Section 1: 10-Q (10-Q)

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

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2019

or

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

For the transition period from to

Commission file number: 001-37870

TiVo Corporation

(Exact name of registrant as specified in its charter)

Delaware	**61-1793262**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

2160 Gold Street , San Jose , California 95002

(Address of principal executive offices, including zip code)

(408) 519-9100

(Registrant's telephone number, including area code)

N/A

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

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

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, par value $0.001 per share	TIVO	The Nasdaq Stock Market LLC

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

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

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

Large accelerated filer	☑	Accelerated filer	☐	Non-accelerated filer	☐
Smaller reporting company	☐	Emerging growth company	☐		

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

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

(in thousands) Class	Outstanding as of October 31, 2019
Common Stock	126,643

TIVO CORPORATION AND SUBSIDIARIES
TABLE OF CONTENTS

PART I. FINANCIAL INFORMATION

PART II. OTHER INFORMATION

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

TIVO CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except per share amounts)

	September 30, 2019	December 31, 2018
ASSETS	(unaudited)	
Current assets:		
Cash and cash equivalents	$ 144,451	$ 161,955
Short-term marketable securities	132,208	158,956
Accounts receivable, net	183,827	152,866
Inventory	3,056	7,449
Prepaid expenses and other current assets	30,842	30,806
Total current assets	494,384	512,032
Long-term marketable securities	4,986	73,207
Property and equipment, net	50,361	53,586
Intangible assets, net	442,857	513,770
Goodwill	1,406,987	1,544,343
Right-of-use assets	63,064	—
Other long-term assets	59,953	63,365
Total assets	$ 2,522,592	$ 2,760,303
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued expenses	$ 107,815	$ 104,981
Unearned revenue	49,579	46,072
Current portion of long-term debt	289,284	373,361
Total current liabilities	446,678	524,414
Unearned revenue, less current portion	46,511	54,495
Long-term debt, less current portion	619,947	618,776
Deferred tax liabilities, net	39,921	45,030
Long-term lease liabilities	65,650	—
Other long-term liabilities	13,618	24,647
Total liabilities	1,232,325	1,267,362
Contingencies (Note 11)		
Stockholders' equity:		
Preferred stock, $0.001 par value, 5,000 shares authorized; no shares issued or outstanding	—	—
Common stock, $0.001 par value, 250,000 shares authorized; 128,969 shares issued and 126,502 shares outstanding as of September 30, 2019; and 125,781 shares issued and 123,975 shares outstanding as of December 31, 2018	129	126
Treasury stock, 2,467 shares and 1,806 shares as of September 30, 2019 and December 31, 2018, respectively, at cost	(37,516)	(32,124)
Additional paid-in capital	3,229,334	3,239,395
Accumulated other comprehensive loss	(3,520)	(3,869)
Accumulated deficit	(1,898,160)	(1,710,587)
Total stockholders' equity	1,290,267	1,492,941
Total liabilities and stockholders' equity	$ 2,522,592	$ 2,760,303

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

TIVO CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share amounts)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	**2018**	**2019**	**2018**
Revenues, net:				
Licensing, services and software	$ 155,918	$ 160,783	$ 486,575	$ 516,495
Hardware	2,606	3,926	6,356	10,911
Total Revenues, net	158,524	164,709	492,931	527,406
Costs and expenses:				
Cost of licensing, services and software revenues, excluding depreciation and amortization of intangible assets	39,263	40,749	114,482	126,547
Cost of hardware revenues, excluding depreciation and amortization of intangible assets	4,289	4,220	14,150	14,260
Research and development	34,038	42,053	113,621	133,894
Selling, general and administrative	45,677	39,867	139,270	133,906
Depreciation	5,314	5,338	16,005	16,252
Amortization of intangible assets	28,212	37,242	84,574	119,463
Restructuring and asset impairment charges	1,995	2,921	6,484	8,568
Goodwill impairment	137,453	—	137,453	—
Total costs and expenses	296,241	172,390	626,039	552,890
Operating loss	(137,717)	(7,681)	(133,108)	(25,484)
Interest expense	(11,844)	(12,436)	(36,480)	(36,241)
Interest income and other, net	860	861	4,150	2,971
(Loss) gain on interest rate swaps	(390)	1,033	(5,475)	7,185
Loss on debt extinguishment	—	—	(300)	—
Loss from continuing operations before income taxes	(149,091)	(18,223)	(171,213)	(51,569)
Income tax expense	1,919	4,769	15,981	13,305
Loss from continuing operations, net of tax	(151,010)	(22,992)	(187,194)	(64,874)
(Loss) Income from discontinued operations, net of tax	(379)	143	(379)	3,738
Net loss	$ (151,389)	$ (22,849)	$ (187,573)	$ (61,136)
Basic loss per share:				
Continuing operations	$ (1.20)	$ (0.19)	$ (1.50)	$ (0.53)
Discontinued operations	—	—	—	0.03
Basic loss per share	$ (1.20)	$ (0.19)	$ (1.50)	$ (0.50)
Weighted average shares used in computing basic per share amounts	126,081	123,459	125,160	122,756
Diluted loss per share:				
Continuing operations	$ (1.20)	$ (0.19)	$ (1.50)	$ (0.53)
Discontinued operations	—	—	—	0.03
Diluted loss per share	$ (1.20)	$ (0.19)	$ (1.50)	$ (0.50)
Weighted average shares used in computing diluted per share amounts	126,081	123,459	125,160	122,756
Dividends declared per share	$ 0.08	$ 0.18	$ 0.34	$ 0.54

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

TIVO CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(In thousands)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net loss	$ (151,389)	$ (22,849)	$ (187,573)	$ (61,136)
Other comprehensive (loss) income, net of tax:				
Change in foreign currency translation adjustment	(936)	(286)	(532)	(1,889)
Unrealized (losses) gains on marketable securities				
Change in unrealized (loss) gains on marketable securities	(11)	222	881	114
Less: Reclassification adjustment on sale	—	—	—	216
Other comprehensive (loss) income, net of tax	(947)	(64)	349	(1,559)
Comprehensive loss	$ (152,336)	$ (22,913)	$ (187,224)	$ (62,695)

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

TIVO CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands)
(Unaudited)

	Common stock		Treasury stock		Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Total stockholders' equity
	Shares	Amount	Shares	Amount				
Balance as of June 30, 2018	124,528	$ 125	(1,557)	$(28,925)	$3,257,093	$ (4,233)	$ (1,399,526)	$ 1,824,534
Net loss							(22,849)	(22,849)
Other comprehensive loss, net of tax						(64)		(64)
Issuance of common stock under employee stock purchase plan	511	—			5,278			5,278
Issuance of restricted stock, net	590	1			—			1
Equity-based compensation					9,526			9,526
Dividends					(22,282)			(22,282)
Withholding taxes related to net share settlement of restricted awards			(197)	(2,570)				(2,570)
Balance as of September 30, 2018	125,629	$ 126	(1,754)	$(31,495)	$3,249,615	$ (4,297)	$ (1,422,375)	$ 1,791,574

	Common stock		Treasury stock		Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Total stockholders' equity
	Shares	Amount	Shares	Amount				
Balance as of June 30, 2019	127,313	$ 127	(2,157)	$(35,219)	$3,230,303	$ (2,573)	$ (1,746,771)	$ 1,445,867
Net loss							(151,389)	(151,389)
Other comprehensive loss, net of tax						(947)		(947)
Issuance of common stock under employee stock purchase plan	608	1			3,920			3,921
Issuance of restricted stock, net	1,048	1			—			1
Equity-based compensation					5,217			5,217
Dividends					(10,106)			(10,106)
Withholding taxes related to net share settlement of restricted awards			(310)	(2,297)				(2,297)
Balance as of September 30, 2019	128,969	$ 129	(2,467)	$(37,516)	$3,229,334	$ (3,520)	$ (1,898,160)	$ 1,290,267

	Common stock		Treasury stock		Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Total stockholders' equity
	Shares	Amount	Shares	Amount				
Balance as of December 31, 2017	123,385	$ 123	(1,269)	$(24,740)	$3,273,022	$ (2,738)	$ (1,392,651)	$ 1,853,016
Cumulative effect adjustment							31,412	31,412
Net loss							(61,136)	(61,136)
Other comprehensive loss, net of tax						(1,559)		(1,559)
Issuance of common stock under employee stock purchase plan	1,150	2			12,852			12,854
Issuance of restricted stock, net	1,094	1			—			1
Equity-based compensation					30,252			30,252
Dividends					(66,511)			(66,511)
Withholding taxes related to net share settlement of restricted awards			(485)	(6,755)				(6,755)
Balance as of September 30, 2018	125,629	$ 126	(1,754)	$(31,495)	$3,249,615	$ (4,297)	$ (1,422,375)	$ 1,791,574

	Common stock		Treasury stock		Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Total stockholders' equity
	Shares	Amount	Shares	Amount				
Balance as of December 31, 2018	125,781	$ 126	(1,806)	$(32,124)	$3,239,395	$ (3,869)	$ (1,710,587)	$ 1,492,941
Net loss							(187,573)	(187,573)
Other comprehensive income, net of tax						349		349
Issuance of common stock under employee stock purchase plan	1,343	1			10,871			10,872
Issuance of restricted stock, net	1,845	2			—			2
Equity-based compensation					22,637			22,637
Dividends					(42,573)			(42,573)
Equity component related to repurchase of 2020 Convertible Notes					(996)			(996)
Withholding taxes related to net share settlement of restricted awards			(661)	(5,392)				(5,392)
Balance as of September 30, 2019	128,969	$ 129	(2,467)	$(37,516)	$3,229,334	$ (3,520)	$ (1,898,160)	$ 1,290,267

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

TIVO CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Nine Months Ended September 30,	
	2019	**2018**
Operating activities:		
Net loss	$ (187,573)	$ (61,136)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Loss (Income) from discontinued operations, net of tax	379	(3,738)
Depreciation	16,005	16,252
Amortization of intangible assets	84,574	119,463
Amortization of convertible note discount and note issuance costs	11,531	11,586
Restructuring and asset impairment charges	6,484	8,568
Goodwill impairment	137,453	—
Equity-based compensation	22,459	28,226
Change in fair value of interest rate swaps	4,613	(10,245)
Loss on debt extinguishment	300	—
Deferred income taxes	(5,418)	(447)
Other operating, net	5,507	1,819
Changes in operating assets and liabilities:		
Accounts receivable	(31,803)	30,548
Inventory	2,001	3,618
Prepaid expenses and other current assets and other long-term assets	(716)	7,377
Right-of-use assets, net of lease liabilities	14,919	—
Accounts payable and accrued expenses and other long-term liabilities	(26,003)	(35,237)
Taxes payable	(1,504)	(474)
Unearned revenue	(11,563)	(2,445)
Net cash provided by operating activities - Continuing operations	41,645	113,735
Net cash used in operating activities - Discontinued operations	(25)	—
Net cash provided by operating activities	41,620	113,735
Investing activities:		
Payments for purchase of short- and long-term marketable securities	(69,220)	(150,583)
Proceeds from sales or maturities of short- and long-term marketable securities	165,799	142,753
Payments for purchase of property and equipment	(15,743)	(17,053)
Payments for acquisition of patents	(6,850)	—
Other investing, net	—	15
Net cash provided by (used in) investing activities	73,986	(24,868)
Financing activities:		
Principal payments on long-term debt	(95,963)	(5,250)
Payments for dividends	(42,493)	(66,687)
Payments for contingent consideration and deferred holdback	—	(1,874)
Payments for withholding taxes related to net settlement of restricted awards	(5,392)	(6,755)
Proceeds from employee stock purchase plan	10,872	12,854
Net cash used in financing activities	(132,976)	(67,712)
Effect of exchange rate changes on cash and cash equivalents	(134)	(465)
Net (decrease) increase in cash and cash equivalents	(17,504)	20,690
Cash and cash equivalents at beginning of period	161,955	128,965
Cash and cash equivalents at end of period	$ 144,451	$ 149,655

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

TIVO CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(1) Basis of Presentation and Summary of Significant Accounting Policies

Description of Business

On April 28, 2016, Rovi Corporation ("Rovi") and TiVo Inc. (renamed TiVo Solutions Inc. ("TiVo Solutions")) entered into an Agreement and Plan of Merger (the “Merger Agreement”) for Rovi to acquire TiVo Solutions in a cash and stock transaction (the "TiVo Acquisition"). Following consummation of the TiVo Acquisition on September 7, 2016 (the "TiVo Acquisition Date"), TiVo Corporation (the "Company"), a Delaware corporation founded in April 2016 as Titan Technologies Corporation and then a wholly-owned subsidiary of Rovi, owns both Rovi and TiVo Solutions.

TiVo Corporation provides an intellectual property portfolio and products to help consumers enjoy watching their favorite entertainment. Our technologies enable an integrated entertainment experience, making entertainment content easy to find, watch and enjoy. Our product business serves up the best movies, video and shows from across live TV, on demand, streaming services and countless apps, helping people discover what to watch as they wish. For content creators and advertisers, our machine learning for personalized content recommendations, conversational voice solution and targeted advertising methodologies help deliver a passionate group of watchers to increase viewership and engagement across online video, TV and other entertainment viewing platforms. Our intellectual property business provides a global portfolio of thousands of patents that underlie this entertainment platform as well as across the broader video landscape.

On May 9, 2019, the Company announced that its Board of Directors unanimously approved a plan to separate the Product and Intellectual Property Licensing businesses into separately traded public companies (the “Separation”). The Separation is expected to be completed through a dividend of newly issued shares of the common stock of a Company subsidiary that will hold the Product business (“ProductCo”). The Company intends that the Separation will be completed in a manner generally intended to qualify as tax-deferred to TiVo Corporation’s stockholders for U.S. federal income tax purposes. The Separation, targeted for completion by April 2020, is subject to certain conditions, including, among others, obtaining final approval from TiVo Corporation's Board of Directors, receipt of a favorable opinion and/or rulings with respect to the tax-deferred nature of the transaction for U.S. federal income tax purposes and the U.S. Securities and Exchange Commission declaring ProductCo's Registration Statement effective.

Basis of Presentation and Principles of Consolidation

The accompanying unaudited Condensed Consolidated Financial Statements have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission. Certain information and disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") have been condensed or omitted in accordance with such rules and regulations. However, the Company believes the disclosures made are adequate to make the information not misleading. In the opinion of management, the accompanying unaudited Condensed Consolidated Financial Statements reflect all adjustments, consisting only of normal recurring adjustments, which in the opinion of management, are considered necessary to present fairly the results for the periods presented.

The information contained in this Quarterly Report on Form 10-Q should be read in conjunction with the audited financial statements and notes thereto and other disclosures contained in the Company’s Annual Report on Form 10-K for the year ended December 31, 2018. The Condensed Consolidated Statements of Operations, Condensed Consolidated Statements of Comprehensive Loss, Condensed Consolidated Statements of Stockholders' Equity and the Condensed Consolidated Statements of Cash Flows for the interim periods presented are not necessarily indicative of the results to be expected for the year ended December 31, 2019, for any future year, or for any other future interim period.

The accompanying Condensed Consolidated Financial Statements include the accounts of TiVo Corporation and subsidiaries and affiliates in which the Company has a controlling financial interest after the elimination of intercompany accounts and transactions.

Certain prior year amounts have been reclassified to conform to the current year presentation.

Use of Estimates

The preparation of the Condensed Consolidated Financial Statements in conformity with U.S. GAAP requires management to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and related disclosures as of the date of the financial statements and the results of operations for the reporting period. On an ongoing basis, management evaluates its estimates, including those related to revenue recognition, long-lived asset impairment, including goodwill and intangible assets, equity-based compensation and income taxes. Actual results may differ from those estimates.

Goodwill

Goodwill represents the excess of cost over fair value of the net assets of an acquired business. The recoverability of goodwill is assessed at the reporting unit level, which is either the operating segment or one level below. Goodwill is evaluated for potential impairment annually, as of the beginning of the fourth quarter, and whenever events or changes in circumstances indicate their carrying amount may not be recoverable.

Qualitative factors are first assessed to determine whether events or changes in circumstances indicate it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount. If, based on the qualitative assessment, it is considered more-likely-than-not that the fair value of a reporting unit is less than its carrying amount, then a quantitative impairment test is performed.

In the quantitative impairment test for goodwill, the fair value of the reporting unit is compared to its carrying amount. The fair value of the Product reporting unit and the Intellectual Property Licensing reporting unit is estimated using an income approach. Under the income approach, the fair value of a reporting unit is estimated based on the present value of estimated future cash flows and considers projected revenue growth rates, future operating margins and risk-adjusted discount rates. The carrying amount of a reporting unit is determined by assigning the assets and liabilities, including goodwill and intangible assets, to the reporting unit. If the fair value of a reporting unit exceeds its carrying amount, goodwill is not impaired. If the fair value of a reporting unit is less than its carrying amount, an impairment loss equal to the difference is recognized.

Right-of-Use Assets and Lease Liabilities

At inception of an agreement, the agreement is reviewed to determine if it is or contains a lease. If an agreement is or contains a lease, the Company recognizes a Right-of-use asset, representing the right to use an underlying asset for the lease term, and a Lease liability, representing the obligation to make lease payments arising from a lease.

Right-of-use assets and Lease liabilities are measured based on the present value of the lease payments over the lease term. The lease term includes options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. The present value of future lease payments is calculated utilizing the discount rate implicit in the lease. If the discount rate implicit in the lease is not readily determinable, the present value of future lease payments is calculated utilizing the Company's incremental borrowing rate. Right-of-use assets and Lease liabilities are subject to adjustment in the event of modifications to lease terms, changes in the probability that an option to extend or terminate a lease would be exercised and other factors. In addition, Right-of-use assets are periodically reviewed for impairment.

Certain of the Company's lease agreements require variable payments, such as inflation-indexed measures. When a lease requires an indexed payment, Right-of-use assets and Lease liabilities are measured based on the variable rate in effect at the measurement date. All other variable fees, such as increases in lessor operating costs and usage-based fees, are excluded from the calculation of the Right-of-use assets and Lease liabilities and are expensed as incurred.

The Company has lease agreements that contain both lease components (e.g., fixed payments including rent, real estate taxes and insurance costs) and non-lease components (e.g., common-area maintenance costs). The Company applies a practical expedient to combine lease components and non-lease components into a single lease component for recognition and measurement purposes.

Lease expense includes amortization of the Right-of-use assets and accretion of the Lease liabilities. Amortization of the Right-of-use assets is calculated as the periodic lease cost less accretion of the lease liability. The amortization period for Right-of-use assets is limited to the expected lease term. For operating leases, lease expense is recognized in the Condensed Consolidated Statements of Operations as an operating expense over the lease term on a straight-line basis. For financing leases, amortization of the Right-of-use asset is recognized as an operating expense in the Condensed Consolidated Statements of Operations over the lease term separately from accretion of the Lease liability.

The Company applies a practical expedient to not measure or recognize Right-of-use assets or Lease liabilities for leases with a lease term of 12 months or less and lease expense for these leases is recognized as incurred.

Recent Accounting Pronouncements

Standards Recently Adopted

In February 2016, the Financial Accounting Standards Board ("FASB") issued a new accounting standard for leases. The new lease accounting standard generally requires the recognition of operating and financing lease liabilities and corresponding right-of-use assets on the statement of financial position. The Company adopted the provisions of the new lease accounting standard on January 1, 2019 using the modified retrospective transition approach and certain practical expedients as described in Note 10. On adoption, the Company recognized the present value of its existing minimum lease payments as a $66.7 million Right-of-use asset and an $81.9 million Lease liability. The difference between the Right-of-use asset and the Lease liability on adoption primarily arises from previously recorded deferred rent, which was effectively reclassified to the Right-of-use asset on adoption. As a result, there was no impact on Accumulated deficit. Results for periods beginning after December 31, 2018 are presented in accordance with the new lease accounting standard, while prior period amounts were not restated and continue to be reported in accordance with the Company's previous lease accounting policies.

In March 2017, the FASB shortened the amortization period for certain investments in callable debt securities held at a premium to the earliest call date. Application of the shortened amortization period was effective for the Company beginning on January 1, 2019 on a modified retrospective basis. The application of the shortened amortization period did not have an effect on the Company's Condensed Consolidated Financial Statements.

In February 2018, the FASB issued guidance on the reclassification of certain income tax effects from accumulated other comprehensive income resulting from the Tax Cuts and Jobs Act of 2017 (the "Tax Act of 2017"). Application of the reclassification guidance was effective for the Company beginning on January 1, 2019. On adoption, the Company made an accounting policy election to use the specific identification method to release income tax effects from Accumulated other comprehensive loss. The Company also made an accounting policy election not to reclassify the stranded tax effects of the Tax Act of 2017 from Accumulated other comprehensive loss to Accumulated deficit. The application of the reclassification guidance did not have a material effect on the Company's Condensed Consolidated Financial Statements.

Standards Pending Adoption

In August 2018, the FASB modified the requirements for capitalizing costs incurred to implement a hosting arrangement that is a service contract. The modified requirements were intended to align the cost capitalization requirements for hosting arrangements with the cost capitalization requirements for internal-use software. The modified guidance is effective for the Company beginning on January 1, 2020, with early adoption permitted. The guidance can be applied prospectively to all arrangements entered into or materially modified after the effective date or using a retrospective transition approach. The Company does not expect application of the modified requirements for capitalizing costs incurred to implement a hosting arrangement to have a material effect on its Condensed Consolidated Financial Statements.

In June 2016, the FASB issued updated guidance that requires entities to use a current expected credit loss model to measure credit-related impairments for financial instruments held at amortized cost. The current expected credit loss model is based on relevant information about past events, including historical experience, current conditions and reasonable and supportable forecasts that affect collectability. Current expected credit losses, and subsequent adjustments, represent an estimate of lifetime expected credit losses that are recorded as an allowance deducted from the amortized cost of the financial instrument. The updated guidance also amends the other-than-temporary impairment model for available-for-sale debt securities by requiring the recognition of impairments for credit-related losses through an allowance and eliminating the length of time a security has been in an unrealized loss position as a consideration in the determination of whether a credit loss exists. The updated guidance is effective for the Company beginning on January 1, 2020 and is effective using a modified retrospective transition approach for the provisions related to application of the current expected credit loss model to financial instruments and using a prospective transition approach for the provisions related to credit losses on available-for-sale debt securities. Early application is permitted. The Company is evaluating the effect of application on its Condensed Consolidated Financial Statements.

(2) Discontinued Operations

In the three and nine months ended September 30, 2019, the Company recognized a Loss from discontinued operations, net of tax, of $0.4 million and $0.4 million, respectively, as a result of costs incurred pursuant to certain indemnification obligations associated with previous business disposals. In the three and nine months ended September 30, 2018, the Company recognized Income from discontinued operations, net of tax, of $0.1 million and $3.7 million, respectively, as a result of the expiration of certain indemnification obligations and the execution of settlement agreements during the period associated with previous business disposals.

(3) Financial Statement Details

Inventory

Components of Inventory were as follows (in thousands):

	September 30, 2019	December 31, 2018
Raw materials	$ 411	$ 864
Finished goods	2,645	6,585
Inventory	$ 3,056	$ 7,449

Property and equipment, net

Components of Property and equipment, net were as follows (in thousands):

	September 30, 2019	December 31, 2018
Computer software and equipment	$ 155,634	$ 148,935
Leasehold improvements	52,389	47,431
Furniture and fixtures	10,317	9,494
Property and equipment, gross	218,340	205,860
Less: Accumulated depreciation and amortization	(167,979)	(152,274)
Property and equipment, net	$ 50,361	$ 53,586

Accounts payable and accrued expenses

Components of Accounts payable and accrued expenses were as follows (in thousands):

	September 30, 2019	December 31, 2018
Accounts payable	$ 13,686	$ 2,180
Accrued compensation and benefits	34,896	46,466
Other accrued liabilities	59,233	56,335
Accounts payable and accrued expenses	$ 107,815	$ 104,981

Supplemental cash flow information (in thousands):

	Nine Months Ended September 30,	
	2019	2018
Significant noncash transactions		
Patents acquired as part of a licensing agreement	$ 7,086	$ —

(4) Revenues

Revenue Details

The following information depicts how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors by disaggregating revenue by significant customer, contract-type, geographic area and product offering (presented in Note 15). This information includes revenue recognized from contracts with customers and revenue from other sources, including out-of-license settlements.

Customers representing 10% or more of Total Revenues, net were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
AT&T Inc. ("AT&T")	11%	11%	11%	10%

Substantially all revenue from AT&T is reported in the Intellectual Property Licensing segment.

By segment, the pattern of revenue recognition was as follows (in thousands):

	Three Months Ended September 30, 2019			Three Months Ended September 30, 2018		
	Product	Intellectual Property Licensing	Total Revenues, net	Product	Intellectual Property Licensing	Total Revenues, net
Goods and services transferred at a point in time	$ 17,616	$ 31,062	$ 48,678	$ 22,093	$ 26,528	$ 48,621
Goods and services transferred over time	65,172	36,743	101,915	72,519	39,768	112,287
Out-of-license settlements	—	7,931	7,931	—	3,801	3,801
Total Revenues, net	$ 82,788	$ 75,736	$ 158,524	$ 94,612	$ 70,097	$ 164,709

	Nine Months Ended September 30, 2019			Nine Months Ended September 30, 2018		
	Product	Intellectual Property Licensing	Total Revenues, net	Product	Intellectual Property Licensing	Total Revenues, net
Goods and services transferred at a point in time	$ 55,963	$ 89,493	$ 145,456	$ 79,569	$ 81,977	$ 161,546
Goods and services transferred over time	203,334	109,623	312,957	224,682	125,212	349,894
Out-of-license settlements	—	34,518	34,518	—	15,966	15,966
Total Revenues, net	$ 259,297	$ 233,634	$ 492,931	$ 304,251	$ 223,155	$ 527,406

Revenue by geographic area was as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
United States	$ 112,325	$ 115,312	$ 327,614	$ 351,423
Canada	13,380	9,797	55,927	30,173
United Kingdom	3,920	9,131	17,506	56,361
Rest of the world	28,899	30,469	91,884	89,449
Total Revenues, net	$ 158,524	$ 164,709	$ 492,931	$ 527,406

Revenue by geographic area is predominately based on the end user's location. Other than the U.S., no country accounted for more than 10% of Total Revenues, net for the three months ended September 30, 2019 and 2018. Other than the U.S. and Canada, no country accounted for more than 10% of Total Revenues, net for the nine months ended September 30, 2019. Other than the U.S. and United Kingdom, no country accounted for more than 10% of Total Revenues, net for the nine months ended September 30, 2018.

Accounts receivable, net

Components of Accounts receivable, net were as follows (in thousands):

	September 30, 2019	December 31, 2018
Accounts receivable, gross	$ 186,828	$ 155,708
Less: Allowance for doubtful accounts	(3,001)	(2,842)
Accounts receivable, net	$ 183,827	$ 152,866

As of September 30, 2019 and December 31, 2018, AT&T represented 25% and 18% of Accounts receivable, net, respectively. Other than AT&T, no customer accounted for more than 10% of Accounts receivable, net as of September 30, 2019 and December 31, 2018.

Contract Balances

Contract assets primarily consist of revenue recognized in excess of the amount billed to the customer, limited to net realizable value and deferred engineering costs for significant software customization or modification and set-up services to the extent deemed recoverable. Contract assets also include the incremental costs of obtaining a contract with a customer, principally sales commissions when the renewal commission is not commensurate with the initial commission. Contract assets were recorded in the Condensed Consolidated Balance Sheets as follows (in thousands):

	September 30, 2019	December 31, 2018
Accounts receivable, net	$ 52,983	$ 35,115
Prepaid expenses and other current assets	2,399	1,654
Other long-term assets	11,517	8,532
Total contract assets, net	$ 66,899	$ 45,301

No impairment losses were recognized with respect to contract assets for the three and nine months ended September 30, 2019 and 2018.

Contract liabilities are mainly comprised of unearned revenue related to consumer lifetime subscriptions for the TiVo service, multi-period licensing or cloud-based services and other offerings for which the Company is paid in advance of when control of the promised good or service is transferred to the customer. Unearned revenue also includes amounts related to professional services to be performed in the future. For the three and nine months ended September 30, 2019, the Company recognized $9.6 million and $34.0 million, respectively, of revenue that had been included in Unearned revenue as of December 31, 2018.

As of September 30, 2019, approximately $691.9 million of revenue is expected to be recognized from unsatisfied performance obligations that are primarily related to fixed-fee intellectual property and software-as-a-service agreements, which is expected to be recognized as follows: 9% in the remainder of 2019, 27% in 2020, 18% in 2021, 13% in 2022, 12% in 2023 and 21% thereafter.

(5) Investments

The amortized cost and fair value of cash, cash equivalents and marketable securities by significant investment category were as follows (in thousands):

	September 30, 2019			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Cash	$ 42,208	$ —	$ —	$ 42,208
Cash equivalents - Money market funds	99,247	—	—	99,247
Cash equivalents - Corporate debt securities	2,996	—	—	2,996
Cash and cash equivalents	$ 144,451	$ —	$ —	$ 144,451
Corporate debt securities	$ 62,080	$ 67	$ (11)	$ 62,136
U.S. Treasuries / Agencies	74,845	236	(23)	75,058
Marketable securities	$ 136,925	$ 303	$ (34)	$ 137,194
Cash, cash equivalents and marketable securities				$ 281,645

	December 31, 2018			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Cash	$ 40,125	$ —	$ —	$ 40,125
Cash equivalents - Money market funds	121,830	—	—	121,830
Cash and cash equivalents	$ 161,955	$ —	$ —	$ 161,955
Corporate debt securities	$ 114,159	$ 1	$ (400)	$ 113,760
U.S. Treasuries / Agencies	118,497	70	(164)	118,403
Marketable securities	$ 232,656	$ 71	$ (564)	$ 232,163
Cash, cash equivalents and marketable securities				$ 394,118

As of September 30, 2019, the amortized cost and fair value of marketable securities, by contractual maturity, were as follows (in thousands):

	Amortized Cost	Fair Value
Due in less than 1 year	$ 134,987	$ 135,204
Due in 1-2 years	4,934	4,986
Total	$ 139,921	$ 140,190

As of September 30, 2019 and December 31, 2018, Other long-term assets include equity securities accounted for under the equity method with a carrying amount of $3.4 million and $2.2 million, respectively, and equity securities without a readily determinable fair value with a carrying amount of $1.6 million and $1.5 million, respectively. No impairments or adjustments to the carrying amount of the Company's equity securities without a readily determinable fair value were recognized in the three and nine months ended September 30, 2019 and 2018.

(6) Fair Value Measurements

Fair Value Hierarchy

The Company uses valuation techniques that are based on observable and unobservable inputs to measure fair value. Observable inputs are developed using publicly available information and reflect the assumptions market participants would use, while unobservable inputs are developed using the best information available about the assumptions market participants would use. Fair value measurements are classified in a hierarchy that gives the highest priority to observable inputs and the lowest priority to unobservable inputs. Assets and liabilities are classified in a fair value hierarchy based on the lowest level input that is significant to the fair value measurement in its entirety:

- *Level 1.* Quoted prices in active markets for identical assets or liabilities.
- *Level 2.* Inputs other than Level 1 inputs that are observable for the asset or liability, either directly or indirectly, such as quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, or market-corroborated inputs.
- *Level 3.* Unobservable inputs for the asset or liability.

The Company recognizes transfers between levels of the fair value hierarchy as of the end of the reporting period. For the three and nine months ended September 30, 2019 and 2018, there were no transfers between levels of the fair value hierarchy.

Recurring Fair Value Measurements

Assets and liabilities reported at fair value on a recurring basis in the Condensed Consolidated Balance Sheets were classified in the fair value hierarchy as follows (in thousands):

	September 30, 2019			December 31, 2018		
	Total	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Total	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)
Assets						
Cash and cash equivalents						
Money market funds	$ 99,247	$ 99,247	$ —	$121,830	$ 121,830	$ —
Corporate debt securities	2,996	2,996	—			
Short-term marketable securities						
Corporate debt securities	62,136	—	62,136	90,753	—	90,753
U.S. Treasuries / Agencies	70,072	—	70,072	68,203	—	68,203
Prepaid expenses and other current assets						
Interest rate swaps	—	—	—	173	—	173
Long-term marketable securities						
Corporate debt securities	—	—	—	23,007	—	23,007
U.S. Treasuries / Agencies	4,986	—	4,986	50,200	—	50,200
Total Assets	$239,437	$ 102,243	$ 137,194	$354,166	$ 121,830	$ 232,336
Liabilities						
Other long-term liabilities						
Interest rate swaps	$ (7,447)	$ —	$ (7,447)	$ (3,012)	$ —	$ (3,012)
Total Liabilities	$ (7,447)	$ —	$ (7,447)	$ (3,012)	$ —	$ (3,012)

Rollforward of Level 3 Fair Value Measurements

Changes in the fair value of assets and liabilities classified in Level 3 of the fair value hierarchy were as follows (in thousands):

	Three Months Ended September 30, 2018	Nine Months Ended September 30, 2018	
	Cubiware Contingent Consideration	Auction Rate Securities	Cubiware Contingent Consideration
Balance at beginning of period	$ (3,599)	$ 10,584	$ (2,234)
Sales	—	(10,715)	—
Settlements	1,874	—	1,874
Transfers out (a)	1,700	—	1,700
Gain (loss) included in earnings	25	(85)	(1,340)
Unrealized loss reclassified on sale	—	216	—
Balance at end of period	$ —	$ —	$ —

(a) During the three and nine months ended September 30, 2018, $1.7 million related to the Cubiware contingent consideration was reclassified to a contingent liability that is not measured at fair value.

For the three and nine months ended September 30, 2018, the Loss included in earnings related to the Cubiware contingent consideration liability is included in Selling, general and administrative expense related to remeasurement of the liability as a $0.1 million and $1.1 million loss, respectively, and in Interest expense related to accretion of the liability to future value of $0.1 million and $0.2 million, respectively.

Nonrecurring Fair Value Measurements

As part of the quantitative interim goodwill impairment test performed as of September 30, 2019, the Product and Intellectual Property Licensing reporting units were measured at fair value, resulting in a Goodwill impairment charge of $137.5 million. The unobservable inputs used to estimate the fair value of the Product and Intellectual Property Licensing reporting units include projected revenue growth rates, future operating margins and risk-adjusted discount rates, and, accordingly, these measurements would be classified in Level 3 of the fair value hierarchy. The Goodwill impairment charge and the valuation techniques used to estimate reporting unit fair values are more fully described in Note 1 and Note 7.

Valuation Techniques

The fair value of marketable securities is estimated using observable market-corroborated inputs, such as quoted prices in active markets for similar assets or independent pricing vendors, obtained from a third-party pricing service.

The fair value of interest rate swaps is estimated using a discounted cash flow analysis that considers the expected future cash flows of each interest rate swap. This analysis reflects the contractual terms of the interest rate swap, including the remaining period to maturity, and uses market-corroborated inputs, including forward interest rate curves and implied interest rate volatilities. The fair value of an interest rate swap is estimated by netting the discounted future fixed cash payments against the discounted expected variable cash receipts. The variable cash receipts are estimated based on an expectation of future interest rates derived from forward interest rate curves. The fair value of an interest rate swap also incorporates credit valuation adjustments to reflect the nonperformance risk of the Company and the respective counterparty. In adjusting the fair value of its interest rate swaps for the effect of nonperformance risk, the Company considers the effect of its master netting agreements.

Other Fair Value Disclosures

The carrying amount and fair value of debt issued or assumed by the Company were as follows (in thousands):

	September 30, 2019		December 31, 2018	
	Carrying Amount	Fair Value (a)	Carrying Amount	Fair Value (a)
2020 Convertible Notes	$ 289,284	$ 290,870	$ 326,640	$ 316,538
2021 Convertible Notes	48	48	48	48
Term Loan Facility B	619,899	618,802	665,449	633,404
Total Long-term debt	$ 909,231	$ 909,720	$ 992,137	$ 949,990

(a) If reported at fair value in the Condensed Consolidated Balance Sheets, debt issued or assumed by the Company would be classified in Level 2 of the fair value hierarchy.

(7) Intangible Assets, Net and Goodwill

Intangible Assets, Net

Intangible assets, net consisted of the following (in thousands):

	September 30, 2019		
	Gross	Accumulated Amortization	Net
Finite-lived intangible assets			
Developed technology and patents	$ 1,065,180	$ (833,081)	$ 232,099
Existing contracts and customer relationships	402,389	(210,887)	191,502
Content databases and other	57,359	(52,103)	5,256
Trademarks / Tradenames	8,300	(8,300)	—
Total finite-lived intangible assets	1,533,228	(1,104,371)	428,857
Indefinite-lived intangible assets			
TiVo Tradename	14,000	—	14,000
Total intangible assets	$ 1,547,228	$ (1,104,371)	$ 442,857

	December 31, 2018		
	Gross	Accumulated Amortization	Net
Finite-lived intangible assets			
Developed technology and patents	$ 1,051,635	$ (765,221)	$ 286,414
Existing contracts and customer relationships	402,756	(195,752)	207,004
Content databases and other	57,235	(50,883)	6,352
Trademarks / Tradenames	8,300	(8,300)	—
Total finite-lived intangible assets	1,519,926	(1,020,156)	499,770
Indefinite-lived intangible assets			
TiVo Tradename	14,000	—	14,000
Total intangible assets	$ 1,533,926	$ (1,020,156)	$ 513,770

Patent Acquisitions

In the three and nine months ended September 30, 2019, the Company acquired patent portfolios for an aggregate cost of $7.1 million and $14.0 million, respectively. The patent portfolios acquired in 2019 were obtained for $7.1 million as consideration in a licensing agreement and for a $6.9 million cash payment. The Company accounted for the patent portfolios acquired as asset acquisitions and is amortizing the purchase prices over a weighted average period of nine years.

Estimated Amortization of Finite-Lived Intangible Assets

As of September 30, 2019, estimated amortization expense for finite-lived intangible assets was as follows (in thousands):

Remainder of 2019	$ 28,132
2020	112,401
2021	69,631
2022	41,946
2023	24,845
Thereafter	151,902
Total	$ 428,857

Goodwill

Goodwill allocated to the reportable segments and changes in the carrying amount of goodwill by reportable segment were as follows (in thousands):

	Product	Intellectual Property Licensing	Total
December 31, 2018	$ 253,011	$ 1,291,332	$ 1,544,343
Impairment	(79,287)	(58,166)	(137,453)
Foreign currency translation	97	—	97
September 30, 2019	$ 173,821	$ 1,233,166	$ 1,406,987

Goodwill at each reporting unit is evaluated for potential impairment annually, as of the beginning of the fourth quarter, and whenever events or changes in circumstances indicate the carrying amount of goodwill may not be recoverable. The process of evaluating goodwill for potential impairment is subjective and requires significant estimates, assumptions and judgments particularly related to the identification of reporting units, the assignment of assets and liabilities to reporting units and estimating the fair value of each reporting unit.

During September 2019, sufficient indicators of potential impairment were identified that management concluded it was more-likely-than-not that goodwill was impaired and a quantitative interim goodwill impairment test should be performed as of September 30, 2019 for the Product and Intellectual Property Licensing reporting units. Indicators of potential impairment included a significant and sustained decline in the trading price of TiVo's common stock, as well as lower-than-previously forecast revenue and profitability levels for the Product reporting unit and downward revisions to this reporting unit's short- and long-term forecasts. The forecast revisions for the Product reporting unit were identified as part of TiVo's 2020 budgeting process and reflect lower expectations for its Platform Solutions products, including changes in both the market and business models internationally. The changes in such expectations related to revenue growth rates, current market trends, business mix, cost structure and other expectations about the anticipated short- and long-term operating results. As a result of the quantitative interim goodwill impairment test performed as of September 30, 2019, a Goodwill impairment charge of $137.5 million was recognized, of which $79.3 million related to the Product reporting unit and $58.2 million related to the Intellectual Property Licensing reporting unit. The Goodwill impairment charge for the Intellectual Property Licensing reporting unit resulted from an increase in the discount rate used to estimate fair value due to the decline in the trading price of TiVo's common stock.

No goodwill impairment charges were recognized as a result of an interim goodwill impairment test during the first two quarters of 2019.

Prior to completing the quantitative interim goodwill impairment test, TiVo tested the recoverability of long-lived assets other than goodwill assigned to the Product and Intellectual Property Licensing reporting units and concluded that such assets were not impaired.

(8) Restructuring and Asset Impairment Charges

Components of Restructuring and asset impairment charges were as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Facility-related costs	$ 158	$ 99	$ 591	$ 387
Severance costs	953	2,822	4,923	5,606
Share-based payments	—	—	—	2,575
Asset impairment	875	—	961	—
Contract termination costs and other	9	—	9	—
Restructuring and asset impairment charges	$ 1,995	$ 2,921	$ 6,484	$ 8,568

Components of accrued restructuring costs were as follows (in thousands):

	September 30, 2019	December 31, 2018
Facility-related costs	$ —	$ 264
Severance costs	2,179	3,996
Accrued restructuring costs	$ 2,179	$ 4,260

The Company expects a substantial portion of the accrued restructuring costs to be paid by the end of 2019.

2019 Transformation Plan

In connection with the May 2019 announcement of its plan to separate its Product and Intellectual Property Licensing businesses, the Company initiated certain activities to transform its business operations in order to execute the separation (the "2019 Transformation Plan"). As a result of the 2019 Transformation Plan, the Company expects to reduce headcount, move certain positions to lower cost locations, rationalize facilities and legal entities and terminate certain leases and other contracts. The 2019 Transformation Plan resulted in restructuring charges of $0.7 million during the three and nine months ended September 30, 2019, substantially all of which related to severance costs.

The process of completing the Separation has been and is expected to continue to be time-consuming and involve significant costs and expenses. In addition to the restructuring costs associated with the 2019 Transformation Plan, the Company also recorded costs that do not qualify as restructuring expense related to the Separation of $9.5 million and $13.9 million during the three and nine months ended September 30, 2019, respectively. These costs were recorded in Selling, general and administrative costs and consist of employee-related costs, costs to establish certain stand-alone functions and information technology systems and other one-time transaction-related costs, including investment banking and consulting fees and other incremental costs directly associated with the Separation process.

Profit Improvement Plan

In February 2018, the Company announced its intention to explore strategic alternatives. In connection with exploring strategic alternatives, the Company initiated certain cost saving actions (the "Profit Improvement Plan"). As a result of the Profit Improvement Plan, the Company moved certain positions to lower cost locations, eliminated layers of management and rationalized facilities resulting in severance costs and the termination of certain leases and other contracts. Restructuring activities related to the Profit Improvement Plan for the nine months ended September 30, 2019 were as follows (in thousands):

	Balance at Beginning of Period	Restructuring Expense	Cash Settlements	Non-Cash Settlements	Other	Balance at End of Period
Facility-related costs	$ —	$ 591	$ —	$ (591)	$ —	$ —
Severance costs	3,857	4,223	(6,203)	—	(72)	1,805
Asset impairment	—	961	—	(961)	—	—
Total	$ 3,857	$ 5,775	$ (6,203)	$ (1,552)	$ (72)	$ 1,805

As a result of actions associated with the Profit Improvement Plan, Restructuring and asset impairment charges of $8.1 million, primarily for severance-related benefits, were recognized in the nine months ended September 30, 2018.

The Profit Improvement Plan was substantially complete as of September 30, 2019.

Previous Restructuring Plans

Following completion of the TiVo Acquisition, TiVo Corporation began implementing integration plans that were intended to realize operational synergies between Rovi and TiVo Solutions (the "TiVo Integration Restructuring Plan"). As a result of these integration plans, the Company eliminated duplicative positions resulting in severance costs and the termination of certain leases and other contracts. As a result of actions associated with the TiVo Integration Restructuring Plan, Restructuring and asset impairment charges of $0.4 million, primarily facility-related costs, were recognized in the nine months ended September 30, 2018. The TiVo Integration Restructuring Plan was completed as of December 31, 2018.

Prior to the TiVo Acquisition, Rovi and TiVo Solutions had each initiated restructuring plans. The Legacy Rovi Restructuring Plan and the Legacy TiVo Solutions Restructuring Plan were completed as of December 31, 2018.

(9) Debt and Interest Rate Swaps

A summary of debt issued by or assumed by the Company was as follows (dollars in thousands):

				September 30, 2019		December 31, 2018	
	Stated Interest Rate	Issue Date	Maturity Date	Outstanding Principal	Carrying Amount	Outstanding Principal	Carrying Amount
2020 Convertible Notes	0.500%	March 4, 2015	March 1, 2020	$ 295,000	$ 289,284	$ 345,000	$ 326,640
2021 Convertible Notes	2.000%	September 22, 2014	October 1, 2021	48	48	48	48
Term Loan Facility B	Variable	July 2, 2014	July 2, 2021	621,912	619,899	668,500	665,449
Total Long-term debt				$ 916,960	909,231	$ 1,013,548	992,137
Less: Current portion of long-term debt					289,284		373,361
Long-term debt, less current portion					$ 619,947		$ 618,776

2020 Convertible Notes

Rovi issued $345.0 million in aggregate principal of 0.500% Convertible Senior Notes that mature March 1, 2020 (the “2020 Convertible Notes”) at par pursuant to an Indenture dated March 4, 2015 (as supplemented, the "2015 Indenture"). The 2020 Convertible Notes were sold in a private placement and bear interest at an annual rate of 0.500% payable semi-annually in arrears on March 1 and September 1 of each year, commencing September 1, 2015. In connection with the TiVo Acquisition, TiVo Corporation and Rovi entered into a supplemental indenture under which TiVo Corporation became a guarantor of the 2020 Convertible Notes and the notes became convertible into TiVo Corporation common stock.

In June 2019, the Company repurchased $50.0 million of outstanding principal of the 2020 Convertible Notes for $49.4 million. The Company allocated $48.4 million of the repurchase price to the liability component and the remaining $1.0 million to the equity component of the 2020 Convertible Notes. The Company accounted for the repurchase as a partial debt extinguishment and recognized a Loss on debt extinguishment of $0.1 million during the three months ended June 30, 2019 from writing off the unamortized debt discount and issuance costs related to the repurchase.

The 2020 Convertible Notes were convertible at an initial conversion rate of 34.5968 shares of TiVo Corporation common stock per $1,000 of principal of notes, which was equivalent to an initial conversion price of $28.9044 per share of TiVo Corporation common stock. The conversion rate and conversion price are subject to adjustment pursuant to the 2015 Indenture, including as a result of dividends paid by TiVo Corporation. As of September 30, 2019, the 2020 Convertible Notes are convertible at a conversion rate of 39.7348 shares of TiVo Corporation common stock per $1,000 principal of notes, which is equivalent to a conversion price of $25.1668 per share of TiVo Corporation common stock.

Holders may convert the 2020 Convertible Notes, prior to the close of business on the business day immediately preceding December 1, 2019, in multiples of $1,000 of principal under the following circumstances:

- during any calendar quarter commencing after the calendar quarter ending on June 30, 2015 (and only during such calendar quarter), if the last reported sale price of TiVo Corporation's common stock for at least 20 trading days (whether or not consecutive) during the period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day;
- during the five business day period after any ten consecutive trading day period in which the trading price per $1,000 of principal of 2020 Convertible Notes for each trading day was less than 98% of the product of the last reported sale price of TiVo Corporation’s common stock and the conversion rate on each such trading day; or
- on the occurrence of specified corporate events.

On or after December 1, 2019 until the close of business on the second scheduled trading day immediately preceding the maturity date, holders may convert the 2020 Convertible Notes, in multiples of $1,000 of principal, at any time. In addition, during the 35-day trading period following a Merger Event, as defined in the 2015 Indenture, holders may convert the 2020 Convertible Notes, in multiples of $1,000 of principal.

On conversion, a holder will receive the conversion value of the 2020 Convertible Notes converted based on the conversion rate multiplied by the volume-weighted average price of TiVo Corporation's common stock over a specified observation period. On conversion, Rovi will pay cash up to the aggregate principal of the 2020 Convertible Notes converted and deliver shares of TiVo Corporation's common stock in respect of the remainder, if any, of the conversion obligation in excess of the aggregate principal of the 2020 Convertible Notes being converted.

The conversion rate is subject to adjustment in certain events, including certain events that constitute a "Make-Whole Fundamental Change" (as defined in the 2015 Indenture). In addition, if Rovi undergoes a "Fundamental Change" (as defined in the 2015 Indenture) prior to March 1, 2020, holders may require Rovi to repurchase for cash all or a portion of the 2020 Convertible Notes at a repurchase price equal to 100% of the principal of the repurchased 2020 Convertible Notes, plus accrued and unpaid interest. The conversion rate is also subject to customary anti-dilution adjustments.

The 2020 Convertible Notes are not redeemable prior to maturity by Rovi and no sinking fund is provided. The 2020 Convertible Notes are unsecured and do not contain financial covenants or restrictions on the payment of dividends, the incurrence of indebtedness or the repurchase of other securities by Rovi. The 2015 Indenture includes customary terms and covenants, including certain events of default after which the 2020 Convertible Notes may be due and payable immediately.

TiVo Corporation has separately accounted for the liability and equity components of the 2020 Convertible Notes. The initial carrying amount of the liability component was calculated by estimating the value of the 2020 Convertible Notes using TiVo Corporation's estimated non-convertible borrowing rate of 4.75% at the time the instrument was issued. The carrying amount of the equity component, representing the value of the conversion option, was determined by deducting the liability component from the principal of the 2020 Convertible Notes. The difference between the principal of the 2020 Convertible Notes and the liability component is considered a debt discount which is being amortized to interest expense using the effective interest method over the expected term of the 2020 Convertible Notes. The equity component of the 2020 Convertible Notes was recorded as a component of Additional paid-in capital in the Condensed Consolidated Balance Sheets and will not be remeasured as long as it continues to meet the conditions for equity classification. Transaction costs of $7.6 million attributable to the liability component were recorded in Long-term debt, less current portion in the Condensed Consolidated Balance Sheets and are being amortized to interest expense using the effective interest method over the expected term of the 2020 Convertible Notes.

Related to the 2020 Convertible Notes, the Condensed Consolidated Balance Sheets included the following (in thousands):

	September 30, 2019	December 31, 2018
Liability component		
Principal outstanding	$ 295,000	$ 345,000
Less: Unamortized debt discount	(5,050)	(16,253)
Less: Unamortized debt issuance costs	(666)	(2,107)
Carrying amount	$ 289,284	$ 326,640
Equity component	$ 62,858	$ 63,854

Components of interest expense related to the 2020 Convertible Notes included in the Condensed Consolidated Statements of Operations were as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Stated interest	$ 369	$ 431	$ 1,225	$ 1,294
Amortization of debt discount	2,983	3,331	9,791	9,877
Amortization of debt issuance costs	387	412	1,256	1,206
Total interest expense	$ 3,739	$ 4,174	$ 12,272	$ 12,377

Purchased Call Options and Sold Warrants related to the 2020 Convertible Notes

Concurrent with the issuance of the 2020 Convertible Notes in 2015, Rovi purchased call options with respect to its common stock. The call options gave TiVo Corporation the right, but not the obligation, to purchase up to 11.9 million shares of TiVo Corporation's common stock at an exercise price of $28.9044 per share, which corresponds to the initial conversion price of the 2020 Convertible Notes, and are exercisable by TiVo Corporation on conversion of the 2020 Convertible Notes. The exercise price is subject to adjustment, including as a result of dividends paid by TiVo Corporation. As of September 30, 2019, the call options give TiVo Corporation the right, but not the obligation, to purchase up to 11.7 million shares of TiVo Corporation's common stock at an exercise price of $25.1668 per share. The call options are intended to reduce the potential dilution from conversion of the 2020 Convertible Notes. The purchased call options are separate transactions from the 2020 Convertible Notes and holders of the 2020 Convertible Notes do not have any rights with respect to the purchased call options.

Concurrent with the issuance of the 2020 Convertible Notes in 2015, Rovi sold warrants that provide the holder of the warrant the right, but not the obligation, to purchase up to 11.9 million shares of TiVo Corporation common stock at an exercise price of $40.1450 per share. The exercise price is subject to adjustment, including as a result of dividends paid by TiVo Corporation. As of September 30, 2019, 13.0 million warrants were outstanding with an exercise price of $34.9541 per share. The warrants are exercisable beginning June 1, 2020 and can be settled in cash or shares at TiVo Corporation's election. The warrants were entered into to offset the cost of the purchased call options. The warrants are separate transactions from the 2020 Convertible Notes and holders of the 2020 Convertible Notes do not have any rights with respect to the warrants.

2021 Convertible Notes

TiVo Solutions issued $230.0 million in aggregate principal of 2.0% Convertible Senior Notes that mature October 1, 2021 (the "2021 Convertible Notes") at par pursuant to an Indenture dated September 22, 2014 (as supplemented, "the 2014 Indenture"). The 2021 Convertible Notes bear interest at an annual rate of 2.0%, payable semi-annually in arrears on April 1 and October 1 of each year, commencing April 2015. On October 12, 2016, TiVo Solutions repaid $229.95 million of the par value of the 2021 Convertible Notes.

The 2021 Convertible Notes were convertible at an initial conversion rate of 56.1073 shares of TiVo Solutions common stock per $1,000 principal of notes, which was equivalent to an initial conversion price of $17.8230 per share of TiVo Solutions common stock. The conversion rate and conversion price are subject to adjustment pursuant to the 2014 Indenture, including as a result of dividends paid by TiVo Corporation. As of September 30, 2019, the 2021 Convertible Notes are convertible at a conversion rate of 24.8196 shares of TiVo Corporation common stock per $1,000 principal of notes and $154.30 per $1,000 principal of notes, which is equivalent to a conversion price of $34.0738 per share of TiVo Corporation common stock.

TiVo Solutions can settle the 2021 Convertible Notes in cash, shares of common stock, or any combination thereof pursuant to the 2014 Indenture. Subject to certain exceptions, holders may require TiVo Solutions to repurchase, for cash, all or part of their 2021 Convertible Notes upon a “Fundamental Change” (as defined in the 2014 Indenture) at a price equal to 100% of the principal amount of the 2021 Convertible Notes being repurchased plus any accrued and unpaid interest up to, but excluding, the “Fundamental Change Repurchase Date” (as defined in the 2014 Indenture). In addition, on a “Make-Whole Fundamental Change” (as defined in the 2014 Indenture) prior to the maturity date of the 2021 Convertible Notes, TiVo Solutions will, in some cases, increase the conversion rate for a holder that elects to convert its 2021 Convertible Notes in connection with such Make-Whole Fundamental Change.

Senior Secured Credit Facility

On July 2, 2014, Rovi Corporation, as parent guarantor, and two of its wholly-owned subsidiaries, Rovi Solutions Corporation and Rovi Guides, Inc., as borrowers, and certain of its other subsidiaries, as subsidiary guarantors, entered into a Credit Agreement (the “Credit Agreement”). After the completion of the TiVo Acquisition, TiVo Corporation became a guarantor under the Credit Agreement. The Credit Agreement provided for a (i) five-year $125.0 million term loan A facility (“Term Loan Facility A”), (ii) seven-year $700.0 million term loan B facility (“Term Loan Facility B” and together with Term Loan Facility A, the “Term Loan Facility”) and (iii) five-year $175.0 million revolving credit facility (including a letter of credit sub-facility) (the "Revolving Facility” and together with the Term Loan Facility, the “Senior Secured Credit Facility”). In September 2015, Rovi made a voluntary principal prepayment to extinguish Term Loan Facility A and elected to terminate the Revolving Facility.

Prior to the refinancing described below, Term Loan Facility B was amortizing in equal quarterly installments in an aggregate annual amount equal to 1% of the original principal amount thereof, with any remaining balance payable on the final maturity date of Term Loan Facility B. Loans under Term Loan Facility B bore interest, at the Company's option, at a rate equal to either the London Interbank Offered Rate ("LIBOR"), plus an applicable margin equal to 3.00% per annum (subject to a 0.75% LIBOR floor) or the prime lending rate, plus an applicable margin equal to 2.00% per annum.

On January 26, 2017, TiVo Corporation, as parent guarantor, two of its wholly-owned subsidiaries, Rovi Solutions Corporation and Rovi Guides, Inc., as borrowers, and certain of TiVo Corporation's other subsidiaries, as subsidiary guarantors, entered into Refinancing Agreement No. 1 with respect to Term Loan Facility B. The borrowing terms for Refinancing Agreement No. 1 are substantially similar to the borrowing terms of Term Loan Facility B. However, loans under Refinancing Agreement No. 1 bear interest, at the borrower's option, at a rate equal to either LIBOR, plus an applicable margin equal to 2.50% per annum (subject to a 0.75% LIBOR floor) or the prime lending rate, plus an applicable margin equal to 1.50% per annum. Refinancing Agreement No. 1 is part of the Senior Secured Credit Facility.

The Credit Agreement contains customary representations and warranties and customary affirmative and negative covenants applicable to the Company and its subsidiaries, including, among other things, restrictions on indebtedness, liens, investments, mergers, dispositions, prepayment of other indebtedness, and dividends and other distributions. The Credit Agreement is secured by substantially all of the Company's assets. Annually, the Company may be required to make an additional principal payment on Refinancing Agreement No. 1, which is calculated as a percentage of the prior year's "Excess Cash Flow" as defined in the Credit Agreement. In February 2019, the Company made an Excess Cash Flow payment of $46.6 million, which eliminated the remaining quarterly principal payments. The outstanding principal balance of Term Loan Facility B is due in July 2021.

The Company accounted for the Excess Cash Flow payment in February 2019 as a partial debt extinguishment. During the three months ended March 31, 2019 the Company recognized a Loss on debt extinguishment of $0.2 million from writing off the unamortized debt discount and issuance costs related to the Excess Cash Flow payment.

Expected Principal Payments

As of September 30, 2019, aggregate expected principal payments on long-term debt, including the current portion of long-term debt, were as follows (in thousands):

2019 (a)	$	295,000
2020		—
2021		621,960
Total	$	916,960

(a) While the 2020 Convertible Notes is scheduled to mature on March 1, 2020, future principal payments are presented based on the date the 2020 Convertible Notes can be freely converted by holders, which is December 1, 2019. However, the 2020 Convertible Notes may be converted by holders prior to December 1, 2019 in certain circumstances.

Interest Rate Swaps

The Company issues long-term debt denominated in U.S. dollars based on market conditions at the time of financing and may enter into interest rate swaps to achieve a primarily fixed interest rate. Alternatively, the Company may choose not to enter into an interest rate swap or may terminate a previously executed interest rate swap if it believes a larger proportion of floating-rate debt would be beneficial. The Company has not designated any of its interest rate swaps as hedges for accounting purposes. The Company records interest rate swaps in the Condensed Consolidated Balance Sheets at fair value with changes in fair value recorded as (Loss) gain on interest rate swaps in the Condensed Consolidated Statements of Operations. Amounts are presented in the Condensed Consolidated Balance Sheets after considering the right of offset based on its master netting agreements. During the three months ended September 30, 2019 and 2018, the Company recorded a $0.4 million loss and a $1.0 million gain, respectively, from adjusting its interest rate swaps to fair value. During the nine months ended September 30, 2019 and 2018, the Company recorded a $5.5 million loss and a $7.2 million gain, respectively, from adjusting its interest rate swaps to fair value.

Details of the Company's interest rate swaps as of September 30, 2019 and December 31, 2018 were as follows (dollars in thousands):

Contract Inception	Contract Effective Date	Contract Maturity	Notional September 30, 2019	Notional December 31, 2018	Interest Rate Paid	Interest Rate Received
Senior Secured Credit Facility						
June 2013	January 2016	March 2019	$ —	$ 250,000	2.23%	One-month USD-LIBOR
September 2014	January 2016	July 2021	$ 125,000	$ 125,000	2.66%	One-month USD-LIBOR
September 2014	March 2017	July 2021	$ 200,000	$ 200,000	2.93%	One-month USD-LIBOR

(10) Leases

Adoption of New Lease Accounting Standard

The Company adopted the provisions of the new lease accounting standard described in Note 1 using the modified retrospective transition approach on January 1, 2019. As such, the new lease accounting standard was applied to contracts in effect as of December 31, 2018. Results for periods beginning after December 31, 2018 are presented in accordance with the new lease accounting standard, while prior period amounts were not restated and continue to be reported in accordance with the Company's previous lease accounting policies. On adoption, the Company recognized a $66.7 million Right-of-use asset and an $81.9 million Lease liability.

Practical Expedients and Exemptions

On adoption, the Company elected to apply the package of practical expedients permitted under the transition provisions of the new lease accounting standard, which among other things, allowed the Company to carryforward the historical lease classification. In addition, the Company elected to apply a practical expedient to combine the lease components and non-lease components into a single lease component. The Company also elected to apply a practical expedient to not measure or recognize right-of-use assets or lease liabilities for leases with a lease term of 12 months or less.

Lease Details

The Company has operating leases for corporate offices, data centers and certain equipment. As of September 30, 2019, the Company's leases have remaining lease terms of 3 months to 10 years and the Company has an option to terminate certain leases within the next 7 years. Additionally, certain leases include options to extend the lease term for up to 10 years. The Company's lease agreements do not contain any material residual value guarantees or material restrictive covenants.

The Company subleases certain real estate to third parties. The sublease portfolio consists of operating leases for previously exited office space. Certain subleases include variable payments for operating costs. The subleases are generally co-terminus with the head lease, or shorter. Subleases do not include any residual value guarantees or restrictions or covenants imposed by the leases.

The components of operating lease costs were as follows (in thousands):

Classification	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2019
Fixed lease cost	$ 4,372	$ 13,387
Variable lease cost	1,282	3,880
Short-term lease cost	47	379
Less: Sublease income	(2,382)	(6,957)
Total operating lease cost	$ 3,319	$ 10,689

Supplemental cash flow information related to leases was as follows (in thousands):

	Nine Months Ended September 30, 2019
Operating cash flows:	
Cash paid for amounts included in the measurement of operating Lease liabilities	$ 14,511
Non-cash activity:	
Right-of-use assets obtained in exchange for operating Lease liabilities	$ 7,574
Other adjustments to Right-of-use assets	$ (1,626)

Supplemental balance sheet information related to operating leases was as follows (in thousands, except weighted average lease term and discount rate):

	September 30, 2019
Right-of-use assets	$ 63,064
Lease liabilities - current	$ 13,562
Lease liabilities - non current	65,650
Total Lease liabilities	$ 79,212
Weighted average remaining lease term	6.0 years
Weighted average discount rate	6.6%

Expected Lease Payments

As of September 30, 2019, aggregate expected lease payments were as follows (in thousands):

	Operating Lease Liabilities	Sublease Income	Net Operating Lease Payments
Remainder of 2019	$ 3,862	$ (1,746)	$ 2,116
2020	19,024	(6,873)	12,151
2021	17,047	(6,808)	10,239
2022	13,970	(6,269)	7,701
2023	11,977	(6,081)	5,896
Thereafter	31,651	(13,470)	18,181
Total lease payments	97,531	(41,247)	56,284
Less: imputed interest	(18,319)	—	(18,319)
Total	$ 79,212	$ (41,247)	$ 37,965

(11) Contingencies

Indemnifications

In the normal course of business, the Company provides indemnifications of varying scopes and amounts to certain of its licensees against claims made by third parties arising out of the use and / or incorporation of the Company's products, intellectual property, services and / or technologies into the licensees' products and services. TiVo Solutions has also indemnified certain customers and business partners for, among other things, the licensing of its products, the sale of its digital video recorders ("DVRs"), and the provision of engineering and consulting services. The Company’s obligation under its indemnification agreements with customer and business partners would arise in the event a third party filed a claim against one of the parties that was covered by the Company’s indemnification. Pursuant to these agreements, the Company may indemnify the other party for certain losses suffered or incurred by the indemnified party in connection with various types of claims, which may include, without limitation, intellectual property infringement, advertising and consumer disclosure laws, certain tax liabilities, negligence and intentional acts in the performance of services and violations of laws.

In some cases, the Company may receive tenders of defense and indemnity arising from products, intellectual property services and / or technologies that are no longer provided by the Company due to having divested certain assets, but which were previously licensed or provided by the Company.

The term of the Company's indemnification obligations is generally perpetual. The Company's indemnification obligations are typically limited to the cumulative amount paid to the Company by the licensee under the license agreement; however, some license agreements, including those with the Company's largest multiple system operator and digital broadcast satellite providers, have larger limits or do not specify a limit on amounts that may be payable under the indemnity arrangements.

The Company cannot reasonably estimate the possible range of losses that may be incurred pursuant to its indemnification obligations, if any. Variables affecting any such assessment include, but are not limited to: the nature of the claim asserted; the relative merits of the claim; the financial ability of the party suing the indemnified party to engage in protracted litigation; the number of parties seeking indemnification; the nature and amount of damages claimed by the party suing the indemnified party; and the willingness of such party to engage in settlement negotiations. Due to the nature of the Company's potential indemnity liability, the Condensed Consolidated Financial Statements could be materially adversely affected in a particular period by one or more of these indemnities.

Under certain circumstances, TiVo Solutions may seek to recover some or all amounts paid to an indemnified party from its insurers. TiVo Solutions does not have any assets held either as collateral or by third parties that, on the occurrence of an event requiring it to indemnify a customer, could be obtained and liquidated to recover all or a portion of the amounts paid pursuant to its indemnification obligations.

Legal Proceedings

The Company may be involved in various lawsuits, claims and proceedings, including intellectual property, commercial, securities and employment matters that arise in the normal course of business. The Company accrues a liability when management believes information available prior to the issuance of the financial statements indicates it is probable a loss has been incurred as of the date of the financial statements and the amount of loss can be reasonably estimated. The Company adjusts its accruals to reflect the impact of negotiations, settlements, rulings, advice of legal counsel and other information and events pertaining to a particular case. Legal costs are expensed as incurred.

The Company believes it has recorded adequate provisions for any such lawsuits, claims and proceedings and, as of September 30, 2019, it was not reasonably possible that a material loss had been incurred in excess of the amounts recognized in the Condensed Consolidated Financial Statements. Based on its experience, the Company believes that damage amounts claimed in these matters are not meaningful indicators of potential liability. Some of the matters pending against the Company involve potential compensatory, punitive or treble damage claims or sanctions, that, if granted, could require the Company to pay damages or make other expenditures in amounts that could have a material adverse effect on its Condensed Consolidated Financial Statements. Given the inherent uncertainties of litigation, the ultimate outcome of the ongoing matters described herein cannot be predicted with certainty. While litigation is inherently unpredictable, the Company believes it has valid defenses with respect to the legal matters pending against it. Nevertheless, the Condensed Consolidated Financial Statements could be materially adversely affected in a particular period by the resolution of one or more of these contingencies.

(12) Stockholders' Equity

Earnings (Loss) Per Share

Basic earnings per share ("EPS") is computed using the weighted average number of common shares outstanding during the period. Diluted EPS is computed using the weighted average number of common shares and dilutive common share equivalents outstanding during the period, except for periods of a loss from continuing operations. In periods of a loss from continuing operations, no common share equivalents are included in Diluted EPS because their effect would be anti-dilutive.

The number of shares used to calculate Basic and Diluted EPS were as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Weighted average shares used in computing basic per share amounts	126,081	123,459	125,160	122,756
Dilutive effect of equity-based compensation awards	—	—	—	—
Weighted average shares used in computing diluted per share amounts	126,081	123,459	125,160	122,756

Weighted average potential shares excluded from the calculation of Diluted EPS as their effect would have been anti-dilutive were as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Restricted awards	6,173	5,401	5,272	4,153
Stock options	596	1,907	885	2,238
2020 Convertible Notes (a)	11,722	12,918	12,881	12,918
2021 Convertible Notes (a)	1	1	1	1
Warrants related to 2020 Convertible Notes (a)	12,999	12,525	12,911	12,424
Weighted average potential shares excluded from the calculation of Diluted EPS	31,491	32,752	31,950	31,734

(a) See Note 9 for additional details.

For the three months ended September 30, 2019 and 2018, 1.2 million and 0.6 million weighted average performance-based restricted awards, respectively, were excluded from the calculation of Diluted EPS as the performance metric had yet to be achieved. For the nine months ended September 30, 2019 and 2018, 0.7 million and 0.9 million weighted average performance-based restricted awards, respectively, were excluded from the calculation of Diluted EPS as the performance metric had yet to be achieved.

Effect of the 2020 Convertible Notes and related transactions on Diluted EPS

In periods when the Company reports income from continuing operations, the dilutive effect of additional shares of common stock that may be issued on conversion of the 2020 Convertible Notes are included in the calculation of Diluted EPS if the price of the Company’s common stock exceeds the conversion price. The 2020 Convertible Notes have no impact on Diluted EPS until the price of the Company's common stock exceeds the conversion price of $25.1668 per share because the principal of the 2020 Convertible Notes is required to be settled in cash. Based on the closing price of the Company's common stock of $7.62 per share on September 30, 2019, the if-converted value of the 2020 Convertible Notes was less than the outstanding principal.

The 2020 Convertible Notes would be dilutive if the Company’s common stock closed at or above $25.1668 per share. However, on conversion, no economic dilution is expected from the 2020 Convertible Notes as the exercise of call options purchased by the Company with respect to its common stock described in Note 9 is expected to eliminate any potential dilution from the 2020 Convertible Notes that would have otherwise occurred. The call options are always excluded from the calculation of Diluted EPS as they are anti-dilutive under the treasury stock method.

The warrants sold by the Company with respect to its common stock in connection with the 2020 Convertible Notes described in Note 9 have an effect on Diluted EPS when the Company’s share price exceeds the warrant’s strike price of $34.9541 per share. As the price of the Company’s common stock increases above the warrant strike price, additional dilution would occur.

Share Repurchase Program

On February 14, 2017, TiVo Corporation's Board of Directors approved an increase to the share repurchase program authorization to $150.0 million. The February 2017 authorization includes amounts which were outstanding under previously authorized share repurchase programs. During the three months ended September 30, 2019 and 2018, no shares were repurchased under the share repurchase program. As of September 30, 2019, the Company had $150.0 million of share repurchase authorization remaining.

The Company issues restricted stock and restricted stock units (collectively, "restricted awards") as part of the equity-based compensation plans described in Note 13. For the majority of restricted awards, shares are withheld to satisfy required withholding taxes at the vesting date. Shares withheld to satisfy required withholding taxes in connection with the vesting of restricted awards are treated as common stock repurchases in the Condensed Consolidated Financial Statements because they reduce the number of shares that would have been issued on vesting. However, these withheld shares are not included in common stock repurchases under the Company's authorized share repurchase plan. During the three months ended September 30, 2019 and 2018, the Company withheld 0.3 million and 0.2 million shares of common stock to satisfy $2.3 million and $2.6 million of required withholding taxes, respectively. During the nine months ended September 30, 2019 and 2018, the Company withheld 0.7 million and 0.5 million shares of common stock to satisfy $5.4 million and $6.8 million of required withholding taxes, respectively.

Dividends

For the three months ended September 30, 2019 and 2018, the Company declared and paid dividends of $0.08 and $0.18 per share, respectively, for aggregate cash payments of $10.0 million and $22.3 million, respectively. For the nine months ended September 30, 2019 and 2018, the Company declared and paid dividends of $0.34 and $0.54 per share, respectively, for aggregate cash payments of $42.5 million and $66.7 million, respectively.

In connection with the Separation, the Product and Intellectual Property Licensing businesses will evaluate the payment of dividends to shareholders in the future, if any. The capacity to pay dividends in the future depends on many factors, including their financial condition, results of operations, capital requirements, capital structure, industry practice and other business conditions that their respective Boards of Directors consider relevant. In addition, the agreements governing the Company's debt, or new debt that may be incurred in the future, may limit or prohibit the payment of dividends.

Section 382 Transfer Restrictions

On September 7, 2016, upon the effective time of the TiVo Acquisition, the Company’s certificate of incorporation was amended and restated to include certain transfer restrictions intended to preserve tax benefits related to the net operating loss carryforwards (“NOLs”) of the Company pursuant to Section 382 of Internal Revenue Code of 1986, as amended (the “Code”), that apply to transfers made by 5% stockholders, transferees related to a 5% stockholder, transferees acting in coordination with a 5% stockholder, or transfers that would result in a stockholder becoming a 5% stockholder. If the Company experiences an “ownership change,” as defined in Section 382 of the Code, its ability to fully utilize the NOLs on an annual basis will be substantially limited, and the timing of the usage of the NOLs could be substantially delayed, which could therefore significantly impair the value of those benefits. These transfer restrictions are intended to act as a deterrent to any person (an “Acquiring Person”) acquiring (together with all affiliates and associates of such person) beneficial ownership of 5% or more of the Company's outstanding common stock within the meaning of Section 382 of the Code, without the approval of the Company's Board of Directors. Such transfer restrictions will expire on the earlier of (i) the repeal of Section 382 or any successor statute if the Company’s Board of Directors determines that such restrictions are no longer necessary or desirable for the preservation of certain tax benefits, (ii) the beginning of a taxable year to which the Company’s Board of Directors determines that no tax benefits may be carried forward or (iii) the end of the day on September 7, 2019, three years from the effective time of the TiVo Acquisition when the Company’s certificate of incorporation was amended and restated to include certain transfer restrictions. The Company conducted a stockholder advisory vote with respect to the maintenance of such transfer restrictions in its certificate of incorporation at its 2017 Annual Meeting of Stockholders and the stockholders approved of such transfer restrictions. By operation of the amended and restated certificate of incorporation, the transfer restrictions expired on September 7, 2019 and a stockholder can become a 5% or greater stockholder without the approval of the Company’s Board of Directors.

(13) Equity-based Compensation

Restricted Awards and Stock Options

The Company grants equity-based compensation awards from the Rovi 2008 Equity Incentive Plan (the "Rovi 2008 Plan"). The Rovi 2008 Plan permits the grant of restricted awards, stock options and similar types of equity awards to employees, officers, directors and consultants of the Company. Restricted stock is considered outstanding at the time of grant as holders are entitled to voting rights. Restricted awards are generally subject to a four-year graded vesting period. Stock options generally have vesting periods of four years with one quarter of the grant vesting on the first anniversary of the grant, followed by monthly vesting thereafter. Stock options generally have a contractual term of seven years. As of September 30, 2019, the Company had 36.4 million shares of common stock reserved and 10.6 million shares of common stock available for issuance under the Rovi 2008 Plan.

On September 7, 2016, the Company assumed the TiVo Inc. Amended and Restated 2008 Equity Incentive Award Plan (the "TiVo 2008 Plan"). The Company amended and restated the TiVo 2008 Plan effective as of the closing of the TiVo Acquisition to be the TiVo Corporation Titan Equity Incentive Award Plan for purposes of awards granted following the TiVo Acquisition Date. Restricted stock is considered outstanding at the time of grant as holders are entitled to voting rights. Restricted awards assumed from the TiVo 2008 Plan are generally subject to a three-year vesting period, with semiannual vesting. Restricted awards issued by the Company from the TiVo 2008 Plan are generally subject to a four-year graded vesting period. Stock options assumed from the TiVo 2008 Plan generally have a four-year vesting period with one quarter of the grant vesting on the first anniversary of the grant followed by monthly vesting thereafter. Stock options assumed from the TiVo 2008 Plan generally have a contractual term of seven years. As of September 30, 2019, there were 3.9 million shares of common stock reserved for future issuance as outstanding awards vest under the TiVo 2008 Plan. The TiVo 2008 Plan expired in August 2018, and no further shares of common stock are available for future grant.

The Company also grants performance-based restricted stock units to certain of its senior officers for three-year performance periods. Vesting in the performance-based restricted stock units is subject to a market condition, as well as a service condition. Depending on the level of achievement, the maximum number of shares that could be issued on vesting generally could be up to 200% of the target number of performance-based restricted stock units granted. For awards subject to a market vesting condition, the fair value per award is fixed at the grant date and the amount of compensation expense is not adjusted during the performance period regardless of changes in the level of achievement of the market condition.

In June 2019, the Company granted 0.6 million performance-based restricted stock units to certain of its senior officers with vesting conditioned on completion of a change-in-control event as defined in the grant agreement, as well as a service condition. For these awards, the fair value per award is estimated as the price of the Company's common stock at the close of trading on the date of grant, less the present value of dividends expected to be paid during the vesting period. However, no compensation expense is recognized for these awards until the change-in-control event occurs, at which time the grant date fair value of $3.3 million, adjusted for any forfeitures, would be recognized as compensation expense.

Employee Stock Purchase Plan

The Company's 2008 Employee Stock Purchase Plan ("ESPP") allows eligible employees to purchase shares of the Company's common stock at a discount through payroll deductions. The ESPP consists of up to four consecutive six-month purchase periods within a twenty-four-month offering period. Employees purchase shares each purchase period at the lower of 85% of the market value of the Company's common stock at either the beginning of the offering period or the end of the purchase period. As of September 30, 2019, the Company had 3.3 million shares of common stock reserved and 3.3 million shares available for issuance under the ESPP.

Valuation Techniques and Assumptions

The Company's restricted awards are generally not eligible for dividend protection. The fair value of restricted awards subject to service conditions is estimated as the price of the Company's common stock at the close of trading on the date of grant, less the present value of dividends expected to be paid during the vesting period. Where a restricted stock award requires a post-vesting restriction on sale, the grant date fair value is adjusted to reflect a liquidity discount based on the expected post-vesting holding period.

The Company uses the Black-Scholes-Merton option-pricing formula to estimate the fair value of ESPP shares. The Black-Scholes-Merton option-pricing formula uses complex and subjective inputs, such as the expected volatility of the Company's common stock over the expected term of the grant and projected employee exercise behavior. Expected volatility is estimated using a combination of historical volatility and implied volatility derived from publicly-traded options on the Company's common stock. The expected term is estimated by calculating the period the award is expected to be outstanding based on historical experience and the terms of the grant. The risk-free interest rate is estimated based on the yield of U.S. Treasury zero-coupon bonds with remaining terms similar to the expected term at the grant date. The Company assumes a constant dividend yield commensurate with the dividend yield on the grant date.

Weighted-average assumptions used to estimate the fair value of equity-based compensation awards granted during the period were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Restricted stock units subject to market conditions:				
Expected volatility	40.7%	39.2%	40.7%	39.2%
Expected term	2.5 years	2.5 years	2.5 years	2.5 years
Risk-free interest rate	1.8%	2.6%	1.8%	2.6%
Expected dividend yield	4.4%	5.5%	4.4%	5.5%
ESPP shares:				
Expected volatility	46.7%	44.3%	49.2%	43.3%
Expected term	1.3 years	1.3 years	1.3 years	1.3 years
Risk-free interest rate	1.8%	2.5%	2.1%	2.2%
Expected dividend yield	3.9%	6.1%	5.1%	5.6%

The number of awards expected to vest during the requisite service period is estimated at the time of grant using historical data and equity-based compensation is only recognized for awards for which the requisite service is expected to be rendered. Forfeiture estimates are revised during the requisite service period and the effect of changes in the number of awards expected to vest during the requisite service period is recognized on a cumulative catch-up basis in the period estimates are revised.

The weighted-average grant date fair value of equity-based awards (per award) and pre-tax equity-based compensation expense (in thousands) was as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Weighted average grant date fair value				
Restricted awards	$ 6.39	$ 11.55	$ 6.72	$ 11.72
ESPP shares	$ 3.80	$ 3.67	$ 3.62	$ 3.99
Equity-based compensation				
Pre-tax equity-based compensation, excluding amounts included in restructuring expense	$ 5,148	$ 9,471	$ 22,459	$ 28,226
Pre-tax equity-based compensation, included in restructuring expense	$ —	$ —	$ —	$ 2,575

As of September 30, 2019, there was $60.7 million of unrecognized compensation cost, net of estimated forfeitures, related to unvested equity-based awards which is expected to be recognized over a remaining weighted average period of 2.8 years. The unrecognized compensation cost, net of estimated forfeitures, excludes $3.3 million of unrecognized compensation cost related to performance-based restricted stock units with vesting conditioned on completion of a change-in-control event.

Equity-Based Compensation Award Activity

Activity related to the Company's restricted awards for the nine months ended September 30, 2019 was as follows:

	Restricted Awards (In Thousands)	Weighted-Average Grant Date Fair Value
Outstanding as of beginning of period	5,350	$ 14.26
Granted	4,487	$ 6.72
Vested	(1,815)	$ 14.45
Forfeited	(891)	$ 13.54
Outstanding as of end of period	7,131	$ 9.56

As of September 30, 2019, unvested restricted awards include 1.2 million performance-based restricted stock units.

The aggregate fair value of restricted awards vested during the three months ended September 30, 2019 and 2018 was $7.0 million and $8.6 million, respectively. The aggregate fair value of restricted awards vested during the nine months ended September 30, 2019 and 2018 was $14.8 million and $21.5 million, respectively.

(14) Income Taxes

Due to the fact that the Company has significant net operating loss carryforwards and has recorded a valuation allowance against a significant portion of its deferred tax assets, foreign withholding taxes are the primary driver of Income tax expense.

Components of Income tax expense were as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Foreign withholding tax	$ 3,518	$ 3,566	$ 14,737	$ 10,635
Federal income tax	1,466	—	3,878	—
Foreign income tax	809	18	1,482	578
State income tax	(228)	42	(501)	221
Change in indefinite reinvestment assertion	—	—	—	1,221
Change in deferred tax liabilities	—	213	—	(277)
Change in unrecognized tax benefits	395	62	426	59
Goodwill impairment	(4,041)	—	(4,041)	—
Transition Tax	—	868	—	868
Income tax expense	$ 1,919	$ 4,769	$ 15,981	$ 13,305

The Company believes it has provided adequate reserves for all tax deficiencies or reductions in tax benefits that could result from U.S. federal, state and foreign tax audits. The Company regularly assesses the potential outcomes of these audits in order to determine the appropriateness of its tax positions. Adjustments to accruals for unrecognized tax benefits are made to reflect the impact of negotiations, settlements, rulings, advice of legal counsel and other information and events pertaining to a particular income tax audit. However, income tax audits are inherently unpredictable and there can be no assurance the Company will accurately predict the outcome of these audits. The amounts ultimately paid on resolution of an audit could be materially different from the amounts previously recognized, and therefore the resolution of one or more of these uncertainties in any particular period could have a material adverse impact on the Condensed Consolidated Financial Statements.

(15) Segment Information

Reportable segments are identified based on the Company's organizational structure and information reviewed by the Company’s chief operating decision maker ("CODM") to evaluate performance and allocate resources. The Company's operations are organized into two reportable segments for financial reporting purposes: Product and Intellectual Property Licensing.

The Product segment consists primarily of licensing Company-developed user experience products and services to multi-channel video service providers and consumer electronics ("CE") manufacturers, licensing the TiVo service and selling TiVo-enabled devices, licensing metadata and advanced search and recommendation and viewership data, as well as sponsored discovery and in-guide advertising. We group our Product segment into three verticals based on the products delivered to our customer: Platform Solutions; Software and Services; and Other. Platform Solutions includes licensing Company-developed UX products, the TiVo service and selling TiVo-enabled devices. Software and Services includes licensing our metadata and advanced media and advertising solutions, including viewership data, sponsored discovery and in-guide advertising. Other includes legacy Analog Content Protection ("ACP"), VCR Plus+ and media recognition products.

The Intellectual Property Licensing segment consists primarily of licensing our patent portfolio to U.S. and international pay television ("TV") providers (directly and through their suppliers), mobile device manufacturers, CE manufacturers and over-the-top ("OTT") video providers. Our broad portfolio of licensable technology patents covers many aspects of content discovery, DVR, video-on-demand, OTT experiences, multi-screen functionality and personalization, as well as interactive applications and advertising. We group our Intellectual Property Licensing segment into three verticals based primarily on the business of our customer: US Pay TV Providers; CE Manufacturers; and New Media, International Pay TV Providers and Other. US Pay TV Providers includes direct and indirect licensing of traditional US Pay TV Providers regardless of the particular distribution technology (e.g., cable, satellite or the internet). CE Manufacturers includes the licensing of our patents to traditional CE manufacturers. New Media, International Pay TV Providers and Other includes licensing to international pay TV providers, virtual service providers, mobile device manufacturers and content and new media companies.

Segment results are derived from the Company's internal management reporting system. The accounting policies used to derive segment results are substantially the same as those used by the consolidated company. Intersegment revenues and expenses have been eliminated from segment financial information as transactions between reportable segments are excluded from the measure of segment profitability reviewed by the CODM. In addition, certain costs are not allocated to the segments as they are considered corporate costs. Corporate costs primarily include general and administrative costs such as corporate management, finance, legal and human resources. The CODM uses an Adjusted EBITDA (as defined below) measure to evaluate the performance of, and allocate resources to, the segments. Segment balance sheets are not used by the CODM to allocate resources or assess performance.

Segment results were as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Product				
Platform Solutions	$ 62,083	$ 73,147	$ 198,851	$ 241,295
Software and Services	19,771	19,851	58,915	57,949
Other	934	1,614	1,531	5,007
Revenues, net	82,788	94,612	259,297	304,251
Adjusted Operating Expenses (1)	69,386	79,347	229,944	250,280
Adjusted EBITDA (2)	13,402	15,265	29,353	53,971
Intellectual Property Licensing				
US Pay TV Providers	41,896	44,474	126,009	143,606
CE Manufacturers	15,580	8,859	31,928	26,754
New Media, International Pay TV Providers and Other	18,260	16,764	75,697	52,795
Revenues, net	75,736	70,097	233,634	223,155
Adjusted Operating Expenses (1)	25,659	23,461	68,825	73,790
Adjusted EBITDA (2)	50,077	46,636	164,809	149,365
Corporate				
Adjusted Operating Expenses (1)	13,427	14,825	44,048	45,385
Adjusted EBITDA (2)	(13,427)	(14,825)	(44,048)	(45,385)
Consolidated				
Total Revenues, net	158,524	164,709	492,931	527,406
Adjusted Operating Expenses (1)	108,472	117,633	342,817	369,455
Adjusted EBITDA (2)	50,052	47,076	150,114	157,951
Depreciation	5,314	5,338	16,005	16,252
Amortization of intangible assets	28,212	37,242	84,574	119,463
Restructuring and asset impairment charges	1,995	2,921	6,484	8,568
Goodwill impairment	137,453	—	137,453	—
Equity-based compensation	5,148	9,471	22,459	28,226
Separation and transformation costs	9,458	—	13,905	—
Transition and integration costs	189	(148)	1,342	9,303
Earnout amortization	—	—	—	1,494
CEO transition cash costs	—	—	1,000	(975)
Remeasurement of contingent consideration	—	(67)	—	1,104
Operating loss	(137,717)	(7,681)	(133,108)	(25,484)
Interest expense	(11,844)	(12,436)	(36,480)	(36,241)
Interest income and other, net	860	861	4,150	2,971
(Loss) gain on interest rate swaps	(390)	1,033	(5,475)	7,185
Loss on debt extinguishment	—	—	(300)	—
Loss from continuing operations before income taxes	$ (149,091)	$ (18,223)	$ (171,213)	$ (51,569)

(1) Adjusted Operating Expenses are defined as operating expenses excluding Depreciation, Amortization of intangible assets, Restructuring and asset impairment charges, Goodwill impairment, Equity-based compensation, Separation and transformation costs, Transition and integration costs, retention earn-outs payable to former shareholders of acquired businesses, CEO transition cash costs and Remeasurement of contingent consideration.

(2) Adjusted EBITDA is defined as operating loss excluding Depreciation, Amortization of intangible assets, Restructuring and asset impairment charges, Goodwill impairment, Equity-based compensation, Separation and

transformation costs, Transition and integration costs, retention earn-outs payable to former shareholders of acquired businesses, CEO transition cash costs and Remeasurement of contingent consideration.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-Looking Statements

This Quarterly Report on Form 10-Q for TiVo Corporation (the "Company," "we" or "us") contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, Section 21E of the Securities and Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995, including the discussion contained in Item 2., "Management's Discussion and Analysis of Financial Condition and Results of Operations." We have based these forward-looking statements on our current expectations and projections about future events or future financial performance, which include implementing our business strategy, successfully integrating Rovi Corporation ("Rovi") and TiVo Inc. (renamed TiVo Solutions Inc. ("TiVo Solutions")) following our acquisition of TiVo Solutions on September 7, 2016 (the "TiVo Acquisition"), realizing planned synergies and cost-savings associated with the TiVo Acquisition, developing and introducing new technologies, obtaining, maintaining and expanding market acceptance of the technologies we offer, successfully renewing intellectual property licenses with the major North American pay TV service providers, competition in our markets and the impact of the separation of our Product and IP Licensing businesses into two independent companies.

In some cases, these forward-looking statements can be identified by terminology such as "may," "will," "should," "expect," "plan," "anticipate," "believe," "estimate," "future," "predict," "potential," "intend," or "continue," and similar expressions. These statements are based on the beliefs and assumptions of our management and on information currently available to our management. Our actual results, performance and achievements may differ materially from the results, performance and achievements expressed or implied in such forward-looking statements. For a discussion of some of the factors that might cause such a difference, see the "Risk Factors" contained in Part II, Item 1A. of this Quarterly Report on Form 10-Q. Except as required by law, we specifically disclaim any obligation to update such forward-looking statements.

The following commentary should be read in conjunction with the Consolidated Financial Statements and related notes thereto contained in our Annual Report on Form 10-K for the year ended December 31, 2018 and the Condensed Consolidated Financial Statements and related notes thereto contained in Part I, Item 1. of this Quarterly Report on Form 10-Q, which are incorporated by reference herein.

Executive Overview of Results

TiVo Corporation provides an intellectual property portfolio and products to help consumers enjoy watching their favorite entertainment. Our technologies enable an integrated entertainment experience, making entertainment content easy to find, watch and enjoy. Our product business serves up the best movies, video and shows from across live TV, on demand, streaming services and countless apps, helping people discover what to watch as they wish. For content creators and advertisers, our machine learning for personalized content recommendations, conversational voice solution and targeted advertising methodologies help deliver a passionate group of watchers to increase viewership and engagement across online video, TV and other entertainment viewing platforms. Our intellectual property business provides a global portfolio of thousands of patents that underlie this entertainment platform as well as across the broader video landscape. Explore the next generation of entertainment at tivo.com, forward.tivo.com or follow us on Twitter @tivo or @tivoforbusiness.

Our operations are organized into two reportable segments for financial reporting purposes: Product and Intellectual Property Licensing. The Product segment consists primarily of licensing Company-developed user experience ("UX") products and services to multi-channel video service providers and consumer electronics ("CE") manufacturers, licensing the TiVo service and selling TiVo-enabled devices, licensing metadata and advanced search and recommendation and viewership data, as well as sponsored discovery and in-guide advertising. The Intellectual Property Licensing segment consists primarily of licensing our patent portfolio to U.S. and international pay television ("TV") providers (directly and through their suppliers), mobile device manufacturers, CE manufacturers and over-the-top ("OTT") video providers. Our broad portfolio of licensable technology patents covers many aspects of content discovery, digital video recorders, video-on-demand, OTT experiences, multi-screen functionality and personalization, as well as interactive applications and advertising.

Total Revenues, net for the three months ended September 30, 2019 decreased by 4% compared to the prior year primarily due to an $11.8 million decrease in Product revenues. The decrease in Product revenues was attributable to a $4.1 million decrease in consumer revenue, which was driven by subscriber erosion, an increase in the amortization period for product lifetime subscriptions and lower hardware sales. Also contributing to the decrease was a $3.2 million decline in revenue from nonrecurring engineering services to an international cable operator, a $1.8 million revenue reduction related to adjusted subscriber reporting from Latin American operators and the year-ago quarter benefiting from a $3.3 million Passport contract renewal that included guaranteed minimums. These revenue declines were partially offset by a $3.2 million increase in revenue from an international cable operator exceeding its cumulative contractual minimums in 2019 and new agreements executed with Vodafone and Liberty Latin America during the quarter. Intellectual Property Licensing revenues increased $5.6 million due to a $4.1 million increase in catch-up payments intended to make us whole for the pre-license period of use. This was partially offset by a $2.8 million decrease in revenue from TiVo Solutions "Time Warp" agreements that were entered into with AT&T Inc. ("AT&T"), DirecTV, EchoStar Corporation ("EchoStar") and Verizon Communications, Inc. ("Verizon") prior to the TiVo Acquisition Date as a result of contract expirations.

For the three months ended September 30, 2019, we reduced Research and development and Selling, general and administrative compensation costs by $10.9 million, primarily as a result of benefits from our transformation and restructuring activities. We also realized a $9.0 million decrease in Amortization of intangible assets due to certain TiVo Solutions intangible assets reaching the end of their economic life. However, our Loss from continuing operations, net of tax was $151.0 million, or $1.20 per diluted share, compared to $23.0 million, or $0.19 per diluted share, in the prior year. The larger loss in the three months ended September 30, 2019 was primarily the result of a $137.5 million Goodwill impairment charge, $9.5 million of Separation and transformation costs incurred in the three months ended September 30, 2019 and the $6.2 million decrease in revenue described above.

Our intellectual property license with Comcast Corporation ("Comcast") expired on March 31, 2016. Our Product relationship with Comcast, primarily a metadata license, expired on September 30, 2017. The expiration of our intellectual property license with Comcast, as well as litigation initiated against Comcast, reduced revenues and increased litigation costs. While we anticipate Comcast will eventually execute a new intellectual property license, the length of time that Comcast is out of license prior to executing a new license is uncertain.

On May 9, 2019, we announced that our Board of Directors unanimously approved a plan to separate the Product and Intellectual Property Licensing businesses into separately traded public companies (the “Separation”). The Separation is expected to be completed through a dividend of newly issued shares of the common stock of a Company subsidiary that will hold the Product business (“ProductCo”). We intend that the Separation will be completed in a manner generally intended to qualify as tax-deferred to TiVo Corporation’s stockholders for U.S. federal income tax purposes. The Separation, targeted for completion by April 2020, is subject to certain conditions, including, among others, obtaining final approval from TiVo Corporation's Board of Directors, receipt of a favorable opinion and/or rulings with respect to the tax-free nature of the transaction for U.S. federal income tax purposes and the U.S. Securities and Exchange Commission declaring ProductCo's Registration Statement effective.

The process of completing the Separation and transformation has been and is expected to continue to be time-consuming and involve significant costs and expenses. During the nine months ended September 30, 2019, we incurred $13.9 million of Separation and transformation costs. The Separation and transformation costs are primarily Selling, general and administrative costs, consisting of employee-related costs, costs to establish certain stand-alone functions and information technology systems and other one-time transaction-related costs, including investment banking and consulting fees and other incremental costs directly associated with the Separation process. In addition, in connection with the May 2019 announcement of our plan to separate the Product and Intellectual Property Licensing businesses, we implemented a cost efficiency program to transform our business operations and to execute the Separation (the "2019 Transformation Plan"). As a result of the 2019 Transformation Plan, we expect to reduce headcount, move certain positions to lower cost locations, rationalize facilities and legal entities and terminate certain leases and other contracts. The 2019 Transformation Plan resulted in restructuring charges of $0.7 million during the nine months ended September 30, 2019, substantially all of which related to severance costs. We expect to spend up to an additional $35.0 million to complete the Separation and 2019 Transformation Plan.

Due to the loss of economies of scale and the need to establish stand-alone corporate functions for each company, the separation of TiVo Corporation into two independent companies is expected to result in total dis-synergies of approximately $25 million annually, primarily associated with the Intellectual Property Licensing business creating an independent patent innovation research organization and establishing stand-alone corporate functions such as finance, legal, information technology, real estate and human resources. As the Intellectual Property Licensing business involves a small portion of the customers and employees of the TiVo Corporation's business, the operational infrastructure and corporate functions will be separated from ProductCo and a new streamlined enterprise application and operational infrastructure will be established to manage the small portion of customers and employees that will remain with Intellectual Property Licensing business. As a result of the Separation and the smaller scale of ProductCo, the cost efficiency program is expected to more than offset the dis-synergies of the Separation.

Comparison of Three and Nine Months Ended September 30, 2019 and 2018

The condensed consolidated results of operations for the three and nine months ended September 30, 2019 and 2018 compared to the prior year were as follows (dollars in thousands):

	Three Months Ended September 30,			
	2019	2018	Change $	Change %
Revenues, net:				
Licensing, services and software	$ 155,918	$ 160,783	$ (4,865)	(3)%
Hardware	2,606	3,926	(1,320)	(34)%
Total Revenues, net	158,524	164,709	(6,185)	(4)%
Costs and expenses:				
Cost of licensing, services and software revenues, excluding depreciation and amortization of intangible assets	39,263	40,749	(1,486)	(4)%
Cost of hardware revenues, excluding depreciation and amortization of intangible assets	4,289	4,220	69	2 %
Research and development	34,038	42,053	(8,015)	(19)%
Selling, general and administrative	45,677	39,867	5,810	15 %
Depreciation	5,314	5,338	(24)	— %
Amortization of intangible assets	28,212	37,242	(9,030)	(24)%
Restructuring and asset impairment charges	1,995	2,921	(926)	(32)%
Goodwill impairment	137,453	—	137,453	N/a
Total costs and expenses	296,241	172,390	123,851	72 %
Operating loss	(137,717)	(7,681)	(130,036)	1,693 %
Interest expense	(11,844)	(12,436)	592	(5)%
Interest income and other, net	860	861	(1)	— %
(Loss) gain on interest rate swaps	(390)	1,033	(1,423)	(138)%
Loss from continuing operations before income taxes	(149,091)	(18,223)	(130,868)	718 %
Income tax expense	1,919	4,769	(2,850)	(60)%
Loss from continuing operations, net of tax	(151,010)	(22,992)	(128,018)	557 %
(Loss) Income from discontinued operations, net of tax	(379)	143	(522)	(365)%
Net loss	$ (151,389)	$ (22,849)	$ (128,540)	563 %

	Nine Months Ended September 30,			
	2019	2018	Change $	Change %
Revenues, net:				
Licensing, services and software	$ 486,575	$ 516,495	$ (29,920)	(6)%
Hardware	6,356	10,911	(4,555)	(42)%
Total Revenues, net	492,931	527,406	(34,475)	(7)%
Costs and expenses:				
Cost of licensing, services and software revenues, excluding depreciation and amortization of intangible assets	114,482	126,547	(12,065)	(10)%
Cost of hardware revenues, excluding depreciation and amortization of intangible assets	14,150	14,260	(110)	(1)%
Research and development	113,621	133,894	(20,273)	(15)%
Selling, general and administrative	139,270	133,906	5,364	4 %
Depreciation	16,005	16,252	(247)	(2)%
Amortization of intangible assets	84,574	119,463	(34,889)	(29)%
Restructuring and asset impairment charges	6,484	8,568	(2,084)	(24)%
Goodwill impairment	137,453	—	137,453	N/a
Total costs and expenses	626,039	552,890	73,149	13 %
Operating loss	(133,108)	(25,484)	(107,624)	422 %
Interest expense	(36,480)	(36,241)	(239)	1 %
Interest income and other, net	4,150	2,971	1,179	40 %
(Loss) gain on interest rate swaps	(5,475)	7,185	(12,660)	(176)%
Loss on debt extinguishment	(300)	—	(300)	N/a
Loss from continuing operations before income taxes	(171,213)	(51,569)	(119,644)	232 %
Income tax expense	15,981	13,305	2,676	20 %
Loss from continuing operations, net of tax	(187,194)	(64,874)	(122,320)	189 %
(Loss) Income from discontinued operations, net of tax	(379)	3,738	(4,117)	(110)%
Net loss	$ (187,573)	$ (61,136)	$ (126,437)	207 %

Total Revenues, net

For the three months ended September 30, 2019, Total Revenues, net decreased 4% compared to the prior year as Product revenues decreased $11.8 million and Intellectual Property Licensing revenues increased $5.6 million. Product generated 52% and 57% of Total Revenues, net for the three months ended September 30, 2019 and 2018, respectively.

For the nine months ended September 30, 2019, Total Revenues, net decreased 7% compared to the prior year as Product revenues decreased $45.0 million and Intellectual Property Licensing revenues increased $10.5 million. Product generated 53% and 58% of Total Revenues, net for the nine months ended September 30, 2019 and 2018, respectively.

For details on the changes in Total Revenues, net, see the discussion of our segment results below.

Cost of licensing, services and software revenues, excluding depreciation and amortization of intangible assets

Cost of licensing, services and software revenues, excluding depreciation and amortization of intangible assets, consists primarily of employee-related costs, patent prosecution, maintenance and litigation costs and an allocation of overhead and facilities costs, as well as service center and other expenses related to providing the TiVo service and our metadata offering.

For the three months ended September 30, 2019, Cost of licensing, services and software revenues, excluding depreciation and amortization of intangible assets decreased 4% due to a $1.5 million decrease in non-recurring engineering costs and a $0.8 million decrease in compensation costs, as well as benefits from our transformation and restructuring activities. These benefits were partially offset by $1.5 million of impairment charges associated with a prepaid license that is not expected to be recoverable from the net direct revenue resulting from patent license agreements executed with new customers and a $0.5

million increase in patent litigation costs, which was primarily related to the timing of costs incurred in the ongoing Comcast litigation. We expect to continue to incur material expenses related to the Comcast litigation in the future.

For the nine months ended September 30, 2019, Cost of licensing, services and software revenues, excluding depreciation and amortization of intangible assets decreased 10% primarily as a result of an $8.2 million decrease in patent litigation costs, which was primarily related to the timing of costs incurred in the ongoing Comcast litigation and benefits from our transformation and restructuring activities, including a $1.4 million decrease in non-recurring engineering costs, a $1.1 million decrease in costs to acquire data from third parties to support our metadata operations, a $1.0 million decrease in compensation costs. We expect to continue to incur material expenses related to the Comcast litigation in the future. The decrease in costs was partially offset by $2.6 million of impairment charges associated with a prepaid license that is not expected to be recoverable from the net direct revenue resulting from patent license agreements executed with new customers.

Cost of hardware revenues, excluding depreciation and amortization of intangible assets

Cost of hardware revenues, excluding depreciation and amortization of intangible assets includes all product-related costs associated with TiVo-enabled devices, including manufacturing costs, employee-related costs, warranty costs and order fulfillment costs, as well as certain licensing costs and an allocation of overhead and facilities costs. Hardware is sold by the Company primarily as a means to generate revenue from the TiVo service. As a result, generating positive gross margins from hardware sales is not the primary goal of our hardware operations.

For the three and nine months ended September 30, 2019, Cost of hardware revenues, excluding depreciation and amortization of intangible assets benefited from the planned transition of our customers to deploying the TiVo service on third-party hardware. These benefits were partially offset by a $2.4 million inventory impairment during the nine months ended September 30, 2019 due to a reduced forecast for sales of refurbished units.

Research and development

Research and development expenses are comprised primarily of employee-related costs, consulting costs and an allocation of overhead and facilities costs.

For the three months ended September 30, 2019, Research and development expenses decreased 19% compared to the prior year primarily due to a $6.5 million decrease in compensation costs and other benefits from our transformation and restructuring activities.

For the nine months ended September 30, 2019, Research and development expenses decreased 15% compared to the prior year, primarily due to a $14.1 million decrease in compensation costs and a $4.6 million decrease in consulting costs as a result of benefits from our transformation and restructuring activities, as well as a $0.9 million decrease in Transition and integration costs associated with the TiVo Acquisition.

Selling, general and administrative

Selling expenses are comprised primarily of employee-related costs, including travel costs, advertising costs and an allocation of overhead and facilities costs. General and administrative expenses are comprised primarily of employee-related costs, including travel costs, corporate accounting, consulting, legal and tax fees and an allocation of overhead and facilities costs.

Selling, general and administrative expenses increased 15% during the three months ended September 30, 2019. The increase is primarily due to $9.5 million of Separation and transformation costs incurred during the three months ended September 30, 2019, partially offset by a $4.4 million decrease in compensation costs and other benefits from our transformation and restructuring activities.

Selling, general and administrative expenses increased 4% during the nine months ended September 30, 2019 as $13.9 million of Separation and transformation costs incurred during the nine months ended September 30, 2019 were partially offset by a $7.5 million decrease in Transition and integration costs associated with the TiVo Acquisition, which was primarily due to a $4.5 million loss associated with a legacy TiVo Solutions legal matter recorded in the second quarter of 2018 and a $1.8 million decrease in compensation costs and other benefits from our transformation and restructuring activities.

Amortization of intangible assets

The decrease in Amortization of intangible assets during the three and nine months ended September 30, 2019 was primarily due to certain intangible assets acquired as part of the TiVo Acquisition reaching the end of their economic life.

Restructuring and asset impairment charges

In connection with the May 2019 announcement of our plan to separate the Product and Intellectual Property Licensing businesses, we initiated certain activities to transform our business operations in order to execute the separation (the "2019 Transformation Plan"). As a result of the 2019 Transformation Plan, we expect to reduce headcount, move certain positions to lower cost locations, rationalize facilities and legal entities and terminate certain leases and other contracts. The 2019 Transformation Plan resulted in Restructuring charges of $0.7 million during the three and nine months ended September 30, 2019, substantially all of which related to severance costs.

In February 2018, we announced our intention to explore strategic alternatives. In connection with exploring strategic alternatives, we initiated certain cost saving actions (the "Profit Improvement Plan"). As a result of the Profit Improvement Plan, we moved certain positions to lower cost locations, eliminated layers of management and rationalized facilities, which resulted in severance costs and the termination of certain leases and other contracts, generating over $40 million in annualized cost savings. As a result of actions associated with the Profit Improvement Plan, Restructuring and asset impairment charges of $1.3 million, primarily related to an asset impairment associated exiting a lease, and $2.8 million, primarily for severance-related benefits, were recognized in the three months ended September 30, 2019 and 2018, respectively. Restructuring and asset impairment charges of $5.8 million and $8.1 million, primarily for severance-related benefits, were recognized in the nine months ended September 30, 2019 and 2018, respectively, as part of the Profit Improvement Plan.

Following completion of the TiVo Acquisition, integration plans were implemented which were intended to realize operational synergies between Rovi and TiVo Solutions (the "TiVo Integration Restructuring Plan"). As part of the TiVo Integration Restructuring Plan, we eliminated duplicative positions resulting in severance costs and terminated certain leases and other contracts, generating over $110 million in annualized cost synergies. As a result of actions associated with the TiVo Integration Restructuring Plan, Restructuring and asset impairment charges of $0.4 million, primarily facility-related costs, were recognized in the nine months ended September 30, 2018.

Goodwill impairment

As a result of the quantitative interim goodwill impairment test performed as of September 30, 2019, a Goodwill impairment charge of $137.5 million was recognized, of which $79.3 million related to the Product reporting unit and $58.2 million related to the Intellectual Property Licensing reporting unit. For further details about the Goodwill impairment charge, refer to Note 7 of the Condensed Consolidated Financial Statements included in Part I, Item 1. of this Quarterly Report on Form 10-Q, which is incorporated by reference herein.

Interest expense

Interest expense decreased by $0.6 million and increased by $0.2 million during the three and nine months ended September 30, 2019 primarily due to changes in the interest rate associated with Term Loan Facility B, which bears interest, at our election, at a rate equal to either London Interbank Offered Rate ("LIBOR"), plus an applicable margin equal to 2.50% per annum (subject to a 0.75% LIBOR floor) or the prime lending rate, plus an applicable margin equal to 1.50% per annum. The Interest expense was also affected by a reduction in outstanding debt due to the $46.6 million Excess Cash Flow principal payment on Term Loan Facility B made in February 2019 and the $50.0 million of 2020 Convertible Notes repurchased in June 2019.

Interest income and other, net

The change in Interest income and other, net during the three months ended September 30, 2019 reflects $0.3 million of beneficial movements in foreign currency exchange rates and a $0.1 million increase in income from an equity method investment, which were offset by a $0.5 million decrease in gains on the sale of investments. We expect interest income to decrease due to investment sales in 2019 to fund the $46.6 million Excess Cash Flow principal payment on Term Loan Facility B made in February 2019 and the $50.0 million of 2020 Convertible Notes repurchased in June 2019.

The increase in Interest income and other, net for the nine months ended September 30, 2019 was primarily due to a $1.4 million increase in interest income due to an increase in interest rates and a $0.6 million increase in income from an equity method investment, which was partially offset by a $0.5 million decrease in gains on the sale of investments and $0.3 million of adverse movements in foreign currency exchange rates.

(Loss) gain on interest rate swaps

We have not designated any of our interest rate swaps as hedges for accounting purposes. Therefore, changes in the fair value of our interest rate swaps are not offset by changes in the fair value of the related hedged item in our Condensed Consolidated Statements of Operations (see Note 9 to the Condensed Consolidated Financial Statements included in Part I, Item 1. of this Quarterly Report on Form 10-Q, which is incorporated by reference herein). We generally utilize interest rate swaps to convert the interest rate on a portion of our loans with a floating interest rate to a fixed interest rate. Under the terms of our interest rate swaps, we receive a floating rate of interest and pay a fixed rate of interest. When there is an increase in expected future LIBOR, we generally have gains when adjusting our interest rate swaps to fair value. When there is a decrease in expected future LIBOR, we generally have losses when adjusting our interest rate swaps to fair value.

Loss on debt extinguishment

In June 2019, the Company repurchased $50.0 million of outstanding principal on its 2020 Convertible Notes. The Company accounted for the repurchase as a partial debt extinguishment and recognized a Loss on debt extinguishment of $0.1 million in the nine months ended September 30, 2019.

Annually, the Company may be required to make an additional principal payment on Term Loan Facility B, which is calculated as a percentage of the prior year's "Excess Cash Flow" as defined in the Credit Agreement. In February 2019, the Company made an Excess Cash Flow payment of $46.6 million on Term Loan Facility B. The Company accounted for the Excess Cash Flow payment as a partial debt extinguishment and recognized a Loss on debt extinguishment of $0.2 million in the nine months ended September 30, 2019.

Income tax expense

Due to our significant net operating loss carryforwards and a valuation allowance applied against a significant portion of our deferred tax assets, foreign withholding taxes are the primary driver of our Income tax expense.

We recorded Income tax expense for the three months ended September 30, 2019 of $1.9 million, which primarily consists of $3.5 million of Foreign withholding tax, $1.5 million of Federal income tax and $0.8 million of Foreign income tax, which was partially offset by a $4.0 million benefit from the Goodwill impairment charge recognized during the three months ended September 30, 2019. We recorded an Income tax expense for the three months ended September 30, 2018 of $4.8 million, which primarily consists of $3.6 million of Foreign withholding tax and a $0.9 million Transition Tax associated with the Tax Act of 2017.

We recorded Income tax expense for the nine months ended September 30, 2019 of $16.0 million, which primarily consists of $14.7 million of Foreign withholding tax, $3.9 million of Federal income tax and $1.5 million of Foreign income tax, which was partially offset by a $4.0 million a benefit from the Goodwill impairment charge recognized during the nine months ended September 30, 2019. We recorded an Income tax expense for the nine months ended September 30, 2018 of $13.3 million, which primarily consists of $10.6 million of Foreign withholding tax, $1.2 million of withholding taxes from a change in our assertion regarding the indefinite reinvestment of certain foreign earnings, a $0.9 million Transition Tax associated with the Tax Act of 2017 and $0.6 million of Foreign income tax, which was partially offset by a $1.0 million benefit to continuing operations from a gain on discontinued operations.

The year-over-year increase in Foreign withholding tax was due to a larger portion of license fees received in the nine months ended September 30, 2019 coming from licensees in countries subject to foreign withholding taxes.

(Loss) Income from discontinued operations, net of tax

In the three and nine months ended September 30, 2019, we recognized a Loss from discontinued operations, net of tax, of $0.4 million and $0.4 million, respectively, as a result of costs incurred pursuant to certain indemnification obligations associated with previous business disposals. In the three and nine months ended September 30, 2018, we recognized Income from discontinued operations, net of tax, of $0.1 million and $3.7 million, respectively, as a result of the expiration of certain indemnification obligations and the execution of settlement agreements during the period associated with previous business disposals.

Segment Results

We report segment information in the same way management internally organizes the business for assessing performance and making decisions regarding the allocation of resources to the business units. The terms Adjusted Operating Expenses and Adjusted EBITDA in the following discussion use the definitions provided in Note 15 of the Condensed Consolidated Financial Statements included in Part I, Item 1. of this Quarterly Report on Form 10-Q, which is incorporated by reference herein.

Product

We group our Product segment into three verticals based on the products delivered to our customer: Platform Solutions; Software and Services; and Other. Platform Solutions includes licensing Company-developed UX products, the TiVo service and selling TiVo-enabled devices. Software and Services includes licensing our metadata and advanced media and advertising solutions, including viewership data, sponsored discovery and in-guide advertising. Other includes legacy Analog Content Protection ("ACP"), VCR Plus+ and media recognition products.

The Product segment's results of operations for the three and nine months ended September 30, 2019 and 2018 compared to the prior year were as follows (dollars in thousands):

	Three Months Ended September 30,			
	2019	2018	Change $	Change %
Platform Solutions	$ 62,083	$ 73,147	$ (11,064)	(15)%
Software and Services	19,771	19,851	(80)	— %
Other	934	1,614	(680)	(42)%
Product Revenues	82,788	94,612	(11,824)	(12)%
Adjusted Operating Expenses	69,386	79,347	(9,961)	(13)%
Adjusted EBITDA	$ 13,402	$ 15,265	$ (1,863)	(12)%
Adjusted EBITDA Margin	16.2%	16.1%		

	Nine Months Ended September 30,			
	2019	2018	Change $	Change %
Platform Solutions	$ 198,851	$ 241,295	$ (42,444)	(18)%
Software and Services	58,915	57,949	966	2 %
Other	1,531	5,007	(3,476)	(69)%
Product Revenues	259,297	304,251	(44,954)	(15)%
Adjusted Operating Expenses	229,944	250,280	(20,336)	(8)%
Adjusted EBITDA	$ 29,353	$ 53,971	$ (24,618)	(46)%
Adjusted EBITDA Margin	11.3%	17.7%		

For the three months ended September 30, 2019, the $11.1 million decrease in Platform Solutions revenue was primarily attributable to a $4.1 million decrease in consumer revenue, which was driven by subscriber erosion, an increase in the amortization period for product lifetime subscriptions and lower hardware sales. Also contributing to the decrease was a $3.2 million decline in revenue from nonrecurring engineering services to an international cable operator, a $1.8 million revenue reduction related to adjusted subscriber reporting from Latin American operators and the year-ago quarter benefiting from a $3.3 million Passport contract renewal that included guaranteed minimums. These revenue declines were partially offset by a $3.2 million increase in revenue from an international cable operator exceeding its cumulative contractual minimums in 2019.

For the nine months ended September 30, 2019, the $42.4 million decrease in Platform Solutions revenue was primarily attributable to a decrease of $33.6 million in revenue from an international cable operator that exercised a contractual option during the three months ended March 31, 2018 to purchase a fully paid license to its then-current version of the TiVo software and purchasing additional engineering services. In addition, revenue for the nine months ended September 30, 2019 decreased $12.6 million due to consumer subscriber erosion, an increase in the amortization period for product lifetime subscriptions and lower hardware sales. These revenue declines were partially offset by a $7.8 million revenue increase for the nine months ended September 30, 2019 from an international software customer exceeding its contractual minimums in 2019.

For the three months ended September 30, 2019, Software and Services revenue was flat as a $0.9 million decrease in Personalized Content Discovery revenue, was offset by an $0.8 million increase in TV viewership data revenue. For the nine months ended September 30, 2019, the $1.0 million increase in Software and Services revenue was primarily the result of an $0.8 million increase in TV viewership data revenue.

For the three and nine months ended September 30, 2019, Other revenue primarily consists of ACP revenue, which is expected to decline in the future.

The 13% and 8% decreases in Product Adjusted Operating Expenses for the three and nine months ended September 30, 2019, respectively, were primarily due to reduced Research and development compensation and consulting costs. Product Adjusted Operating Expenses also decreased from the planned transition of our customers to deploying the TiVo service on third-party hardware and other benefits from our transformation and restructuring activities. A $2.4 million inventory impairment during the nine months ended September 30, 2019 due to a reduced forecast for sales of refurbished units partially offset these benefits.

Adjusted EBITDA Margin for the three months ended September 30, 2019 was flat as benefits from reduced Research and development compensation and consulting costs, benefits from our transformation and restructuring activities and a shift in business mix toward higher margin products due to the planned transition of our customers to deploying the TiVo service on third-party hardware were offset by the revenue changes described above. The decrease in Adjusted EBITDA Margin for the nine months ended September 30, 2019 reflect the revenue changes and inventory impairment described above, which were partially offset by benefits from reduced Research and development compensation and consulting costs, benefits from our transformation and restructuring activities and a shift in business mix toward higher margin products due to the planned transition of our customers to deploying the TiVo service on third-party hardware.

Intellectual Property Licensing

We group our Intellectual Property Licensing segment into three verticals based primarily on the business of our customer: US Pay TV Providers; CE Manufacturers; and New Media, International Pay TV Providers and Other. US Pay TV Providers includes direct and indirect licensing of traditional US Pay TV Providers regardless of the particular distribution technology (e.g., cable, satellite or the internet). CE Manufacturers includes the licensing of our patents to traditional CE manufacturers. New Media, International Pay TV Providers and Other includes licensing to international pay TV providers, virtual service providers, mobile device manufacturers and content and new media companies.

The Intellectual Property Licensing segment's results of operations for the three and nine months ended September 30, 2019 and 2018 compared to the prior year were as follows (dollars in thousands):

	Three Months Ended September 30,			
	2019	**2018**	**Change $**	**Change %**
US Pay TV Providers	$ 41,896	$ 44,474	$ (2,578)	(6)%
CE Manufacturers	15,580	8,859	6,721	76 %
New Media, International Pay TV Providers and Other	18,260	16,764	1,496	9 %
Intellectual Property Licensing Revenues	75,736	70,097	5,639	8 %
Adjusted Operating Expenses	25,659	23,461	2,198	9 %
Adjusted EBITDA	$ 50,077	$ 46,636	$ 3,441	7 %
Adjusted EBITDA Margin	66.1%	66.5%		

	Nine Months Ended September 30, 2019	2018	Change $	Change %
US Pay TV Providers	$ 126,009	$ 143,606	$ (17,597)	(12)%
CE Manufacturers	31,928	26,754	5,174	19 %
New Media, International Pay TV Providers and Other	75,697	52,795	22,902	43 %
Intellectual Property Licensing Revenues	233,634	223,155	10,479	5 %
Adjusted Operating Expenses	68,825	73,790	(4,965)	(7)%
Adjusted EBITDA	$ 164,809	$ 149,365	$ 15,444	10 %
Adjusted EBITDA Margin	70.5%	66.9%		

For the three and nine months ended September 30, 2019, Intellectual Property Licensing revenue grew 8% and 5%, respectively, due to an increase in revenues from CE Manufacturers and New Media, International Pay TV Providers and Other, which was partially offset by a decrease in revenue from US Pay TV Providers.

For the three and nine months ended September 30, 2019, the decrease in revenue from US Pay TV Providers was primarily due to decreases of $2.8 million and $20.1 million in the three and nine months ended September 30, 2019, respectively, in revenue from TiVo Solutions Time Warp agreements that were entered into with AT&T, DirecTV, EchoStar and Verizon prior to the TiVo Acquisition Date due to the expiration of these contracts by the end of July 2018. In addition, revenue from catch-up payments from US Pay TV Providers intended to make us whole for the pre-license period of use for the three and nine months ended September 30, 2019 decreased by $0.3 million and $0.7 million, respectively. These revenue declines from US Pay TV Providers were partially offset by increases in revenue from our existing customers.

For the three and nine months ended September 30, 2019, the increase in revenue from CE Manufacturers was primarily the result of an increase of $6.5 million and $7.0 million, respectively, from catch-up payments from CE Manufacturers intended to make us whole for the pre-license period of use. These increases in revenue were partially offset by a decrease in our licensees' market share, combined with continuing pressures on our licensees' business models. Such declines could continue unless we are able to successfully license new entrants to this market.

For the three and nine months ended September 30, 2019, New Media, International Pay TV Providers and Other reflects an increase in revenue compared to the prior period due to new licenses and contract amendments executed since the year ago period. This revenue increase for the three months ended September 30, 2019 was partially offset by a $2.1 million decrease in revenue from catch-up payments intended to make us whole for the pre-license period of use. For the nine months ended September 30, 2019, New Media, International Pay TV Providers and Other reflects an increase of $12.3 million in revenue from catch-up payments intended to make us whole for the pre-license period of use, primarily related to expanding our license with Shaw Communications to include the TiVo Solutions patent portfolio and our first social media customer.

The 9% increase in Intellectual Property Licensing Adjusted Operating Expenses for the three months ended September 30, 2019 reflects a $1.5 million impairment charge associated with a prepaid license that is not expected to be recoverable from the net direct revenue resulting from patent license agreements executed with new customers and a $0.5 million increase in patent litigation costs, which was primarily related to the timing of costs incurred in ongoing litigation. The 7% decrease in Intellectual Property Licensing Adjusted Operating Expenses during the nine months ended September 30, 2019 reflects an $8.2 million decrease in patent litigation costs, which was primarily related to the timing of costs incurred in ongoing litigation. This decrease in costs was partially offset by $2.6 million of impairment charges associated with a prepaid license that is not expected to be recoverable from the net direct revenue resulting from patent license agreements executed with new customers.

The decrease in Adjusted EBITDA Margin for the three months ended September 30, 2019 is primarily the result of the $1.5 million impairment charge associated with a prepaid license and an increase in patent litigation costs, which were partially offset by an increase in Intellectual Property Licensing revenue. The increase in Adjusted EBITDA Margin for the nine months ended September 30, 2019 is primarily the result of the decrease in patent litigation costs combined with an increase in Intellectual Property Licensing revenue, partially offset by $2.6 million of impairment charges associated with a prepaid license.

Corporate

Corporate costs primarily include general and administrative costs such as corporate management, finance, legal and human resources.

Corporate costs for the three and nine months ended September 30, 2019 compared to the prior year were as follows (dollars in thousands):

	Three Months Ended September 30,			
	2019	2018	Change $	Change %
Adjusted Operating Expenses	$ 13,427	$ 14,825	$ (1,398)	(9)%

	Nine Months Ended September 30,			
	2019	2018	Change $	Change %
Adjusted Operating Expenses	$ 44,048	$ 45,385	$ (1,337)	(3)%

For the three and nine months ended September 30, 2019, the decrease in Corporate Adjusted Operating Expenses primarily reflects a decrease in compensation costs and other benefits from our transformation and restructuring activities.

Liquidity and Capital Resources

We finance our business primarily from operating cash flow. We believe our cash position remains strong and our cash, cash equivalents and marketable securities and anticipated operating cash flow, supplemented with access to capital markets as necessary, are generally sufficient to support our operating businesses, capital expenditures, restructuring activities, maturing debt, interest payments and income tax payments, in addition to investments in future growth opportunities for at least the next twelve months. Our access to capital markets may be constrained and our cost of borrowing may increase under certain business, market and economic conditions; however, our use of a variety of funding sources to meet our liquidity needs is designed to facilitate continued access to sufficient capital resources under such conditions. Based on current market and business conditions, if we were to refinance our existing debt, we anticipate our cost of borrowing would increase.

As of September 30, 2019, we had $144.5 million in Cash and cash equivalents, $132.2 million in Short-term marketable securities and $5.0 million in Long-term marketable securities. Our cash, cash equivalents and marketable securities are held in numerous locations around the world, with $38.9 million held by our foreign subsidiaries as of September 30, 2019. Due to our net operating loss carryforwards and the effects of the Tax Act of 2017, we could repatriate amounts to the U.S. with minimal income tax effects.

Sources and Uses of Cash

Cash flows for the nine months ended September 30, 2019 compared to the prior year were as follows (in thousands):

	Nine Months Ended September 30,			
	2019	2018	Change $	Change %
Net cash provided by operating activities - Continuing operations	$ 41,645	$ 113,735	$ (72,090)	(63)%
Net cash provided by (used in) investing activities	73,986	(24,868)	98,854	(398)%
Net cash used in financing activities	(132,976)	(67,712)	(65,264)	96 %
Net cash used in operating activities - Discontinued operations	(25)	—	(25)	N/a
Effect of exchange rate changes on cash and cash equivalents	(134)	(465)	331	(71)%
Net (decrease) increase in cash and cash equivalents	$ (17,504)	$ 20,690	$ (38,194)	(185)%

For the nine months ended September 30, 2019, operating cash flow decreased $72.1 million. The decrease was primarily due to the timing of collections on Accounts receivable, net, a decrease in cash collections in advance of revenue being recognized and payments for Separation and transformation costs. We expect to make material cash payments for Separation and transformation costs through 2020. The availability of cash generated by our operations in the future could be adversely affected by business risks including, but not limited to, the Risk Factors described in Part II, Item 1A. of this Quarterly Report on Form 10-Q, which are incorporated by reference herein.

For the nine months ended September 30, 2019, investing cash flow increased $98.9 million. Net proceeds from marketable security investment transactions increased by $104.4 million compared to the prior year. The proceeds from the investment transactions were primarily used to repay debt during the nine months ended September 30, 2019. The decrease in capital expenditures for the nine months ended September 30, 2019 was primarily associated with infrastructure projects designed to integrate TiVo Solutions in 2018. We expect 2019 full year capital expenditures of approximately $20 million to $25 million for infrastructure projects designed to support anticipated growth in our business, to strengthen our operations infrastructure and to prepare for the Separation. Partially offsetting these cash flow benefits was $6.9 million of cash paid to acquire patent portfolios during the nine months ended September 30, 2019.

Financing cash flow for the nine months ended September 30, 2019 reflects the repurchase of $50.0 million of outstanding principal of the Company's 2020 Convertible Notes for $49.4 million and a $46.6 million principal payment on Term Loan Facility B compared to $5.3 million of principal payments in the nine months ended September 30, 2018. Net cash used in financing activities for the nine months ended September 30, 2019 reflects dividend payments of $0.34 per share, resulting in aggregate cash payments of $42.5 million compared to dividend payments of $0.54 per share, resulting in aggregate cash payments of $66.7 million for the nine months ended September 30, 2018.

In connection with the Separation, the Product and Intellectual Property Licensing businesses will evaluate the payment of dividends to shareholders in the future, if any. The capacity to pay dividends in the future depends on many factors, including their financial condition, results of operations, capital requirements, capital structure, industry practice and other business conditions that their respective Boards of Directors consider relevant. In addition, the agreements governing our debt, or new debt that may be incurred in the future, may limit or prohibit the payment of dividends.

On February 14, 2017, TiVo Corporation's Board of Directors approved an increase to the stock repurchase program authorization to $150.0 million, which remains available as of September 30, 2019. The February 2017 authorization includes amounts which were outstanding under previously authorized share repurchase programs.

Capital Resources

The outstanding principal and carrying amount of debt we issued or assumed was as follows (in thousands):

	September 30, 2019		December 31, 2018	
	Outstanding Principal	Carrying Amount	Outstanding Principal	Carrying Amount
2020 Convertible Notes	$ 295,000	$ 289,284	$ 345,000	$ 326,640
2021 Convertible Notes	48	48	48	48
Term Loan Facility B	621,912	619,899	668,500	665,449
Total	$ 916,960	$ 909,231	$ 1,013,548	$ 992,137

While $295.0 million of 2020 Convertible Notes is scheduled to mature on March 1, 2020, the 2020 Convertible Notes can be freely converted by holders beginning December 1, 2019. The 2020 Convertible Notes may be converted by holders prior to December 1, 2019 in certain circumstances.

For more information on our borrowings, see Note 9 to the Condensed Consolidated Financial Statements included in Part I, Item 1. of this Quarterly Report on Form 10-Q, which is incorporated by reference herein. Our ability to make payments on and to refinance our indebtedness depends on our financial and operating performance, which is subject to prevailing economic and competitive conditions. If our cash flows and capital resources are insufficient to service our debt obligations, we may be forced to reduce or delay investments and capital expenditures, or to sell assets, seek additional capital or restructure or refinance our indebtedness. For additional information about liquidity risk, see the Risk Factors described in Part II, Item 1A. of this Quarterly Report on Form 10-Q, which are incorporated by reference herein.

2020 Convertible Notes

Rovi issued $345.0 million in aggregate principal of 0.500% Convertible Notes that mature on March 1, 2020 at par pursuant to an Indenture dated March 4, 2015 (the "2015 Indenture"). In June 2019, the Company repurchased $50.0 million of outstanding principal of the 2020 Convertible Notes.

The 2020 Convertible Notes were convertible at an initial conversion rate of 34.5968 shares of TiVo Corporation common stock per $1,000 of principal of notes, which was equivalent to an initial conversion price of $28.9044 per share of TiVo Corporation common stock. The conversion rate and conversion price are subject to adjustment pursuant to the 2015 Indenture, including as a result of dividends paid by TiVo Corporation. As of September 30, 2019, the 2020 Convertible Notes are convertible at a conversion rate of 39.7348 shares of TiVo Corporation common stock per $1,000 principal of notes, which is equivalent to a conversion price of $25.1668 per share of TiVo Corporation common stock.

Holders may convert the 2020 Convertible Notes prior to the close of business on the business day immediately preceding December 1, 2019, in multiples of $1,000 of principal under the following circumstances:

- during any calendar quarter commencing after the calendar quarter ending on June 30, 2015 (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during the period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day;
- during the five business day period after any ten consecutive trading day period in which the trading price per $1,000 of principal of 2020 Convertible Notes for each trading day was less than 98% of the product of the last reported sale price of our common stock and the conversion rate on each such trading day; or
- on the occurrence of specified corporate events.

On or after December 1, 2019 until the close of business on the second scheduled trading day immediately preceding the maturity date, holders may convert the 2020 Convertible Notes, in multiples of $1,000 of principal, at any time.

In addition, during the 35-day trading period following a Merger Event, as defined in the 2015 Indenture, holders may convert the 2020 Convertible Notes, in multiples of $1,000 of principal.

On conversion, a holder will receive the conversion value of the 2020 Convertible Notes converted based on the conversion rate multiplied by the volume-weighted average price of our common stock over a specified observation period. On conversion, Rovi will pay cash up to the aggregate principal of the 2020 Convertible Notes converted and deliver shares of our common stock in respect of the remainder, if any, of the conversion obligation in excess of the aggregate principal of the 2020 Convertible Notes being converted.

The conversion rate is subject to adjustment in certain events, including certain events that constitute a "Make-Whole Fundamental Change" (as defined in the 2015 Indenture). In addition, if we undergo a "Fundamental Change" (as defined in the 2015 Indenture) prior to March 1, 2020, holders may require Rovi to repurchase for cash all or a portion of the 2020 Convertible Notes at a repurchase price equal to 100% of the principal of the repurchased 2020 Convertible Notes, plus accrued and unpaid interest. The conversion rate is also subject to customary anti-dilution adjustments.

The 2020 Convertible Notes are not redeemable prior to maturity by Rovi and no sinking fund is provided. The 2020 Convertible Notes are unsecured and do not contain financial covenants or restrictions on the payment of dividends, the incurrence of indebtedness or the repurchase of other securities by Rovi. The 2015 Indenture includes customary terms and covenants, including certain events of default after which the 2020 Convertible Notes may be due and payable immediately.

2021 Convertible Notes

TiVo Solutions issued $230.0 million in aggregate principal of 2.0% Convertible Senior Notes that mature October 1, 2021 (the "2021 Convertible Notes") at par pursuant to an Indenture dated September 22, 2014 ("the 2014 Indenture"). On October 12, 2016, TiVo Solutions repaid $229.95 million of the par value of the 2021 Convertible Notes.

The 2021 Convertible Notes were convertible at an initial conversion rate of 56.1073 shares of TiVo Solutions common stock per $1,000 principal of notes, which was equivalent to an initial conversion price of $17.8230 per share of TiVo Solutions common stock. The conversion rate and conversion price are subject to adjustment pursuant to the 2014 Indenture, including as a result of dividends paid by TiVo Corporation. As of September 30, 2019, the 2021 Convertible Notes are convertible at a conversion rate of 24.8196 shares of TiVo Corporation common stock per $1,000 principal of notes and $154.30 per $1,000 principal of notes, which is equivalent to a conversion price of $34.0738 per share of TiVo Corporation common stock.

TiVo Solutions can settle the 2021 Convertible Notes in cash, shares of common stock, or any combination thereof pursuant to the 2014 Indenture. Subject to certain exceptions, holders may require TiVo Solutions to repurchase, for cash, all or part of their 2021 Convertible Notes upon a “Fundamental Change” (as defined in the 2014 Indenture) at a price equal to 100% of the principal amount of the 2021 Convertible Notes being repurchased plus any accrued and unpaid interest up to, but excluding, the “Fundamental Change Repurchase Date” (as defined in the 2014 Indenture). In addition, on a “Make-Whole Fundamental Change” (as defined in the 2014 Indenture) prior to the maturity date of the 2021 Convertible Notes, TiVo Solutions will, in some cases, increase the conversion rate for a holder that elects to convert its 2021 Convertible Notes in connection with such Make-Whole Fundamental Change.

Senior Secured Credit Facility

On July 2, 2014, Rovi Corporation, as parent guarantor, and two of its wholly-owned subsidiaries, Rovi Solutions Corporation and Rovi Guides, Inc., as borrowers, and certain of its other subsidiaries, as subsidiary guarantors, entered into a Credit Agreement (the “Credit Agreement”). After the completion of the TiVo Acquisition, TiVo Corporation became a guarantor under the Credit Agreement. The Credit Agreement provided for a (i) five-year $125.0 million term loan A facility (the “Term Loan Facility A”), (ii) seven-year $700.0 million term loan B facility (the “Term Loan Facility B” and together with Term Loan Facility A, the “Term Loan Facility”) and (iii) five-year $175.0 million revolving credit facility (including a letter of credit sub-facility) (the "Revolving Facility” and together with the Term Loan Facility, the “Senior Secured Credit Facility”). In September 2015, Rovi made a voluntary principal prepayment to extinguish Term Loan Facility A and elected to terminate the Revolving Facility.

Prior to the refinancing described below, Term Loan Facility B was amortizing in equal quarterly installments in an aggregate annual amount equal to 1% of the original principal amount thereof, with any remaining balance payable on the final maturity date of Term Loan Facility B. Loans under Term Loan Facility B bore interest, at our option, at a rate equal to either LIBOR, plus an applicable margin equal to 3.00% per annum (subject to a 0.75% LIBOR floor) or the prime lending rate, plus an applicable margin equal to 2.00% per annum.

On January 26, 2017, TiVo Corporation, as parent guarantor, two of its wholly-owned subsidiaries, Rovi Solutions Corporation and Rovi Guides, Inc., as borrowers, and certain of TiVo Corporation’s other subsidiaries, as subsidiary guarantors, entered into Refinancing Agreement No. 1 with respect to Term Loan Facility B. The borrowing terms for Refinancing Agreement No. 1 are substantially similar to the borrowing terms of Term Loan Facility B. However, loans under Refinancing Agreement No. 1 bear interest, at the borrower's option, at a rate equal to either LIBOR, plus an applicable margin equal to 2.50% per annum (subject to a 0.75% LIBOR floor) or the prime lending rate, plus an applicable margin equal to 1.50% per annum. Refinancing Agreement No. 1 is part of the Senior Secured Credit Facility.

The Credit Agreement contains customary representations and warranties and customary affirmative and negative covenants applicable to us and our subsidiaries, including, among other things, restrictions on indebtedness, liens, investments, mergers, dispositions, prepayment of other indebtedness, dividends and other distributions. The Credit Agreement is secured by substantially all of the Company's assets. Annually, we may be required to make an additional principal payment on Refinancing Agreement No. 1, which is calculated as a percentage of the prior year's "Excess Cash Flow" as defined in the Credit Agreement. In February 2019, the Company made an Excess Cash Flow payment of $46.6 million, which eliminated the remaining quarterly principal payments. The outstanding principal balance of Term Loan Facility B is due in July 2021.

Critical Accounting Policies and Estimates

The preparation of our Condensed Consolidated Financial Statements in accordance with accounting principles generally accepted in the U.S. requires management to make estimates, assumptions and judgments that affect the amounts reported in the financial statements and accompanying notes. Our estimates, assumptions and judgments are based on historical experience and various other assumptions believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying amount of assets and liabilities that are not readily apparent from other sources. Making estimates, assumptions and judgments about future events is inherently unpredictable and is subject to significant uncertainties, some of which are beyond our control. Management believes the estimates, assumptions and judgments employed and resulting balances reported in the Condensed Consolidated Financial Statements are reasonable; however, actual results could differ materially.

Except as disclosed below, there have been no significant changes to our critical accounting policies and estimates as compared to those disclosed in "Critical Accounting Policies and Estimates" in Part II, Item 7. of our Annual Report on Form 10-K, which is incorporated by reference herein.

Goodwill

Goodwill represents the excess of cost over fair value of the net assets of an acquired business. The recoverability of goodwill is assessed at the reporting unit level, which is either the operating segment or one level below. Goodwill is evaluated for potential impairment annually, as of the beginning of the fourth quarter, and whenever events or changes in circumstances indicate their carrying amount may not be recoverable.

Qualitative factors are first assessed to determine whether events or changes in circumstances indicate it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount. Qualitative factors which could trigger an interim impairment review, include, but are not limited to a:

- significant deterioration in general economic, industry or market conditions;
- significant adverse development in cost factors;
- significant deterioration in actual or expected financial performance or operating results;
- significant adverse changes in legal factors or in the business climate, including adverse regulatory actions or assessments; and
- significant sustained decrease in share price.

If, based on the qualitative assessment, it is considered more-likely-than-not that the fair value of a reporting unit is less than its carrying amount, then a quantitative impairment test is performed. In the quantitative impairment test, the fair value of each reporting unit is compared to its carrying amount. The fair value of the Product reporting unit and the Intellectual Property Licensing reporting unit is estimated using an income approach. Under the income approach, the fair value of a reporting unit is estimated based on the present value of estimated future cash flows and considers estimated revenue growth rates, future operating margins and risk-adjusted discount rates. The carrying amount of a reporting unit is determined by assigning the assets and liabilities, including goodwill and intangible assets, to the reporting unit. If the fair value of a reporting unit exceeds its carrying amount, goodwill is not impaired. If the fair value of a reporting unit is less than its carrying amount, an impairment loss equal to the difference is recognized.

The process of evaluating goodwill for potential impairment is subjective and requires significant estimates, assumptions and judgments particularly related to the identification of reporting units, the assignment of assets and liabilities to reporting units and estimating the fair value of each reporting unit. Estimating the fair value of a reporting unit considers future revenue growth rates, operating margins, income tax rates and economic and market conditions, as well as risk-adjusted discount rates and the identification of appropriate market comparable data.

During September 2019, sufficient indicators of potential impairment were identified that management concluded it was more-likely-than-not that goodwill was impaired and a quantitative interim goodwill impairment test should be performed as of September 30, 2019 for the Product and Intellectual Property Licensing reporting units. Indicators of potential impairment included a significant and sustained decline in the trading price of TiVo's common stock, as well as lower-than-previously forecast revenue and profitability levels for the Product reporting unit and downward revisions to this reporting unit's short- and long-term forecasts. The forecast revisions for the Product reporting unit were identified as part of TiVo's 2020 budgeting process and reflect lower expectations for its Platform Solutions products, including changes in both the market and business models internationally. The changes in such expectations related to revenue growth rates, current market trends, business mix, cost structure and other expectations about the anticipated short- and long-term operating results. As a result of the quantitative interim goodwill impairment test performed as of September 30, 2019, a Goodwill impairment charge of $137.5 million was recognized, of which $79.3 million relates to the Product reporting unit and $58.2 million relates to the Intellectual Property Licensing reporting unit. The Goodwill impairment charge for the Intellectual Property Licensing reporting unit resulted from an increase in the discount rate used to estimate fair value due to the decline in the trading price of TiVo's common stock.

Following the recognition of the Goodwill impairment charge, the equity fair value of the Product reporting unit equaled its carrying amount of $461.2 million and the equity fair value of the Intellectual Property Licensing reporting unit equaled its carrying amount of $829.1 million, which is net of the Company's debt. A deterioration in conditions or circumstances similar to those described above may result in additional goodwill impairment charges for the Product or Intellectual Property Licensing reporting units in the future. In addition, if we fail to renew licenses, or renew licenses with materially different terms than those assumed, if there is an adverse outcome with respect to patent infringement claims we have asserted against Comcast, an impairment of goodwill for the Intellectual Property Licensing reporting unit could result, the effect of which could be material.

No goodwill impairment charges were recognized as a result of an interim or annual goodwill impairment test during the first two quarters of 2019.

Contractual Obligations

For information about our contractual obligations, see "Contractual Obligations" in Part II, Item 7. of our Annual Report on Form 10-K for the year ended December 31, 2018, which is incorporated by reference herein. Other than the repurchase of $50.0 million of outstanding principal of the Company's 2020 Convertible Notes in June 2019, the $46.6 million principal payment on Term Loan Facility B in February 2019 and the $4.3 million paid in January 2019 in connection with an agreement executed in December 2018 to acquire a portfolio of patents, our contractual obligations have not changed materially since December 31, 2018.

Off-Balance Sheet Arrangements

For information about our off-balance sheet arrangements, see "Off-Balance Sheet Arrangements" in Part II, Item 7. of our Annual Report on Form 10-K for the year ended December 31, 2018, which is incorporated by reference herein. Since December 31, 2018, we have not engaged in any material off-balance sheet arrangements, including the use of structured finance vehicles, special purpose entities or variable interest entities.

Recent Accounting Pronouncements

For a summary of applicable recent accounting pronouncements, see Note 1 to the Condensed Consolidated Financial Statements included in Part I, Item 1. of this Quarterly Report on Form 10-Q, which is incorporated by reference herein.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

In the normal course of business, we are exposed to market risks, including those related to changes in interest rates, foreign currency exchange rates and security prices that could affect our financial position, results of operations or cash flows. For quantitative and qualitative disclosures about market risk, see Part II, Item 7A of our Annual Report on Form 10-K for the year ended December 31, 2018, which is incorporated reference herein. Our exposure to market risk has not changed materially since December 31, 2018.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this report, we carried out an evaluation, under the supervision and with participation of management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). In evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management necessarily is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on their evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this report.

Changes in Internal Control Over Financial Reporting

We believe there have been no changes to our internal controls over financial reporting during the quarter ended September 30, 2019, that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

PART II.

ITEM 1. LEGAL PROCEEDINGS

Information with respect to this item is contained in Note 11 to the Condensed Consolidated Financial Statements included in Part I, Item 1. of this Quarterly Report on Form 10-Q, which is incorporated by reference herein.

ITEM 1A. RISK FACTORS

Management believes that there have been no significant changes to the risk factors associated with our business as compared to those disclosed in Part 1, Item 1A. of our Annual Report on Form 10-K for the year ended December 31, 2018, which is incorporated by reference herein, other than as described below.

Our plan to separate into two independent, publicly traded companies is subject to various risks and uncertainties and may not be completed in accordance with the expected plans or anticipated timeline, or at all, and will involve significant time, expense and management attention, any of which could negatively impact our businesses, financial condition, results of operations and prospects.

On May 9, 2019, we announced that our Board of Directors has unanimously approved a plan to separate our Product and IP Licensing businesses (the "Separation"). The Separation is expected to be completed through a dividend of newly issued shares of the common stock of a Company subsidiary that will hold the Product business ("ProductCo"). We currently intend that the Separation will be completed in a manner generally intended to qualify as tax-deferred to our stockholders for U.S. federal income tax purposes (the "Distribution").

The Separation will be subject to customary closing conditions, including, among others, obtaining final approval from the TiVo Board of Directors, receipt of tax opinions, and the effectiveness of an applicable registration statement with the U.S. Securities and Exchange Commission.

Unanticipated developments, including difficulty in separating the assets and resources of our Product business from the rest of our assets and resources, changes to the competitive environment for the respective Product and IP Licensing businesses, possible delays in obtaining or failure to obtain tax opinions, an IRS ruling on the tax-deferred nature of the Distribution, regulatory or other approvals or clearances to approve or facilitate the Separation, including the Distribution, uncertainty in financial markets and other challenges in executing the Separation as planned, including addressing any impact of the Separation and the Distribution on our existing credit facilities and convertible notes, could delay or prevent the Distribution, or cause the Separation, including the Distribution, to occur on terms or conditions that are different or less favorable than expected.

We expect that the process of completing the Separation, including the Distribution, will be time-consuming and involve significant costs and expenses, which may be significantly higher than those currently anticipated and may not yield a discernible benefit if the Separation, including the Distribution, is not completed. Furthermore, the time and energy required of our senior management and other employees to plan and execute the Separation may lead to increased costs, negative effects on relationships with business partners, suppliers, and customers, and disruptions in operations, and may ultimately harm our businesses, financial condition and results of operations. We may also experience difficulty attracting, retaining and motivating employees during the pendency of the Separation, including the Distribution, which could also harm our businesses, financial condition, and results of operations.

If the Separation, including the Distribution, is completed, there is a further risk that the sum of the value of the two independent, publicly traded companies will be less than the value of the Company before the Separation. There is also a risk that we may not be able to achieve the full strategic, operational and financial benefits to us and our Product business that are anticipated to result from the Separation, including the Distribution, or that such benefits may be delayed or not occur at all.

This Quarterly Report on Form 10-Q does not constitute an offer to sell or a solicitation of an offer to buy securities, and shall not constitute an offer, solicitation or sale in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of that jurisdiction.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Issuer Purchases of Equity Securities

We may choose to repurchase shares under our ongoing repurchase program when sufficient liquidity exists, the shares are trading at a discount relative to estimated intrinsic value and there are no alternative investment opportunities expected to generate a higher risk-adjusted return on investment.

The following table provides information about the Company's purchases of its common stock during the three months ended September 30, 2019 (in thousands, except per share amounts):

Period	Total Number of Shares Purchased (1)	Average Price Paid Per Share (1)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1)	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (2)
July 2019	—	$ —	—	$ 150,000
August 2019	—	$ —	—	$ 150,000
September 2019	—	$ —	—	$ 150,000
Total	—	$ —	—	

(1) Excludes shares withheld to satisfy minimum statutory tax withholding requirements in connection with the net share settlement of restricted awards on vesting. During the three months ended September 30, 2019, we withheld 0.3 million shares of common stock to satisfy $2.3 million of required withholding taxes.

(2) On February 14, 2017, TiVo Corporation's Board of Directors approved an increase to its common stock repurchase program authorization to $150.0 million. The February 2017 authorization includes amounts which were outstanding under previously authorized share repurchase programs.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

		Incorporated by Reference			
Exhibit Number	Exhibit Description	Company Form	Filing Date	Exhibit Number	Filed Herewith
10.01**	Executive Severance Plan, as amended				X
31.01	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				X
31.02	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				X
32.01	Certification of Chief Executive Officer pursuant to Section 1350 of the Sarbanes-Oxley Act of 2002				*
32.02	Certification of Chief Financial Officer pursuant to Section 1350 of the Sarbanes-Oxley Act of 2002				*
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document				X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document				X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document				X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document				X
101.SCH	Inline XBRL Taxonomy Extension Schema Document				X
104	Cover Page Interactive Data File				+

* Furnished herewith.

** Management contract or compensatory plan or arrangement.

\+ Included in Interactive Data File covered by Exhibit 101.

Signatures

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

TIVO CORPORATION		
Authorized Officer:		
Date:	By:	/s/ David Shull
November 7, 2019		David Shull
		President and Chief Executive Officer
Principal Financial Officer:		
Date:	By:	/s/ Peter C. Halt
November 7, 2019		Peter C. Halt
		Chief Financial Officer
Principal Accounting Officer:		
Date:	By:	/s/ Wesley Gutierrez
November 7, 2019		Wesley Gutierrez
		Chief Accounting Officer and Treasurer

(Back To Top)

Section 2: EX-10.01 (EXHIBIT 10.01)

Exhibit 10.01

TIVO CORPORATION

EXECUTIVE SEVERANCE PLAN AND SUMMARY PLAN DESCRIPTION

(Effective July 7, 2017)

(As amended on September 3, 2019)

Table of Contents

TIVO CORPORATION
EXECUTIVE SEVERANCE PLAN
AND SUMMARY PLAN DESCRIPTION
(Effective July 7, 2017)
(As amended on September 3, 2019)

SECTION 1. INTRODUCTION

The TiVo Corporation Executive Severance Plan (the "Plan") is established by TiVo Corporation (the "Company"), originally effective as of July 7, 2017 (the "Effective Date"). The Plan provides severance benefits to specified eligible executive employees of the Company, its subsidiaries, and any successor thereto by merger, consolidation or otherwise (collectively, "TiVo").

The Plan is designed to be an unfunded "employee welfare benefit plan," as defined in Section 3(1) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and, accordingly, the Plan is governed by ERISA. This document constitutes both the official plan document and the required summary plan description under ERISA.

As of and after the Effective Date, this Plan supersedes and replaces any and all prior group severance, salary continuation, and separation pay plans, programs, arrangements, policies, procedures or practices previously sponsored by TiVo for employees who are eligible for this Plan.

SECTION 2. ELIGIBILITY FOR BENEFITS

a. Conditions for Eligibility

You will generally be eligible for severance benefits under the Plan if you meet all of the following requirements:

i. you are a regular, full-time employee of TiVo who is classified as an Executive Vice President ("EVP") or Senior Vice President ("SVP"), as determined by the Company; and

ii. you enter into a written agreement (the "Participation Notice") signed on behalf of the Company by its Chairman of the Board, Chief Executive Officer, General Counsel or Chief Administrative and Internal Operations Officer (or, in the event of a vacancy of such position or a change of title, the most senior position in the applicable department) or the specified delegate thereof, providing that you are eligible to participate in the Plan subject to the terms and conditions of the Participation Notice and this Plan; and

iii. your current term of employment includes at least twelve (12) months of continuous employment at TiVo (or a predecessor thereof by corporate merger or stock acquisition); and

iv. you have been actively at work with TiVo within the last twelve (12) months from your termination date; and

v. you continue as a satisfactory employee until you are released by TiVo in accordance with its business needs; and

vi. you abide by such other written terms and conditions as TiVo has established as a condition for participation in, or payment of benefits from, the Plan; and

vii. you sign and deliver one or more agreement(s) to release claims that you may have against TiVo in a form provided by, and satisfactory to, the Company (individually, a "Release" and collectively, "Releases") within the timeframe specified in the Release; and

viii. you enter into an agreement, in a form approved by the Company, not to solicit any employee of TiVo during the twenty-four (24)-month period following your termination date, which agreement will be incorporated into the Release; and

ix. you enter into a non-disparagement agreement, in a form approved by the Company, which agreement will be incorporated into the Release; and

x. you are not in one of the excluded categories listed below.

b. Eligibility Exclusions

Regardless of whether or when you receive and execute the Participation Notice, you will not be eligible to, or will cease to be eligible to, participate in the Plan if any of the following applies:

i. your employment terminates due to your death or disability (as determined under TiVo's long-term disability program); or

ii. your employment terminates for Cause, whereby solely for this purpose, "Cause" means: (i) conviction of any felony or any act of fraud, misappropriation or embezzlement that has an immediate and materially adverse effect on TiVo; (ii) engaging in a fraudulent act to the material damage or prejudice of TiVo, or engaging in conduct or activities materially damaging to the property, business or reputation of TiVo; (iii) failure to comply in any material respect with the terms of any applicable employment agreement or any written policies or directives of the Company which, if curable, has not been cured within ten (10) business days after written notice from the Company of such failure; (iv) any material act or material omission involving malfeasance or negligence in the performance of employment duties which has an immediate and materially adverse effect on TiVo and which, if curable, has not been cured within ten (10) business days after written notice from the Company; or (v) material breach of any other agreement with the Company, which, if curable, has not been cured within ten (10) business days after written notice from the Company of such breach. For the avoidance of doubt, if the Plan Administrator determines that a breach is incurable, then termination for Cause may be effected immediately. The determination by TiVo (as settlor) or, in the event that a claim is filed in accordance with the terms and conditions provided herein, by the Plan Administrator (including, the review panel, if applicable), in each case as applicable, that “Cause” exists for termination of the employment relationship shall be conclusive and binding for all purposes hereunder. Neither the later discovery of additional or different facts tending to negate such determination of “Cause,” nor any subsequent finding by any other fact finder that you did not in fact engage in conduct identified in this definition of “Cause” shall alter the finality of the determination hereunder; or

iii. you voluntarily terminate your employment with TiVo without Good Reason, whereby solely for this purpose, “Good Reason” means the occurrence of any of the following without your consent: (i) a material diminution in your base salary other than as part of a general reduction in base salary that affects substantially all similarly situated TiVo executives in similar proportions; or (ii) a relocation of your principal place of employment to a new worksite requiring an increase in one-way commute from your primary residence of more than thirty-five (35) miles; provided, however, that the occurrence of any of the foregoing will not be Good Reason unless, within thirty (30) days of the initial occurrence, you provide written notice to the Company of the occurrence of the event, the Company fails to remedy the condition within thirty (30) days following receipt of such notice, and you resign effective within thirty (30) days after expiration of the Company’s cure period; or

iv. you are not in the eligible classes of TiVo employees or otherwise do not meet the criteria for eligibility specified above; or

v. you are offered a Comparable Position with an employer that is a successor to TiVo as a result of any divestiture of a subsidiary, division or business unit of TiVo for which you provided services immediately prior to the divestiture; for this purpose, you will be considered to have been offered a “Comparable Position” if the changes (if any) in terms and conditions of such position offered by the successor employer would not constitute Good Reason if such changes in terms and conditions had been unilaterally instituted by TiVo (including due to you failure to provide prompt notice of all deficiencies and reasonable opportunity to cure); or

vi. you do not sign the Release or you revoke or disclaim such Release within the time period specified by applicable law, or such Release becomes invalid for any reason; or

vii. you fail to tender your resignation from each officer or director position held at the Company and/or its subsidiaries and affiliates upon a request of the Company made on or after your termination date has been established; or

viii. you fail to return all Company Property, whereby solely for this purpose, “Company Property” means all paper and electronic Company documents (and all copies thereof) you created and/or received during your period of employment with TiVo and other TiVo materials and property which you have in your possession or control, including, but not limited to, files, notes, drawings, records, plans, forecasts, reports, studies, analyses, proposals, agreements, financial information, research and development information, sales and marketing information, operational and personnel information, specifications, code, software, databases, computer-recorded information, tangible property and equipment (including, but not limited to, leased vehicles, computers, computer equipment, software programs, facsimile machines, mobile telephones, servers), credit and calling cards, entry cards, identification badges and keys; and any materials of any kind which contain or embody any proprietary or confidential information of TiVo (and all reproductions thereof in whole or in part). As a condition to receiving benefits under this Plan, you must not retain copies, reproductions or summaries of any such documents, materials or property. However, you are not required to return your personal copies of documents evidencing your hire, termination, compensation, benefits, equity awards and any other documentation received as a stockholder of the Company.

SECTION 3. SEVERANCE BENEFIT

a. General

If you are eligible for severance benefits under the Plan, then such severance benefits (as described in the remaining subsections of this Section 3) will begin after all of the following conditions are met: (i) you meet the eligibility requirements in Section 2 above, and (ii) your Release becomes effective and irrevocable.

b. Severance Pay

If you are eligible for severance benefits under the Plan, then you will be eligible to receive the following amount payable in cash ("Severance Pay"), less authorized deductions and applicable withholding taxes. Your Severance Pay will be payable in a lump sum, in installments or in some other form as determined by TiVo at the time of your eligibility, as described in the Release; provided, however, that the payment(s) will commence no later than thirty (30) days after all conditions for severance benefits eligibility have been satisfied and will be completed no later than twenty-four (24) months after your termination date.

Tier	Amount of Severance Pay
EVP	12 Months of Pay
SVP	6 Months of Pay

"Months of Pay," whereby solely for this purpose, means your annual base pay in effect at the time of your termination (but, if applicable, prior to any salary reduction constituting the Good Reason precipitating your termination) divided by twelve (12). It does not include, for example and without limitation, bonuses or incentive pay, overtime, or any other compensation apart from base pay.

c. COBRA Continuation

Your participation in the group health coverage and other health benefit plans, programs and arrangements sponsored by TiVo terminates on the last day of the calendar month of your termination of employment, except as otherwise specified below.

If you are eligible, then you may elect continuation coverage of your existing group health coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), and as provided by TiVo's then-existing group health plans. A separate election form and notice outlining continuation coverage under COBRA will be provided to you, as an eligible employee (and/or your eligible dependent(s)) who is eligible for COBRA continuation coverage, and must be timely returned if you (and/or your eligible dependent(s)) wish to enroll in COBRA continuation coverage.

If you elect COBRA medical, dental, vision, and Employee Assistance Program (EAP) coverage and TiVo continues to maintain a group health plan, then TiVo will be responsible for paying the full premium cost to continue the then-applicable medical, dental, vision, and EAP coverage for you (and your eligible dependents) under COBRA until the earliest to occur of: (1) the final day of the period during which TiVo is obligated to pay you Severance Pay pursuant to Section 3(b) above, (2) the date on which you (or your dependent(s)) become COBRA ineligible or (3) the date on which you become electable for medical, dental, vision or EAP coverage under any plan maintained by any entity employing you after your employment with TiVo terminates (the "Coverage Period").

Notwithstanding the foregoing, the Company may choose, at its election, to satisfy the obligations above by continuing your participation in the relevant benefit plans of TiVo, in which case TiVo shall not make the COBRA-related payments set forth above. If prior to your termination you were required to contribute towards the cost of a benefit as a condition of receiving such benefit, you may be required to continue contributing towards the cost of such benefit under the same terms and conditions as applied to you immediately prior to your termination in order to receive such benefit.

In the event that TiVo chooses to make the COBRA-related payments set forth above rather than continuing your participation in TiVo plans, and if TiVo determines that such COBRA premium payment could result in adverse tax treatment to TiVo or you under applicable law, TiVo may instead provide you with payments during the Coverage Period equivalent in value to the COBRA premiums otherwise payable by TiVo hereunder, but without regard as to whether you (or your eligible dependents) continue group health coverage under TiVo's group health plan.

d. Outplacement Benefits

TiVo will reimburse you, or pay directly, the costs of individual or group career transition outplacement services, the scope and provider of which shall be selected by the Company, commensurate with your position level for the same time period for which you are awarded Severance Pay, that is, EVP eligible employees will receive twelve (12) months of outplacement services and SVP eligible employees will receive six (6) months of outplacement services; provided, however, that the outplacement services will terminate as of the date that you commence employment with another employer. To receive these outplacement services, you must inform TiVo in writing of your desire to receive such services within ninety (90) days following your termination date.

e. Effect of Reemployment on Severance Pay: Repayment and Forfeiture

If you are rehired by TiVo as a regular employee after you have received all or a portion of your Severance Pay, a portion of your Severance Pay may have to be repaid. The amount of any required repayment is based on the length of time between your termination and rehire dates, and the number of months of Severance Pay you received. To determine whether repayment is required, add the number of full Months of Pay to your termination date to determine a "cutoff date." If the rehire date is on or after the cutoff date, no repayment is required. If the rehire date is before the cutoff date, the required repayment from Severance Pay that you have already been paid is equal to the amount of Severance Pay that is attributable to the period between your rehire date and the cutoff date.

> For example, if a SVP terminates on Friday, June 29, 2020, his/her cutoff date would be Friday, December 28, 2020. If such SVP is rehired after Friday, December 28, 2020, no repayment would be required. On the other hand, if such SVP was rehired on September 28, 2020, he/she would be required to repay three (3) Months of Pay.

In addition, if you received severance benefits (including Severance Pay) and are reemployed by TiVo within a number of months following your termination that is less than the total number of months of Severance Pay that you have received under the Plan, then the unpaid portion of your severance benefits under the Plan will be forfeited. In other words, you will not receive whatever portion of your severance benefit has not been paid at the time you are reemployed.

f. Effect of Death on Severance Benefits

If you, as an otherwise eligible employee, die after your employment has terminated, but before you have received full payment of your Severance Pay, the unpaid portion of your Severance Pay will be paid to your surviving spouse or, if there is no surviving spouse, to your estate. If payment is to be made to your estate and it is a "small estate" that may be collected or transferred by affidavit under California Probate Code Section 13100, et seq. (or under similar laws of another state providing for the transfer of a small estate without probate administration), then the Plan Administrator may distribute the payment pursuant to such state law in accordance with procedures established by the Plan Administrator. If you die after your employment has terminated, all further benefits under the Plan other than Severance Pay (including, but not limited to, COBRA continuation and outplacement) will be forfeited.

g. Effect of Breaches on Severance Benefits

Your right to receive unpaid severance benefits provided under this Plan shall terminate immediately and you shall be obligated to return, and the Company shall have a right of recovery of, any benefits already received under this Plan within twenty (20) business days if, without the prior written approval of the Company:

i. you willfully breach a material provision of your Proprietary Information, Inventions and Ethics Agreement with TiVo; or

ii. you fail to reasonably cooperate (including, but not limited to, meeting with the Company's counsel to prepare for any discovery, mediation, arbitration, trial, administrative hearing or other proceeding or to act as a witness) with TiVo in the investigation, defense or prosecution of any claims or actions against or on behalf of TiVo at any time during the twelve (12)-month period after your termination from TiVo, except in the case of a third party proceeding in which you are a named party and have not yet entered into a joint defense agreement with TiVo and provided that TiVo must reimburse you for reasonable out-of-pocket expenses that you may incur in connection with any such cooperation (excluding foregone wages, salary, or other compensation); or

iii. you willfully breach the Release at any time.

h. Benefits Offsets; Anti-Duplication

The benefits provided under this Plan are intended to satisfy any and all statutory obligations that may arise out of your involuntary termination of employment, including, without limitation, the obligations of TiVo (or its affiliates) under the Federal Worker Adjustment and Retraining Notification ("WARN") Act or a similar state law (collectively, the "WARN Act"). In the event that an eligible employee's termination is deemed covered by the WARN Act, then the benefits payable under the Plan shall be reduced and offset (but not below zero (0)) by an amount equal to up to sixty (60)-days' pay and benefits if such amounts are required to be paid by TiVo to the employee under the WARN Act (including, without limitation, for any period of advance notice of termination under the WARN Act). In the event that the severance benefits hereunder are used to satisfy such statutory obligation (s), then the consideration for the Release will also be reduced accordingly. The Plan Administrator shall construe and interpret the terms and conditions of the Plan in order to comply with such intention.

Notwithstanding any other provision of the Plan, all severance benefits shall be reduced by any applicable federal, state, or local tax withholdings and any applicable payroll deductions, as required and/or permitted by law. If you are indebted to TiVo at your termination date, then TiVo reserves the right to offset any severance benefits payable under the Plan by the amount of such indebtedness to the extent permitted by law (but not below one dollar ($1.00)).

All other group severance, separation pay, and salary continuation plans, arrangements, practices, policies or agreements otherwise applicable to an eligible employee who has received a Participation Notice are expressly superseded by this Plan.

All other individual severance, separation pay, and salary continuation arrangements or agreements otherwise applicable to an eligible employee that were effective on or prior to the date such eligible employee properly executes and timely returns a Participation Notice are expressly superseded by this Plan, except to the extent specifically set forth in such Participation Notice. All other individual severance, separation pay, and salary continuation arrangements or agreements otherwise applicable to an eligible employee that are adopted after the date that eligible employee properly executes and timely returns a Participation Notice are expressly superseded by this Plan, except to the extent specifically set forth in such other plan, arrangement, practice, policy or agreement.

i. Golden Parachute Limitation

In the event that the severance and other benefits provided to your under this Plan or otherwise payable to you (i) constitute "parachute payments" within the meaning of Code Section 280G, and (ii) but for this Section 3(i), would be subject to the excise tax imposed by Code Section 4999, then your benefit under this Plan will be either: (i) delivered in full, or (ii) delivered as to such lesser extent which would result in no portion of such benefits being subject to excise tax under Code Section 4999 as determined by the Company, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the excise tax imposed by Code Section 4999, results in your receipt on an after-tax basis, of the greatest amount of benefits, notwithstanding that all or some portion of such benefits may be taxable under Code Section 4999.

j. No Duty to Mitigate

Except as otherwise set forth in Section 3(c), 3(d) and 3(e) of this Plan, you are not required to mitigate the receipt of benefits under this Plan.

SECTION 4. GENERAL INFORMATION

a. Non-Alienation of Benefits

To the fullest extent permitted by law, no Plan benefit may be made subject to anticipation, alienation, sale transfer assignment, pledge, encumbrance or charge, and any attempt to do so will be void.

b. Applicable Law and Venue

The Plan will be construed in accordance with ERISA and, to the extent not preempted by ERISA, the laws of the State of California (other than the choice of law principles). Any claim that you may have relating to or arising under the Plan may only be brought in the U.S. District Court for the Northern District of California. No other court is a proper venue for your claim. The U.S. District Court for the Northern District of California will have personal jurisdiction over you and any other participant or beneficiary named in the action.

c. Plan Sponsor and Plan Administrator

The Company is the "Plan Sponsor" and the Compensation Committee of the Company's Board of Directors (the "Compensation Committee") is the "Plan Administrator" of the Plan, as such terms are used in ERISA.

d. Administrative Power and Responsibility

The Company, as the Plan Sponsor (serving in a settlor capacity), has sole and absolute discretionary authority to administer and interpret the Plan, including, without limitation, discretionary authority to determine eligibility for participation (including, without limitation, whether such termination of employment is without Cause or for Good Reason, what constitutes a Comparable Position, the effective date of employment termination, any extension of the date of employment termination, and the number of Releases and related payments utilized per eligible employee) and for benefits under the Plan, the amount of benefits (if any) payable per eligible employee, and to interpret ambiguous terms. Any authorized delegate acting on behalf of the Plan Sponsor or assignee shall have sole and absolute discretionary authority to carry out the Plan Sponsor's delegated duties. Any determination by the Plan Sponsor (or its authorized delegate) shall be conclusive and binding on all persons.

The Compensation Committee, as the Plan Administrator, is the named fiduciary that has the authority to control and manage the operation and administration of the Plan. The Plan Administrator has the sole and absolute discretion to adopt rules, regulations, interpretations and computations under the Plan, including, without limitation, discretionary authority to determine eligibility for participation (including, without limitation, whether such termination of employment is without Cause or for Good Reason, what constitutes a Comparable Position, the effective date of employment termination, any extension of the date of employment termination, and the number of Releases and related payments utilized per eligible employee) and for benefits under the Plan, the amount of benefits (if any) payable per eligible employee, and to interpret ambiguous terms. The Plan Administrator may take any action to administer the Plan as it may deem appropriate in its sole and absolute discretion. Such rules, regulations, interpretations, computations and other actions are conclusive and binding upon all persons. The Plan Administrator may, in its sole and absolute discretion, authorize severance benefits in an amount different from the guideline amount set forth above, as well as waive or modify, with respect to an employee or one or more classes of employees, the eligibility requirements for severance benefits or modify the method for calculating severance benefits for any employee or group or class of employees. The Plan Administrator may engage other persons or organizations to provide advice or perform services with respect to its responsibilities under the Plan. Notwithstanding anything to the contrary in this Plan, no benefits shall be paid under this Plan unless the Plan Administrator (or its authorized delegate) or the review panel determines that the claimant is entitled to them, and the Compensation Committee (or its authorized delegate) and the review panel shall have the sole and absolute discretionary authority to make all determinations under the Plan and their determinations shall be conclusive and binding on all persons.

e. Performance of Responsibilities

The responsibilities of the Company under the Plan will be carried out on its behalf by its directors, officers, employees and agents, acting on behalf of the Company in their capacity as directors, officers employees and agents. The Company, as Plan Sponsor, and the Compensation Committee, as Plan Administrator, may delegate any of its fiduciary or settlor responsibilities, respectively, under the Plan to another person or entity pursuant to a written instrument that specifies the responsibilities that are delegated to such person or entity.

f. Basis of Payments to and from the Plan

When severance benefits are due, they will be paid from the general assets of the Company. The expenses of operating and administering the Plan shall be borne entirely by the Company. As previously stated, this Plan is intended to be an "employee welfare benefit plan" under ERISA and not an "employee pension benefit plan" under ERISA. Therefore, the following additional restrictions shall apply to the maximum severance amount: (i) in no event shall the total amount of benefits exceed two (2) times your annual compensation during the year immediately preceding your termination date, and (ii) all payments under the Plan shall be paid within twenty-four (24) months of your termination date.

g. Compliance with Code Section 409A

To the maximum extent possible, this Plan is intended to qualify as a "separation pay plan" under Treasury Regulations Section 1.409A-1(b)(9), and the payments hereunder are intended to be exempt from the definition of "deferral of compensation" pursuant to the exemption for short-term deferrals under Treasury Regulations Section 1.409A-1(b)(4) and/or the exemption for separation pay due to involuntary separation from service under Treasury Regulations Section 1.409A-1(b)(9)(iii). To the extent that any payment hereunder does not meet an exemption from Code Section 409A, then this Plan is intended to comply with the applicable requirements of Code Section 409A. The Plan shall be interpreted and administered in a manner that is consistent with the foregoing intent.

Notwithstanding any provision in the Plan to the contrary, references to your termination of employment shall be interpreted to require that you have a "separation from service" with TiVo, as such term is defined in regulations under Code Section 409A. To the extent that severance benefits may be paid in multiple installments, each installment of severance benefits shall for all purposes of Code Section 409A be treated as a separate payment. To the extent that any expense reimbursements or the provision of any in-kind benefits under the Plan are determined to be subject to Code Section 409A (including, without limitation, any exemptions thereto), the amount of any such expenses eligible for reimbursement or the provision of any in-kind benefit in one calendar year shall not affect the expenses eligible for reimbursement or in-kind benefits to be provided in any other calendar year (except for any aggregate limitation applicable to medical expenses), in no event shall any expenses be reimbursed after the last day of the calendar year following the calendar year in which you incurred such expenses, and in no event shall any right to reimbursement or the provision of any in-kind benefit be subject to liquidation or exchange for another benefit.

To the extent you are a "specified employee" within the meaning of Code Section 409A at the time of your separation (other than due to death), then any payments or benefits under the Plan that are treated as nonqualified deferred compensation for purposes of Code Section 409A and that are otherwise payable within the first six (6) months following your separation from service, will first become payable on the earlier of: (i) the first payroll date that occurs on or after the date six (6) months and one (1) day following the date of your separation from service, and (ii) your date of death. In any case where your separation from service and the date by which you are required to deliver a Release fall in two (2) separate taxable years, any severance benefits required to be provided to you that are conditioned on the effectiveness of a Release and are treated as nonqualified deferred compensation for purposes of Code Section 409A will be paid in the later taxable year. Any benefits delayed as a result of either of the two preceding sentences shall be provided to you in a lump sum (without interest) as soon as reasonably practicable after becoming payable, and any remaining severance benefits due under this Plan shall be provided in accordance with the time and form of payment otherwise provided for such benefits herein.

h. Severability

If any provision of this Plan, or the application thereof to any individual or circumstance, is deemed invalid or unenforceable by a court of competent jurisdiction, then the remainder of the Plan or the application of such term or provision to individuals or circumstances will be valid and enforceable to the fullest extent permitted by law. Furthermore, TiVo intends that this Plan and the terms thereof shall apply to all eligible employees regardless of whether such eligible employees are subject to, and inure the benefits of, ERISA.

i. Plan Termination or Amendment

The Plan shall remain in full force and effect until December 31, 2018; thereafter, the Compensation Committee may terminate the Plan at any time for any reason with or without notice. The Compensation Committee may prospectively amend the Plan at any time for any reason with or without notice; provided, however, that, except pursuant to the immediately preceding sentence, no amendment of the Plan may materially impair the rights or benefits of any TiVo employee who has received a Participation Notice without the consent of the affected employee.

No agent or employee other than a duly authorized officer of the Company has the authority to change or waive any provision of the Plan. Because the provisions of the Plan are intended to serve as mere guidelines for the payment of severance benefits under certain prescribed circumstances, it is neither intended that, nor shall, any employee obtain any vested right to severance benefits.

j. No Right to Employment

No provision of this Plan is intended to alter the at-will nature of your employment, provide you or any other employee with any right to continue employment with TiVo or affect TiVo’s right, which right is hereby expressly reserved, to terminate the employment of any individual for any reason, at any time, with or without advance notice, and with or without cause.

SECTION 5. CLAIM AND REVIEW PROCESS

a. Applications for Benefits and Inquiries

If you (or your beneficiary or authorized representative) believe that you are incorrectly denied a benefit or have not received the proper benefit under the Plan, then you may submit a signed, written application to the Plan Administrator within ninety (90) days of the expiration date of the revocation period for the Release mandated by federal or state law, as applicable.

b. Denial of Claims

If an application for benefits is denied in whole or in part, the Plan Administrator will provide the applicant with written or electronic notice of such denial and of the right to a review of the claim. Such written or electronic notice will explain, in a manner calculated to be understood by the applicant, the specific reasons for the denial, references to the specific Plan provisions on which the denial is based, a description of any information or material necessary to perfect the application, an explanation of why such material is necessary, an explanation of the Plan’s review procedure and the time limits applicable to such procedures, and a statement of the applicant’s right to bring a civil action under ERISA Section 502(a) if the claim is denied on review. Such written or electronic notice will be given to the applicant within ninety (90) days after the Plan Administrator receives the application, unless special circumstances require an extension of time of up to an additional ninety (90) days for processing the application. If such an extension of time for processing is required, written or electronic notification of the extension will be provided to the applicant prior to the termination of the initial ninety (90)-day period. This notice of extension will indicate the special circumstances requiring the extension of time and the date by which the Plan Administrator expects to render its decision. The applicant will be permitted to appeal such denial in accordance with the procedures described in Section 5(d) below.

c. Review Panel

The Plan Administrator may appoint a "review panel," consisting of three (3) individuals who may (but need not) be employees of TiVo. The review panel will be the named fiduciary that has the authority to act with respect to any appeal from an initial denial of benefits.

d. Request for Review

An individual whose application is denied in whole or in part under Section 5(b), or such person's duly authorized representative, may appeal from such denial by submitting a request for a review of the application to the review panel within sixty (60) days after receiving written or electronic notice of such denial from the Plan Administrator. A request for review must be in writing and must be addressed as follows: "Review Panel Under the TiVo Corporation Executive Severance Plan, TiVo Corporation, 2160 Gold Street, San Jose, CA 95002." A request for review must provide all of the grounds on which it is based, all facts in support of the request and any other matters that the applicant deems pertinent. The review panel may require the applicant to submit such additional facts, documents or other material as it may deem necessary or appropriate to review the application. The review panel will provide the applicant with the opportunity to submit written comments, documents, records and other information relating to the application. The Plan Administrator will provide to the applicant, upon request and free of charge, reasonable access to, and copies of, all documents, records and other information relevant to the application (except to the extent such items are legally or otherwise privileged).

e. Decision on Review

The review panel's determination will take into account all comments, documents, records, and other information that the applicant has submitted without regard to whether such information was submitted or considered in the initial benefit determination. The review panel will provide the applicant with written or electronic notification of its decision within a reasonable period of time, but not later than sixty (60) days after receiving the review request, unless special circumstances require an extension of time for reviewing the request, up to an additional sixty (60) days. If such an extension for review is required, written or electronic notification of the extension will be provided to the applicant within the initial sixty (60)-day period. The notice of extension will indicate the special circumstances requiring the extension of time and the date by which the review panel expects to render a decision. If an extension of time is required due to the applicant's failure to submit information necessary to review the application, the period of time that the review panel has to review the application will be tolled from the date on which the notice of the extension is sent to the applicant until the date on which the applicant responds to the request for additional information.

f. Denial on Review

In the event that the review panel confirms the denial of the application in whole or in part, the notice will explain, in a manner calculated to be understood by the applicant, the specific reasons for the denial, references to the specific Plan provisions on which the decision is based, a statement that the applicant is entitled to receive, upon request and free of charge, reasonable access to, and copies of, all documents, records, and other information relevant to the application (except to the extent such items are legally or otherwise privileged), and a statement of the applicant's right to bring an action under ERISA Section 502(a).

g. Rules and Procedures

The review panel will establish such rules and procedures, consistent with the Plan and with ERISA, as it may deem necessary or appropriate in carrying out its responsibilities under the Plan. A communication, statement, or notice addressed to you at your last known mailing address as filed with the Plan Administrator and/or the Company will be binding on you for all purposes under the Plan, and neither the Company, nor the Plan Administrator shall be obligated to conduct any further search to determine how you may be contacted.

h. Exhaustion of Remedies

If the Plan Administrator (including, without limitation, the review panel) denies your appeal in whole or part, then the Plan Administrator will provide you with an explanation of the subsequent denial, this explanation will include a statement regarding your right to bring a civil action under ERISA Section 502(a). Notwithstanding anything to the contrary in the Plan, no legal action for benefits under the Plan may be brought unless and until an applicant: (i) has submitted a written application for benefits in accordance with Section 5(a); (ii) has received written or electronic notification from the Plan Administrator that the application is denied in accordance with Section 5(b); (iii) has filed a written request for a review of the application in accordance with Section 5 (d); and (iv) has received written or electronic notification that the review panel has affirmed the denial of the application in accordance with Section 5(f). In addition, no action in law or equity shall be brought more than one (1) year after the Plan Administrator's (including, without limitation, the review panel's) affirmation of a denial of the claim or, if earlier, more than four (4) years after the facts or events giving rise to the claimant's allegation(s) or claim(s) first occurred under the Plan. Nothing in this Section or in the Plan is intended to or shall be deemed to waive or otherwise invalidate any statutes of limitations.

SECTION 6. STATEMENT OF ERISA RIGHTS

As a participant in the Plan, you are entitled to certain rights and protections under ERISA. ERISA provides that all Plan participants shall be entitled to:

a. Receive Information About Your Plan and Benefits

Examine, without charge, at the Plan Administrator's office and at other specified locations, such as worksites, all documents governing the Plan, including a copy of the latest annual report (Form 5500 Series)(if any) filed by the Plan with the U.S. Department of Labor and available at the Public Disclosure Room of the Employee Benefits Security Administration.

Obtain, upon written request to the Plan Administrator, copies of documents governing the operation of the Plan, including copies of the latest annual report (Form 5500 Series) (if any), and updated summary plan description. The Plan Administrator may make a reasonable charge for the copies.

Receive a summary of the Plan's annual financial report (if required to be filed). The Plan Administrator is required by law to furnish each participant with a copy of this summary annual report (if filed).

b. Continue Group Health Plan Coverage

Please note that this summary plan description does not address the rules governing your COBRA continuation coverage rights - such rules can be found in the summary plan description and the documents governing the group health plan.

c. Prudent Action by Plan Fiduciaries

In addition to creating rights for Plan participants, ERISA imposes duties upon the people who are responsible for the operation of the Plan. The people who operate your Plan, called "fiduciaries" of the Plan, have a duty to do so prudently and in the interest of you and other Plan participants (and their beneficiaries). No one, including your employer, or any other person, may fire you or otherwise discriminate against you in any way to prevent you from obtaining a welfare benefit or exercising your rights under ERISA.

d. Enforce Your Rights

If your claim for a welfare benefit is denied or ignored, in whole or in part, you have a right to know why this was done, to obtain copies of documents relating to the decision without charge, and to appeal any denial, all within certain time schedules.

Under ERISA, there are steps you can take to enforce the above rights. For instance, if you request a copy of plan documents or the latest annual report (if any) from the Plan and do not receive them within thirty (30) days, you may file suit in a federal court. In such a case, the court may require the Plan Administrator to provide the materials and pay you up to $110 a day until you receive the materials, unless the materials were not sent because of reasons beyond the control of the Plan Administrator. If you have a claim for benefits which is denied or ignored, in whole or in part, you may file suit in a state or federal court. If it should happen that you are discriminated against for asserting your rights, you may seek assistance from the U.S. Department of Labor, or you may file suit in a federal court. The court will decide who should pay court costs and legal fees. If you are successful, the court may order the person you have sued to pay these costs and fees. If you lose, the court may order you to pay these costs and fees, for example, if it finds your claim is frivolous.

e. Assistance with Your Questions

If you have any questions about your Plan, you should contact the Plan Administrator. If you have any questions about this statement or about your rights under ERISA, or if you need assistance in obtaining documents from the Plan Administrator, you should contact the nearest office of the Employee Benefits Security Administration, U.S. Department of Labor, listed in your telephone directory or the Division of Technical Assistance and Inquiries, Employee Benefits Security Administration, U.S. Department of Labor, 200 Constitution Avenue N.W., Washington, D.C. 20210. You may also obtain certain publications about your rights and

responsibilities under ERISA by calling the publications hotline of the Employee Benefits Security Administration.

SECTION 7. OTHER PLAN INFORMATION

Name of Plan:	TiVo Corporation Executive Severance Plan
Plan Sponsor:	TiVo Corporation
2160 Gold Street	
San Jose, CA 95002	
Employer Identification Number:	61-1793262
Plan Number:	505
Effective Date:	July 7, 2017
Plan Administrator:	TiVo Corporation 2160 Gold Street San Jose, CA 95002
Agent for Service of Legal Process:	Service of legal process may be made on the Plan or the Plan Administrator by serving the General Counsel c/o TiVo Corporation, 2160 Gold Street, San Jose, CA 95002
Plan Costs:	Paid entirely from the general assets of TiVo Corporation (or a successor thereto)
Type of Plan:	Employee welfare benefit plan

(Back To Top)

Section 3: EX-31.01 (EXHIBIT 31.01)

Exhibit 31.01

CERTIFICATION

I, David Shull, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of TiVo Corporation;

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

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

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

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

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

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

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

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

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

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

Date: November 7, 2019

/s/ David Shull

David Shull

President and Chief Executive Officer

(Back To Top)

Section 4: EX-31.02 (EXHIBIT 31.02)

Exhibit 31.02

CERTIFICATION

I, Peter C. Halt, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of TiVo Corporation;

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

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

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

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

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

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

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

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

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

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

Date: November 7, 2019

/s/ Peter C. Halt

Peter C. Halt
Chief Financial Officer

(Back To Top)

Section 5: EX-32.01 (EXHIBIT 32.01)

Exhibit 32.01

SECTION 1350 CERTIFICATION

In connection with the Quarterly Report of TiVo Corporation (the "Company") on Form 10-Q for the period ended September 30, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), David Shull certifies in his capacity as Chief Executive Officer of the Company, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350, as adopted), that to the best of his knowledge:

(a) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a) or 78o (d)), and

(b) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operation of the Company.

IN WITNESS WHEREOF, the undersigned has hereunto signed this Certification as of November 7, 2019.

/s/ David Shull

David Shull
President and Chief Executive Officer

(Back To Top)

Section 6: EX-32.02 (EXHIBIT 32.02)

Exhibit 32.02

SECTION 1350 CERTIFICATION

In connection with the Quarterly Report of TiVo Corporation (the "Company") on Form 10-Q for the period ended September 30, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Peter C. Halt certifies in his capacity as Chief Financial Officer of the Company, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350, as adopted), that to the best of his knowledge:

(a) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a) or 78o (d)), and

(b) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operation of the Company.

IN WITNESS WHEREOF, the undersigned has hereunto signed this Certification as of November 7, 2019.

/s/ Peter C. Halt

Peter C. Halt

Chief Financial Officer

(Back To Top)