss) Recognized in Income	\$ 0	\$ 0	\$ 89
Derivatives Not Designated as Hedging Instruments			
Derivative Instruments, Gain (Loss) [Line Items]			
Amount of Gain or (Loss) Recognized in Income	39	(75)	110
Foreign exchange contracts Gain (loss) on derivatives associated with terminated business combination Derivatives Not Designated as Hedging Instruments			
Derivative Instruments, Gain (Loss) [Line Items]			
Amount of Gain or (Loss) Recognized in Income	0	0	89
Foreign exchange contracts General and administrative			
Derivative Instruments, Gain (Loss) [Line Items]			
Amount of Gain or (Loss) Recognized in Income	39	-	-
Foreign exchange contracts General and administrative Derivatives Not Designated as Hedging Instruments			
Derivative Instruments, Gain (Loss) [Line Items]			
Amount of Gain or (Loss) Recognized in Income	-	\$ (75)	\$ 21

Accounts Receivable, Net (Narrative) (Details) (USD \$)	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Receivables [Abstract]			
Accounts receivable sold	\$ 746,000,000	\$ 75,000,000	\$ 0
Allowance for doubtful accounts	\$ 34,000,000	\$ 51,000,000	\$ 49,000,000

Accounts Receivable, Net (Net of Allowance for Doubtful Accounts) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Changes in allowance for doubtful accounts			
Beginning balance	\$ 51	\$ 49	\$ 58
Provision	0	3	0
Decreases	(17)	(1)	(9)
Ending balance	\$ 34	\$ 51	\$ 49

Balance Sheet Detail (Inventory) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Inventories			
Customer service spares	\$ 595	\$ 452	-
Raw materials	603	474	-
Work-in-process	468	393	-
Finished goods	1,264	731	-
Total Inventories	2,930	2,050	1,833
Inventory at customer locations included in finished goods	331	190	-
Evaluation inventory	\$ 281	\$ 197	-

Balance Sheet Detail (Other Current Assets) (Details) (USD \$) In Millions, unless otherwise specified	Oct. 29, 2017	Oct. 30, 2016
Other Current Assets		
Prepaid income taxes and income taxes receivable	\$ 57	\$ 87
Prepaid expenses and other	317	188
Total other current assets	<u>\$ 374</u>	<u>\$ 275</u>

Balance Sheet Detail (Property, Plant and Equipment) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended			1 Months Ended
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015	Nov. 30, 2017
Property, Plant and Equipment, Net				
Gross property, plant and equipment	\$ 3,311	\$ 3,043	-	-
Accumulated depreciation	(2,245)	(2,106)	-	-
Net property, plant and equipment	1,066	937	-	-
Depreciation	214	200	185	-
Property, Plant and Equipment, Additions	345	253	215	-
Land and improvements				
Property, Plant and Equipment, Net				
Gross property, plant and equipment	160	159	-	-
Building and improvements				
Property, Plant and Equipment, Net				
Gross property, plant and equipment	1,315	1,261	-	-
Building and improvements Minimum				
Property, Plant and Equipment, Net				
Useful life	3 years	-	-	-
Building and improvements Maximum				
Property, Plant and Equipment, Net				
Useful life	30 years	-	-	-
Demonstration and manufacturing equipment				
Property, Plant and Equipment, Net				
Gross property, plant and equipment	1,129	992	-	-
Demonstration and manufacturing equipment Minimum				
Property, Plant and Equipment, Net				
Useful life	3 years	-	-	-
Demonstration and manufacturing equipment Maximum				
Property, Plant and Equipment, Net				
Useful life	5 years	-	-	-
Furniture, fixtures and other equipment				
Property, Plant and Equipment, Net				
Gross property, plant and equipment	572	547	-	-
Furniture, fixtures and other equipment Minimum				
Property, Plant and Equipment, Net				
Useful life	3 years	-	-	-
Furniture, fixtures and other equipment Maximum				
Property, Plant and Equipment, Net				
Useful life	15 years	-	-	-
Construction in progress				
Property, Plant and Equipment, Net				
Gross property, plant and equipment	135	84	-	-
Subsequent Event				
Property, Plant and Equipment, Net				
Property, Plant and Equipment, Additions	-	-	-	\$ 100

Balance Sheet Detail (Accounts Payable, Notes Payable and Accrued Expenses) (Details) (USD \$) In Millions, unless otherwise specified	Oct. 29, 2017	Oct. 30, 2016
Accounts Payable, Notes Payable and Accrued Expenses		
Accounts payable	\$ 945	\$ 813
Notes payable, short-term	0	200
Compensation and employee benefits	666	517
Warranty	199	153
Dividends payable	106	108
Income taxes payable	112	101
Other accrued taxes	70	50
Interest payable	38	31
Other	314	283
Accounts payable and accrued expenses	<u>\$ 2,450</u>	<u>\$ 2,256</u>

Balance Sheet Detail (Customer Deposits) (Details) (USD \$) In Millions, unless otherwise specified	Oct. 29, 2017	Oct. 30, 2016
Customer Deposits and Deferred Revenue		
Customer deposits	\$ 381	\$ 471
Deferred revenue	1,284	905
Customer deposits and deferred revenue	<u>\$ 1,665</u>	<u>\$ 1,376</u>

Balance Sheet Detail (Other Liabilities) (Details) (USD \$) In Millions, unless otherwise specified	Oct. 29, 2017	Oct. 30, 2016
Other Liabilities		
Income taxes payable	\$ 392	\$ 337
Defined and postretirement benefit plans	160	182
Other	99	77
Other liabilities	<u>\$ 651</u>	<u>\$ 596</u>

Business Combinations Narrative (Details) (2017 Acquisitions, USD \$) In Millions, unless otherwise specified	12 Months Ended
	Oct. 29, 2017 acquisition
2017 Acquisitions	
Business Acquisition [Line Items]	
Number of acquisitions	3
Weighted average useful life (in years)	3 years 6 months
Transaction costs	\$ 0

Business Combinations Purchase Price Allocation (Details) (USD \$) In Millions, unless otherwise specified	Oct. 29, 2017	Oct. 30, 2016
Business Acquisition [Line Items]		
Goodwill	\$ 3,368	\$ 3,316
2017 Acquisitions		
Business Acquisition [Line Items]		
Fair value of net assets acquired	23	-
Goodwill	55	-
Purchased technology	31	-
Purchase price allocated	<u>\$ 109</u>	<u>-</u>

Goodwill, Purchased Technology and Other Intangible Assets (Narrative) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended
	Oct. 29, 2017
Finite-Lived Intangible Assets [Line Items]	
Goodwill and other indefinite lived intangible assets acquired through acquisitions	\$ 27
Minimum	
Finite-Lived Intangible Assets [Line Items]	
Useful Life	1 year
Maximum	
Finite-Lived Intangible Assets [Line Items]	
Useful Life	15 years

Goodwill, Purchased Technology and Other Intangible Assets (Goodwill and Other Indefinite-lived Intangible Assets) (Details) (USD \$) In Millions, unless otherwise specified	Oct. 29, 2017	Oct. 30, 2016
Indefinite-lived intangible assets		
Goodwill	\$ 3,368	\$ 3,316
Other Intangible Assets	0	25
Total	3,368	3,341
Semiconductor Systems		
Indefinite-lived intangible assets		
Goodwill	2,151	2,151
Other Intangible Assets	0	0
Total	2,151	2,151
Applied Global Services		
Indefinite-lived intangible assets		
Goodwill	1,018	1,010
Other Intangible Assets	0	5
Total	1,018	1,015
Display and Adjacent Markets		
Indefinite-lived intangible assets		
Goodwill	199	155
Other Intangible Assets	0	20
Total	\$ 199	\$ 175

Goodwill, Purchased Technology and Other Intangible Assets (Purchased Technology and Intangible Assets) (Details) (USD \$) In Millions, unless otherwise specified	Oct. 29, 2017	Oct. 30, 2016
Summary of Purchased Technology and Intangible Assets [Line Items]		
Carrying amount	\$ 412	\$ 550
Intangible assets - indefinite-lived	0	25
Total	412	575
Purchased technology, net		
Summary of Purchased Technology and Intangible Assets [Line Items]		
Carrying amount	288	409
Intangible Assets		
Summary of Purchased Technology and Intangible Assets [Line Items]		
Carrying amount	124	141
Intangible assets - indefinite-lived	\$ 0	\$ 25

Goodwill, Purchased Technology and Other Intangible Assets (Finite-lived Intangible Assets) (Details) (USD \$) In Millions, unless otherwise specified	Oct. 29, 2017	Oct. 30, 2016
Amortized intangible assets		
Gross carrying amount	\$ 1,988	\$ 1,934
Accumulated amortization	(1,576)	(1,384)
Carrying amount	412	550
Purchased technology, net		
Amortized intangible assets		
Gross carrying amount	1,645	1,593
Accumulated amortization	(1,357)	(1,184)
Carrying amount	288	409
Other Intangible Assets		
Amortized intangible assets		
Gross carrying amount	343	341
Accumulated amortization	(219)	(200)
Carrying amount	124	141
Operating Segments Semiconductor Systems		
Amortized intangible assets		
Gross carrying amount	1,701	1,701
Accumulated amortization	(1,341)	(1,156)
Operating Segments Semiconductor Systems Purchased technology, net		
Amortized intangible assets		
Gross carrying amount	1,449	1,449
Accumulated amortization	(1,210)	(1,043)
Operating Segments Semiconductor Systems Other Intangible Assets		
Amortized intangible assets		
Gross carrying amount	252	252
Accumulated amortization	(131)	(113)
Operating Segments Applied Global Services		
Amortized intangible assets		
Gross carrying amount	77	72
Accumulated amortization	(72)	(71)
Operating Segments Applied Global Services Purchased technology, net		
Amortized intangible assets		
Gross carrying amount	33	28
Accumulated amortization	(28)	(27)
Operating Segments Applied Global Services Other Intangible Assets		
Amortized intangible assets		
Gross carrying amount	44	44
Accumulated amortization	(44)	(44)
Operating Segments Display and Adjacent Markets		
Amortized intangible assets		
Gross carrying amount	201	151
Accumulated amortization	(154)	(147)
Operating Segments Display and Adjacent Markets Purchased technology, net		
Amortized intangible assets		
Gross carrying amount	163	115
Accumulated amortization	(119)	(113)
Operating Segments Display and Adjacent Markets Other Intangible Assets		
Amortized intangible assets		
Gross carrying amount	38	36
Accumulated amortization	(35)	(34)
Corporate and Other		
Amortized intangible assets		
Gross carrying amount	9	10
Accumulated amortization	(6)	(10)

Accumulated amortization	(9)	(10)
Corporate and Other Purchased technology, net		
Amortized intangible assets		
Gross carrying amount	0	1
Accumulated amortization	0	(1)
Corporate and Other Other Intangible Assets		
Amortized intangible assets		
Gross carrying amount	9	9
Accumulated amortization	\$ (9)	\$ (9)

Goodwill, Purchased Technology and Other Intangible Assets (Amortization Expense) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Finite-Lived Intangible Assets [Line Items]			
Amortization expense	\$ 193	\$ 189	\$ 186
Cost of products sold			
Finite-Lived Intangible Assets [Line Items]			
Amortization expense	173	167	163
Research, development, and engineering			
Finite-Lived Intangible Assets [Line Items]			
Amortization expense	1	2	1
Marketing and selling			
Finite-Lived Intangible Assets [Line Items]			
Amortization expense	19	20	20
General and administrative			
Finite-Lived Intangible Assets [Line Items]			
Amortization expense	0	0	2
Operating Segments Semiconductor Systems			
Finite-Lived Intangible Assets [Line Items]			
Amortization expense	185	185	179
Operating Segments Applied Global Services			
Finite-Lived Intangible Assets [Line Items]			
Amortization expense	1	1	1
Operating Segments Display and Adjacent Markets			
Finite-Lived Intangible Assets [Line Items]			
Amortization expense	7	0	3
Corporate and Other			
Finite-Lived Intangible Assets [Line Items]			
Amortization expense	\$ 0	\$ 3	\$ 3

Goodwill, Purchased Technology and Other Intangible Assets (Future Estimated Amortization Expense) (Details) (USD \$) In Millions, unless otherwise specified	Oct. 29, 2017	Oct. 30, 2016
Future estimated amortization expense		
2018	\$ 198	-
2019	57	-
2020	52	-
2021	40	-
2022	65	-
Carrying amount	\$ 412	\$ 550

Borrowing Facilities and Debt (Narrative) (Details) (USD \$)	1 Months Ended				
	May 31, 2017	Oct. 29, 2017	Oct. 30, 2016	Oct. 30, 2011	Mar. 31, 2017
Line of Credit Facility [Line Items]					
Available revolving credit agreement	-	\$ 1,600,000,000.0	-	-	-
Amount outstanding	-	0	0	-	-
Commercial paper program amount	-	-	-	1,500,000,000	-
Senior Notes 3.300% Senior Notes Due 2027 and 4.350% Senior Notes due 2047					
Line of Credit Facility [Line Items]					
Aggregate principal amount	-	-	-	-	2,200,000,000.0
Senior Notes 7.125% Senior Notes Due 2017					
Line of Credit Facility [Line Items]					
Debt redeemed	200,000,000	-	-	-	-
Stated interest rate	7.125%	7.125%	-	-	-
Commercial paper, corporate bonds and medium-term notes					
Line of Credit Facility [Line Items]					
Commercial paper outstanding	-	0	0	-	-
Revolving Credit					
Line of Credit Facility [Line Items]					
Available revolving credit agreement	-	1,500,000,000.0	-	-	-
Foreign Line of Credit					
Line of Credit Facility [Line Items]					
Available revolving credit agreement	-	\$ 70,000,000	-	-	-

Borrowing Facilities and Debt (Debt Outstanding) (Details) (USD \$) In Millions, unless otherwise specified	Oct. 29, 2017	May 31, 2017	Oct. 30, 2016
Schedule of debt			
Notes payable, short-term	\$ 0	-	\$ 200
Long-term debt principal amount	5,350	-	3,150
Total long-term debt	5,304	-	3,125
Total debt	5,304	-	3,325
Senior Notes			
Schedule of debt			
Total unamortized discount	(12)	-	(7)
Total unamortized debt issuance costs	(34)	-	(18)
Senior Notes 7.125% Senior Notes Due 2017			
Schedule of debt			
Notes payable, short-term	0	-	200
Effective Interest Rate	7.19%	-	-
Stated interest rate	7.125%	7.125%	-
Senior Notes 2.625% Senior Notes Due 2020			
Schedule of debt			
Long-term debt principal amount	600	-	600
Effective Interest Rate	2.64%	-	-
Stated interest rate	2.625%	-	-
Senior Notes 4.300% Senior Notes Due 2021			
Schedule of debt			
Long-term debt principal amount	750	-	750
Effective Interest Rate	4.326%	-	-
Stated interest rate	4.30%	-	-
Senior Notes 3.900% Senior Notes Due 2025			
Schedule of debt			
Long-term debt principal amount	700	-	700
Effective Interest Rate	3.944%	-	-
Stated interest rate	3.90%	-	-
Senior Notes 3.300% Senior Notes Due 2027			
Schedule of debt			
Long-term debt principal amount	1,200	-	0
Effective Interest Rate	3.342%	-	-
Stated interest rate	3.30%	-	-
Senior Notes 5.100% Senior Notes Due 2035			
Schedule of debt			
Long-term debt principal amount	500	-	500
Effective Interest Rate	5.127%	-	-
Stated interest rate	5.10%	-	-
Senior Notes 5.850% Senior Notes Due 2041			
Schedule of debt			
Long-term debt principal amount	600	-	600
Effective Interest Rate	5.879%	-	-
Stated interest rate	5.85%	-	-
Senior Notes 4.350% Senior Notes Due 2047			
Schedule of debt			
Long-term debt principal amount	\$ 1,000	-	\$ 0
Effective Interest Rate	4.361%	-	-
Stated interest rate	4.35%	-	-

Stockholders' Equity, Comprehensive Income and Share-Based Compensation (Accumulated Other Comprehensive Income (Loss) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Accumulated Other Comprehensive Income (Loss), Net of Tax [Roll Forward]			
Beginning Balance	\$ 7,217	\$ 7,613	\$ 7,868
Other comprehensive income (loss) before reclassifications	66	(61)	(25)
Amounts reclassified out of AOCI	(15)	38	9
Other comprehensive income, net of tax	51	(23)	(16)
Ending Balance	9,349	7,217	7,613
Unrealized Gain (Loss) on Investments, Net			
Accumulated Other Comprehensive Income (Loss), Net of Tax [Roll Forward]			
Beginning Balance	30	14	24
Other comprehensive income (loss) before reclassifications	24	14	(11)
Amounts reclassified out of AOCI	(1)	2	1
Other comprehensive income, net of tax	23	16	(10)
Ending Balance	53	30	14
Unrealized Gain (Loss) on Derivative Instruments Qualifying as Cash Flow Hedges			
Accumulated Other Comprehensive Income (Loss), Net of Tax [Roll Forward]			
Beginning Balance	(18)	(15)	0
Other comprehensive income (loss) before reclassifications	13	(33)	(9)
Amounts reclassified out of AOCI	(6)	30	(6)
Other comprehensive income, net of tax	7	(3)	(15)
Ending Balance	(11)	(18)	(15)
Defined and Postretirement Benefit Plans			
Accumulated Other Comprehensive Income (Loss), Net of Tax [Roll Forward]			
Beginning Balance	(141)	(105)	(105)
Other comprehensive income (loss) before reclassifications	29	(42)	(5)
Amounts reclassified out of AOCI	(8)	6	5
Other comprehensive income, net of tax	21	(36)	0
Ending Balance	(120)	(141)	(105)
Cumulative Translation Adjustments			
Accumulated Other Comprehensive Income (Loss), Net of Tax [Roll Forward]			
Beginning Balance	14	14	5
Other comprehensive income (loss) before reclassifications	0	0	0
Amounts reclassified out of AOCI	0	0	9
Other comprehensive income, net of tax	0	0	9
Ending Balance	14	14	14
AOCI Attributable to Parent			
Accumulated Other Comprehensive Income (Loss), Net of Tax [Roll Forward]			
Beginning Balance	(115)	(92)	(76)
Other comprehensive income, net of tax	51	(23)	(16)
Ending Balance	\$ (64)	\$ (115)	\$ (92)

Stockholders' Equity, Comprehensive Income and Share-Based Compensation (Narrative) (Details) (USD \$)	12 Months Ended					
	Oct. 29, 2017 Plan	Oct. 30, 2016	Oct. 25, 2015	Sep. 30, 2017	Jun. 30, 2016	Apr. 30, 2015
Equity [Line Items]						
Tax effects on net income of amounts reclassified from AOCI	-	\$ 22,000,000	-	-	-	
Stock Repurchase Program						
Authorized amount	-	-	-	3,000,000,000.0	2,000,000,000	3,000,000,000
Remaining authorized repurchase amount	3,600,000,000	-	-	-	-	
Dividends						
Quarterly cash dividend declared (usd per share)	\$ 0.10	\$ 0.10	\$ 0.10	-	-	
Payments of dividends	430,000,000	444,000,000	487,000,000	-	-	
Share-based Compensation						
Number of employee stock purchase plans	2	-	-	-	-	
Employee Stock Purchase Plan						
Employee Stock Purchase Plans						
Purchase period	- 6 months		-	-	-	
Number of shares issued under the ESPP	3,000,000	6,000,000	5,000,000	-	-	
Employee Stock						
Share-based Compensation						
Total unrecognized compensation expense	\$ 324,000,000	-	-	-	-	
Weighted average period for unrecognized compensation expense to be recognized	2 years 4 months 25 days	-	-	-	-	
Employee Stock Purchase Plans						
Purchase price of common stock, percent	85.00%	-	-	-	-	
Stock Options						
Stock Options, Restricted Stock Units, Restricted Stock, Performance Shares and Performance Units						
Stock options scheduled to expire	7 years	-	-	-	-	
Options granted (in shares)	0	0	0	-	-	
Stock Options Employee Stock Incentive Plan						
Share-based Compensation						
Number of shares available for grant	91,000,000	-	-	-	-	
Stock Options Employee Stock Purchase Plan						
Share-based Compensation						
Number of shares available for grant	20,000,000	-	-	-	-	
Stock Options Minimum						
Stock Options, Restricted Stock Units, Restricted Stock, Performance Shares and Performance Units						
Stock options scheduled to be vested	3 years	-	-	-	-	
Stock Options Maximum						
Stock Options, Restricted Stock Units, Restricted Stock, Performance Shares and Performance Units						
Stock options scheduled to be vested	4 years	-	-	-	-	
Performance Shares/Performance Units						
Stock Options, Restricted Stock Units, Restricted Stock, Performance Shares and Performance Units						
Award measurement period	3 years	-	-	-	-	
Additional performance-based awards to be earned upon certain levels of achievement (in shares)	1,000,000	-	-	-	-	
Performance Shares/Performance Units Minimum						
Stock Options, Restricted Stock Units, Restricted Stock, Performance Shares and Performance Units						
Award vesting rights as percentage of target amount	0.00%	-	-	-	-	
Performance Shares/Performance						

Units Maximum						
Stock Options, Restricted Stock Units, Restricted Stock, Performance Shares and Performance Units						
Award vesting rights as percentage of target amount	200.00%	-	-	-	-	
Restricted Stock Units, Restricted Stock, Performance Shares and Performance Units						
Stock Options, Restricted Stock Units, Restricted Stock, Performance Shares and Performance Units						
Stock options scheduled to be vested	4 years	-	-	-	-	
Officer Performance Shares/Performance Units						
Stock Options, Restricted Stock Units, Restricted Stock, Performance Shares and Performance Units						
Award measurement period	2 years	-	-	-	-	

Stockholders' Equity, Comprehensive Income and Share-Based Compensation (Stock Repurchases) (Details) (USD \$) In Millions, except Per Share data, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Equity [Abstract]			
Shares of common stock repurchased (in shares)	28	96	76
Cost of stock repurchased	\$ 1,172	\$ 1,892	\$ 1,325
Average price paid per share (in dollars per share)	\$ 42.08	\$ 19.82	\$ 17.33

Stockholders' Equity, Comprehensive Income and Share-Based Compensation (Share-based Compensation) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Total share-based compensation and related tax benefits			
Share-based compensation	\$ 220	\$ 201	\$ 187
Tax benefit recognized	\$ 60	\$ 63	\$ 52

Stockholders' Equity, Comprehensive Income and Share-Based Compensation (Effect of Share-based Compensation) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Employee Service Share-based Compensation, Allocation of Recognized Period Costs [Line Items]			
Total share-based compensation	\$ 220	\$ 201	\$ 187
Cost of products sold			
Employee Service Share-based Compensation, Allocation of Recognized Period Costs [Line Items]			
Total share-based compensation	69	62	57
Research, development, and engineering			
Employee Service Share-based Compensation, Allocation of Recognized Period Costs [Line Items]			
Total share-based compensation	83	76	69
Marketing and selling			
Employee Service Share-based Compensation, Allocation of Recognized Period Costs [Line Items]			
Total share-based compensation	28	26	26
General and administrative			
Employee Service Share-based Compensation, Allocation of Recognized Period Costs [Line Items]			
Total share-based compensation	\$ 40	\$ 37	\$ 35

Stockholders' Equity, Comprehensive Income and Share-Based Compensation (Restricted Stock Units, Restricted Stock, Performance Shares and Performance Units (Details) (Restricted Stock Units, Restricted Stock, Performance Shares and Performance Units, USD \$) In Millions, except Per Share data, unless otherwise specified	12 Months Ended			
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015	Oct. 26, 2014
Restricted Stock Units, Restricted Stock, Performance Shares and Performance Units				
Shares				
Beginning Balance (shares)	25	27	33	-
Granted (shares)	8	11	10	-
Vested (shares)	(10)	(11)	(15)	-
Canceled (shares)	(1)	(2)	(1)	-
Ending Balance (shares)	22	25	27	33
Non-vested restricted stock units, restricted stock, performance shares and performance units expected to vest (in shares)	20	-	-	-
Weighted Average Grant Date Fair Value				
Beginning of Period (in dollars per share)	\$ 18.28	\$ 16.41	\$ 12.59	-
Granted (in dollars per share)	\$ 31.79	\$ 18.54	\$ 22.60	-
Vested (in dollars per share)	\$ 16.50	\$ 14.25	\$ 12.04	-
Canceled (in dollars per share)	\$ 21.25	\$ 17.57	\$ 14.98	-
Ending Balance (in dollars per share)	\$ 23.96	\$ 18.28	\$ 16.41	\$ 12.59
Non-vested restricted stock units, restricted stock, performance shares and performance units expected to vest (in dollars per share)	\$ 23.30	-	-	-
Weighted Average Remaining Contractual Term				
Weighted average remaining contractual term	2 years 2 months 18 days	2 years 3 months 18 days	2 years 2 months 12 days	2 years 3 months 18 days
Non-vested restricted stock units, restricted stock, performance shares and performance units expected to vest, Weighted Average Remaining Contractual Term	2 years 0 months 10 days	-	-	-
Aggregate Intrinsic Value				
Aggregate Intrinsic Value	\$ 1,239	\$ 718	\$ 440	\$ 698
Expected to vest, Aggregate Intrinsic Value	\$ 1,107	-	-	-

Stockholders' Equity, Comprehensive Income and Share-Based Compensation (ESPP Fair Value Assumptions) (Details) (Employee Stock Purchase Plan, USD \$)	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Employee Stock Purchase Plan			
Weighted Average Assumptions Used for ESPP Granted			
Dividend yield	0.99%	1.76%	2.20%
Expected volatility	26.30%	29.30%	31.80%
Risk-free interest rate	0.92%	0.47%	0.19%
Expected life (in years)	6 months	6 months	6 months
Weighted average estimated fair value (in dollars per share)	\$ 9.14	\$ 5.48	\$ 4.55

Employee Benefit Plans (Narrative) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017 Plan	Oct. 30, 2016	Oct. 25, 2015
Employee Bonus Plans			
Charges to expense under Employee bonus plans	\$ 449	\$ 312	\$ 307
Defined Benefit Pension Plans of Foreign Subsidiaries and Other Post-Retirement Benefits			
Liability under other post retirement plan	161	194	206
Company contributions expected for next fiscal year	11	-	-
Executive Deferred Compensation Plans			
Number of unfunded plans	2	-	-
Executive Deferred Compensation Plans			
Executive Deferred Compensation Plans			
Amounts payable under EDCP	63	40	-
Other Postretirement Benefit Plans, Defined Benefit			
Defined Benefit Pension Plans of Foreign Subsidiaries and Other Post-Retirement Benefits			
Minimum age limit for medical and vision benefits	55 years	-	-
Minimum years of service plus ages for medical and vision benefits	65 years	-	-
Liability under other post retirement plan	1	1	-
Savings and Retirement Plan			
Employee Savings and Retirement Plan			
Employer matching contribution, percent of match	100.00%	-	-
Employer matching contribution, percent of employees' gross pay	3.00%	-	-
Employer matching contribution, percent of match, second tier	50.00%	-	-
Percentage vested in matching contribution account	100.00%	-	-
401(K) Matching contributions	38	38	35
401(K) Matching contributions forfeited	-	-	\$ 1
Savings and Retirement Plan Minimum			
Employee Savings and Retirement Plan			
Employer matching contribution, percent of employees' gross pay, second tier	4.00%	-	-
Savings and Retirement Plan Maximum			
Employee Savings and Retirement Plan			
Employer matching contribution, percent of employees' gross pay, second tier	6.00%	-	-

Employee Benefit Plans (Benefit Obligations and Plan Assets) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Change in projected benefit obligation			
Beginning projected benefit obligation	\$ 495	\$ 471	\$ 479
Service cost	13	13	15
Interest cost	10	13	13
Plan participants' contributions	2	1	1
Actuarial (gain) loss	(35)	77	12
Curtailments, settlements and special termination benefits	(1)	(6)	(1)
Foreign currency exchange rate changes	34	(42)	(39)
Benefits paid	(12)	(10)	(9)
Plan amendments and business combinations	0	(22)	0
Ending projected benefit obligation	506	495	471
Ending accumulated benefit obligation	472	460	434
Change in plan assets			
Beginning fair value of plan assets	310	281	268
Return on plan assets	18	37	19
Employer contributions	16	50	21
Plan participants' contributions	2	1	1
Foreign currency exchange rate changes	28	(45)	(18)
Divestitures, settlements and business combinations	(1)	(4)	(1)
Benefits paid	(12)	(10)	(9)
Ending fair value of plan assets	361	310	281
Funded status	(145)	(185)	(190)
Amounts recognized in the consolidated balance sheets			
Noncurrent asset	17	11	19
Current liability	(1)	(2)	(3)
Noncurrent liability	(161)	(194)	(206)
Total	(145)	(185)	(190)
Estimated amortization from accumulated other comprehensive loss into net periodic benefit cost over the next fiscal period			
Actuarial loss	6	6	6
Prior service credit	(4)	(16)	(1)
Total	2	(10)	5
Amounts recognized in accumulated other comprehensive loss			
Net actuarial loss	141	186	135
Prior service credit	(4)	(21)	0
Total	137	165	135
Plans with projected benefit obligations in excess of plan assets			
Projected benefit obligation	326	341	308
Fair value of plan assets	142	145	98
Plans with accumulated benefit obligations in excess of plan assets			
Accumulated benefit obligation	293	307	274
Fair value of plan assets	\$ 142	\$ 145	\$ 98
Minimum			
Range of assumptions to determine benefit obligations			
Discount rate	0.50%	0.50%	0.90%
Rate of compensation increase	2.20%	1.60%	1.90%
Maximum			
Range of assumptions to determine benefit obligations			
Discount rate	3.40%	3.10%	4.40%
Rate of compensation increase	3.50%	3.60%	3.60%

Employee Benefit Plans (Plan Assets Allocation) (Details)	Oct. 29, 2017	Oct. 30, 2016
Equity securities		
Defined Benefit Plan Disclosure [Line Items]		
Plan assets — allocation	47.00%	42.00%
Debt securities		
Defined Benefit Plan Disclosure [Line Items]		
Plan assets — allocation	39.00%	40.00%
Insurance contracts		
Defined Benefit Plan Disclosure [Line Items]		
Plan assets — allocation	11.00%	12.00%
Other investments		
Defined Benefit Plan Disclosure [Line Items]		
Plan assets — allocation	3.00%	4.00%
Cash		
Defined Benefit Plan Disclosure [Line Items]		
Plan assets — allocation	0.00%	2.00%

Employee Benefit Plans (Fair Value of Plan Assets) (Details) (USD \$) In Millions, unless otherwise specified	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015	Oct. 26, 2014
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	\$ 361	\$ 310	\$ 281	\$ 268
Level 1				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	101	79	-	-
Level 2				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	13	12	-	-
Level 3				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	38	38	40	-
Equity securities				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	83	59	-	-
Equity securities Level 1				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	83	59	-	-
Equity securities Level 2				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	0	0	-	-
Equity securities Level 3				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	0	0	-	-
Debt securities				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	16	12	-	-
Debt securities Level 1				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	16	12	-	-
Debt securities Level 2				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	0	0	-	-
Debt securities Level 3				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	0	0	-	-
Insurance contracts				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	38	38	-	-
Insurance contracts Level 1				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	0	0	-	-
Insurance contracts Level 2				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	0	0	-	-
Insurance contracts Level 3				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	38	38	-	-
Other investments				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	13	12	-	-

Fair value of plan of assets	13	12	-	-
Other investments Level 1				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	0	0	-	-
Other investments Level 2				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	13	12	-	-
Other investments Level 3				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	0	0	-	-
Cash				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	2	8	-	-
Cash Level 1				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	2	8	-	-
Cash Level 2				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	0	0	-	-
Cash Level 3				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	0	0	-	-
Total assets at fair value				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	152	129	-	-
Assets measured at net asset value				
Defined Benefit Plan Disclosure [Line Items]				
Fair value of plan of assets	\$ 209	\$ 181	-	-

Employee Benefit Plans (Level 3 Instruments) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Change in plan assets			
Beginning fair value of plan assets	\$ 310	\$ 281	\$ 268
Actual return on plan assets:			
Currency impact	28	(45)	(18)
Ending fair value of plan assets	361	310	281
Level 3			
Change in plan assets			
Beginning fair value of plan assets	38	40	-
Actual return on plan assets:			
Relating to assets still held at reporting date	(3)	(1)	-
Purchases, sales, settlements, net	1	0	-
Currency impact	2	(1)	-
Ending fair value of plan assets	\$ 38	\$ 38	-

Employee Benefit Plans (Net Periodic Benefit Costs) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Components of net periodic benefit cost			
Service cost	\$ 13	\$ 13	\$ 15
Interest cost	10	13	13
Expected return on plan assets	(18)	(14)	(15)
Amortization of actuarial loss and prior service credit	(10)	3	7
Settlement and curtailment loss	0	(5)	(1)
Net periodic benefit cost (income)	\$ (5)	\$ 10	\$ 19
Weighted average assumptions			
Discount rate	1.88%	2.82%	3.00%
Expected long-term return on assets	5.38%	5.38%	5.62%
Rate of compensation increase	2.69%	2.71%	2.74%

Employee Benefit Plans (Future Expected Benefit Payments) (Details) (USD \$) In Millions, unless otherwise specified	Oct. 29, 2017
Defined Benefit Plan, Estimated Future Benefit Payments [Abstract]	
2018	\$ 11
2019	11
2020	11
2021	12
2022	12
2023-2027	72
Total	<u>\$ 129</u>

Income Taxes (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Components of income from operations before income taxes			
U.S.	\$ 514	\$ 199	\$ 629
Foreign	3,217	1,814	969
Income before income taxes	3,731	2,013	1,598
Current:			
U.S.	67	(36)	134
Foreign	233	351	199
State	9	(2)	18
Total current provision for income taxes	309	313	351
Deferred:			
U.S.	(11)	55	(194)
Foreign	(7)	(89)	69
State	6	13	(5)
Total deferred provision (benefit) for income taxes	(12)	(21)	(130)
Provision for income taxes	297	292	221
Reconciliation between the statutory U.S.federal income tax rate to actual effective income tax rate			
Tax provision at U.S. statutory rate	35.00%	35.00%	35.00%
Resolutions of prior years' income tax filings	(1.90%)	3.90%	(4.90%)
Effect of foreign operations taxed at various rates	(24.90%)	(24.10%)	(16.30%)
State income taxes, net of federal benefit	0.30%	0.60%	0.90%
Research and other tax credits	(0.70%)	(1.30%)	(0.20%)
U.S. domestic production deduction	(0.20%)	(0.20%)	(0.60%)
Share-based compensation	0.40%	0.40%	0.80%
Other	0.00%	0.20%	(0.90%)
Effective income tax rate	8.00%	14.50%	13.80%
Deferred tax assets:			
Allowance for doubtful accounts	13	20	-
Inventory reserves and basis difference	156	151	-
Installation and warranty reserves	1	3	-
Accrued liabilities	31	53	-
Deferred revenue	15	17	-
Tax credits	317	210	-
Deferred compensation	81	45	-
Share-based compensation	53	55	-
Other	67	176	-
Gross deferred tax assets	734	730	-
Valuation allowance	(227)	(207)	-
Total deferred tax assets	507	523	-
Deferred tax liabilities:			
Fixed assets	(36)	(29)	-
Intangible assets	(76)	(81)	-
Undistributed foreign earnings	(11)	(42)	-
Foreign exchange	(4)	0	-
Total gross deferred tax liabilities	(127)	(152)	-
Net deferred tax assets	380	371	-
Breakdown between current and non-current net deferred tax assets and liabilities			
Non-current deferred tax asset	385	372	-
Non-current deferred tax liability	(5)	(1)	-
Net deferred tax assets	380	371	-
Reconciliation of gross unrecognized tax benefits			
Beginning balance of gross unrecognized tax benefits	320	177	134
Settlements with tax authorities	(42)	(25)	(16)
Lapses of statutes of limitation	(15)	(2)	(1)
Increases in tax positions for current year	95	62	43
Increases in tax positions for prior years	33	109	21
Decreases in tax positions for prior years	0	(1)	(4)

Decreases in tax positions for prior years	0	(1)	(7)
Ending balance of gross unrecognized tax benefits	\$ 391	\$ 320	\$ 177

Income Taxes (Valuation Allowance) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Movement in Valuation Allowances and Reserves [Roll Forward]			
Increases	\$ 0	\$ 3	\$ 0
Decreases	(17)	(1)	(9)
Valuation Allowance of Deferred Tax Assets			
Movement in Valuation Allowances and Reserves [Roll Forward]			
Beginning balance	207	207	173
Increases	20	27	40
Decreases	0	(27)	(6)
Ending balance	\$ 227	\$ 207	\$ 207

Income Taxes (Narrative) (Details) (USD \$)	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Income Tax Examination [Line Items]			
Statutory U.S. federal tax rate	35.00%	35.00%	35.00%
Adjustment to correct intercompany sales	-	-	\$ 28,000,000
Tax holiday benefit	452,000,000	-	-
Tax holiday benefit per diluted share (in dollars per share)	\$ 0.42	-	-
Undistributed earnings from foreign subsidiaries	8,200,000,000	-	-
Income tax effects allocated directly to equity	55,000,000	23,000,000	56,000,000
Income tax penalties and interest expense (benefit)	17,000,000	24,000,000	(6,000,000)
Unrecognized tax benefits that would impact effective tax rate	284,000,000	302,000,000	167,000,000
Decrease in unrecognized tax benefits is reasonably possible	116,000,000	-	-
Noncurrent Liabilities			
Income Tax Examination [Line Items]			
Interest and penalties related to uncertain tax positions	46,000,000	33,000,000	14,000,000
State and Local Jurisdiction			
Income Tax Examination [Line Items]			
Operating loss carryforwards	3,000,000	-	-
Foreign Tax Authority			
Income Tax Examination [Line Items]			
Income tax expense (benefit) from settlement with tax authorities	-	-	(10,000,000)
Research Tax Credit Carryforward State and Local Jurisdiction			
Income Tax Examination [Line Items]			
Tax credit carryforwards	221,000,000	-	-
Research, carried over until exhausted State and Local Jurisdiction			
Income Tax Examination [Line Items]			
Tax credit carryforwards	199,000,000	-	-
Research, carried over the next fifteen years State and Local Jurisdiction			
Income Tax Examination [Line Items]			
Tax credit carryforwards	22,000,000	-	-
Tax credit carryforward, term	15 years	-	-
SINGAPORE			
Income Tax Examination [Line Items]			
Foreign statutory income tax rate	17.00%	-	-
ISRAEL			
Income Tax Examination [Line Items]			
Foreign statutory income tax rate	24.00%	-	-
ITALY Foreign Tax Authority			
Income Tax Examination [Line Items]			
Income tax paid or accrued	29,000,000	-	19,000,000
Income tax expense (benefit) from settlement with tax authorities	6,000,000	-	-
SWITZERLAND Foreign Tax Authority			
Income Tax Examination [Line Items]			
Income tax paid or accrued	-	25,000,000	2,000,000
Income tax expense (benefit) from settlement with tax authorities	-	\$ 19,000,000	-

Warranty, Guarantees, Commitments and Contingencies (Narrative) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended			Jun. 20, 2014 employee	Feb. 07, 2013 employee
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015		
Commitments and Contingencies Disclosure [Abstract]					
Total rent expense	\$ 34	\$ 38	\$ 32	-	-
Products warranty period	12 months	-	-	-	-
Maximum potential amount of future payments for letters of credit or other guarantee instruments	57	-	-	-	-
Parent guarantees to banks	\$ 140	-	-	-	-
Number of employees acquitted	-	-	-	-	9
Number of employees found guilty	-	-	-	-	1
Number of employees found not guilty	-	-	-	10	-

Warranty, Guarantees, Commitments and Contingencies (Future Minimum Lease Payments) (Details) (USD \$) In Millions, unless otherwise specified	Oct. 29, 2017
Future minimum lease payments	
2018	\$ 33
2019	24
2020	16
2021	10
2022	7
Thereafter	11
Total	<u>\$ 101</u>

Warranty, Guarantees, Commitments and Contingencies (Warranty Reserves) (Details) (USD \$) In Millions, unless otherwise specified	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Changes in the warranty reserves			
Beginning balance	\$ 153	\$ 126	\$ 113
Provisions for warranty	166	135	127
Changes in reserves related to preexisting warranty	1	(12)	(10)
Consumption of reserves	(121)	(96)	(104)
Ending balance	\$ 199	\$ 153	\$ 126

Industry Segment Operations (Narrative) (Details)	12 Months Ended
	Oct. 29, 2017 segment
Segment Reporting [Abstract]	
Number of reportable segments	3

Industry Segment Operations (Reportable Segment) (Details) (USD \$) In Millions, unless otherwise specified	3 Months Ended								Oct. 29 2017
	Oct. 29, 2017	Jul. 30, 2017	Apr. 30, 2017	Jan. 29, 2017	Oct. 30, 2016	Jul. 31, 2016	May 01, 2016	Jan. 31, 2016	
Information for each reportable segment									
Net Sales	\$ 3,969	\$ 3,744	\$ 3,546	\$ 3,278	\$ 3,297	\$ 2,821	\$ 2,450	\$ 2,257	\$ 14,5
Operating Income (Loss)	-	-	-	-	-	-	-	-	3,8
Depreciation/ Amortization	-	-	-	-	-	-	-	-	4
Capital Expenditures	-	-	-	-	-	-	-	-	3
Accounts Receivable	2,338	-	-	-	2,279	-	-	-	2,3
Inventories	2,930	-	-	-	2,050	-	-	-	2,9
Operating Segments Semiconductor Systems									
Information for each reportable segment									
Net Sales	-	-	-	-	-	-	-	-	9,5
Operating Income (Loss)	-	-	-	-	-	-	-	-	3,1
Depreciation/ Amortization	-	-	-	-	-	-	-	-	2
Capital Expenditures	-	-	-	-	-	-	-	-	1
Accounts Receivable	1,626	-	-	-	1,524	-	-	-	1,6
Inventories	1,760	-	-	-	1,188	-	-	-	1,7
Operating Segments Applied Global Services									
Information for each reportable segment									
Net Sales	-	-	-	-	-	-	-	-	3,0
Operating Income (Loss)	-	-	-	-	-	-	-	-	8
Depreciation/ Amortization	-	-	-	-	-	-	-	-	
Capital Expenditures	-	-	-	-	-	-	-	-	
Accounts Receivable	564	-	-	-	559	-	-	-	5
Inventories	762	-	-	-	594	-	-	-	7
Operating Segments Display and Adjacent Markets									
Information for each reportable segment									
Net Sales	-	-	-	-	-	-	-	-	1,9
Operating Income (Loss)	-	-	-	-	-	-	-	-	5
Depreciation/ Amortization	-	-	-	-	-	-	-	-	
Capital Expenditures	-	-	-	-	-	-	-	-	
Accounts Receivable	190	-	-	-	238	-	-	-	1
Inventories	367	-	-	-	215	-	-	-	3
Corporate And Reconciling Items [Member]									
Information for each reportable segment									
Net Sales	-	-	-	-	-	-	-	-	1
Operating Income (Loss)	-	-	-	-	-	-	-	-	(6
Depreciation/ Amortization	-	-	-	-	-	-	-	-	
Capital Expenditures	-	-	-	-	-	-	-	-	1
Accounts Receivable	(42)	-	-	-	(42)	-	-	-	(
Inventories	\$ 41	-	-	-	\$ 53	-	-	-	\$

[illegible]

Industry Segment Operations (Net Sales and Long-lived Assets) (Details) (USD \$) In Millions, unless otherwise specified	3 Months Ended								Oct. 29 2017
	Oct. 29, 2017	Jul. 30, 2017	Apr. 30, 2017	Jan. 29, 2017	Oct. 30, 2016	Jul. 31, 2016	May 01, 2016	Jan. 31, 2016	
Revenues from External Customers and Long-Lived Assets [Line Items]									
Net Sales	\$ 3,969	\$ 3,744	\$ 3,546	\$ 3,278	\$ 3,297	\$ 2,821	\$ 2,450	\$ 2,257	\$ 14,5
Long-lived assets	1,186	-	-	-	1,015	-	-	-	1,1
United States									
Revenues from External Customers and Long-Lived Assets [Line Items]									
Net Sales	-	-	-	-	-	-	-	-	1,4
Long-lived assets	915	-	-	-	798	-	-	-	9
Korea									
Revenues from External Customers and Long-Lived Assets [Line Items]									
Net Sales	-	-	-	-	-	-	-	-	4,0
Long-lived assets	21	-	-	-	12	-	-	-	
Taiwan									
Revenues from External Customers and Long-Lived Assets [Line Items]									
Net Sales	-	-	-	-	-	-	-	-	3,2
Long-lived assets	50	-	-	-	34	-	-	-	
China									
Revenues from External Customers and Long-Lived Assets [Line Items]									
Net Sales	-	-	-	-	-	-	-	-	2,7
Long-lived assets	47	-	-	-	44	-	-	-	
Japan									
Revenues from External Customers and Long-Lived Assets [Line Items]									
Net Sales	-	-	-	-	-	-	-	-	1,5
Long-lived assets	8	-	-	-	8	-	-	-	
Europe									
Revenues from External Customers and Long-Lived Assets [Line Items]									
Net Sales	-	-	-	-	-	-	-	-	8
Long-lived assets	47	-	-	-	34	-	-	-	
Southeast Asia									
Revenues from External Customers and Long-Lived Assets [Line Items]									
Net Sales	-	-	-	-	-	-	-	-	6
Long-lived assets	98	-	-	-	85	-	-	-	
Total outside United States									
Revenues from External Customers and Long-Lived Assets [Line Items]									
Net Sales	-	-	-	-	-	-	-	-	13,0
Long-lived assets	\$ 271	-	-	-	\$ 217	-	-	-	\$ 2

Industry Segment Operations (Percentage by Customer) (Details) (Sales Revenue, Net, Customer Concentration Risk)	12 Months Ended		
	Oct. 29, 2017	Oct. 30, 2016	Oct. 25, 2015
Samsung Electronics Co., Ltd.			
Entity-Wide Revenue, Major Customer [Line Items]			
Concentration risk percentage	23.00%	13.00%	18.00%
Taiwan Semiconductor Manufacturing Company Limited			
Entity-Wide Revenue, Major Customer [Line Items]			
Concentration risk percentage	15.00%	16.00%	15.00%
Intel Corporation			
Entity-Wide Revenue, Major Customer [Line Items]			
Concentration risk percentage	-	11.00%	-
Micron Technology, Inc.			
Entity-Wide Revenue, Major Customer [Line Items]			
Concentration risk percentage	-	11.00%	-

Unaudited Quarterly Consolidated Financial Data (Details) (USD \$) In Millions, except Per Share data, unless otherwise specified	3 Months Ended								
	Oct. 29, 2017	Jul. 30, 2017	Apr. 30, 2017	Jan. 29, 2017	Oct. 30, 2016	Jul. 31, 2016	May 01, 2016	Jan. 31, 2016	Oct. 29 2017
Unaudited Quarterly Consolidated Financial Data									
Net sales	\$ 3,969	\$ 3,744	\$ 3,546	\$ 3,278	\$ 3,297	\$ 2,821	\$ 2,450	\$ 2,257	\$ 14,5
Gross profit	1,787	1,700	1,600	1,445	1,399	1,192	1,004	916	6,5
Net income	\$ 982	\$ 925	\$ 824	\$ 703	\$ 610	\$ 505	\$ 320	\$ 286	\$ 3,4
Diluted earnings per share (in dollars per share)	\$ 0.91	\$ 0.85	\$ 0.76	\$ 0.65	\$ 0.56	\$ 0.46	\$ 0.29	\$ 0.25	\$ 3.