UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 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, 2020

OR

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

Commission File Number: 001-39304

XPERI HOLDING CORPORATION
(Exact Name of Registrant as Specified in Its Charter)

Delaware	**84-4734590**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**
3025 Orchard Parkway, San Jose, California	**95134**
(Address of Principal Executive Offices)	**(Zip Code)**

(408) 321-6000
(Registrant's Telephone Number, Including Area Code)

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)	XPER	Nasdaq Global Select Market

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

Large accelerated filer	☒	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 ☒

The number of shares outstanding of the registrant's common stock as of October 30, 2020 was 105,707,630.

XPERI HOLDING CORPORATION
FORM 10-Q
FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2020
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PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

XPERI HOLDING CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share amounts)
(unaudited)

	Three Months Ended		Nine Months Ended	
	September 30, 2020	September 30, 2019	September 30, 2020	September 30, 2019
Revenue:				
Licensing, services and software	$ 195,319	$ 57,750	$ 448,802	$ 189,093
Hardware	7,478	117	9,291	456
Total revenue	202,797	57,867	458,093	189,549
Operating expenses:				
Cost of licensing, services and software revenue, excluding depreciation and amortization of intangible assets	21,854	1,462	31,646	5,970
Cost of hardware revenue, excluding depreciation and amortization of intangible assets	12,216	44	13,688	271
Research, development and other related costs	57,731	25,998	124,565	78,004
Selling, general and administrative	63,785	27,588	168,586	84,120
Depreciation expense	6,753	1,629	11,815	5,056
Amortization expense	50,894	25,146	105,447	75,919
Litigation expense	8,527	1,527	14,501	4,049
Total operating expenses	221,760	83,394	470,248	253,389
Operating loss	(18,963)	(25,527)	(12,155)	(63,840)
Interest expense	(13,393)	(5,506)	(24,602)	(18,390)
Other income and expense, net	2,305	429	3,448	7,537
Loss on debt extinguishment	—	—	(8,300)	—
Loss before taxes	(30,051)	(30,604)	(41,609)	(74,693)
Provision for (benefit from) income taxes	482	(14,583)	(6,761)	(27,080)
Net loss	$ (30,533)	$ (16,021)	$ (34,848)	$ (47,613)
Less: net loss attributable to noncontrolling interest	(781)	(407)	(1,819)	(1,095)
Net loss attributable to the Company	$ (29,752)	$ (15,614)	$ (33,029)	$ (46,518)
Loss per share attributable to the Company:				
Basic	$ (0.28)	$ (0.32)	$ (0.44)	$ (0.95)
Diluted	$ (0.28)	$ (0.32)	$ (0.44)	$ (0.95)
Weighted average number of shares used in per share calculations-basic	107,499	49,459	75,441	49,036
Weighted average number of shares used in per share calculations-diluted	107,499	49,459	75,441	49,036

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

XPERI HOLDING CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands)
(unaudited)

	Three Months Ended		Nine Months Ended	
	September 30, 2020	September 30, 2019	September 30, 2020	September 30, 2019
Net loss	$ (30,533)	$ (16,021)	$ (34,848)	$ (47,613)
Other comprehensive income, net of tax:				
Change in foreign currency translation adjustment	740	—	895	—
Net unrealized gain (loss) on available-for-sale debt securities	(91)	53	(23)	321
Other comprehensive income, net of tax	649	53	872	321
Comprehensive loss	(29,884)	(15,968)	(33,976)	(47,292)
Less: comprehensive loss attributable to noncontrolling interest	(781)	(407)	(1,819)	(1,095)
Comprehensive loss attributable to the Company	$ (29,103)	$ (15,561)	$ (32,157)	$ (46,197)

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

XPERI HOLDING CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except for par value)
(unaudited)

	September 30, 2020	December 31, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 115,725	$ 74,551
Available-for-sale debt securities, at fair value (amortized cost and allowance for credit losses of $87,262 and $0, respectively, at September 30, 2020)	87,258	45,802
Equity securities	—	1,124
Accounts receivable, net of allowance for credit losses of $3,624 and $566, respectively	111,915	24,177
Unbilled contracts receivable	164,138	121,826
Other current assets	36,084	13,735
Total current assets	515,120	281,215
Long-term unbilled contracts receivable	15,083	26,672
Property and equipment, net	65,432	32,877
Operating lease right-of-use assets	84,230	17,786
Intangible assets, net	1,005,522	232,275
Goodwill	846,913	385,784
Other long-term assets	136,395	71,336
Total assets	$ 2,668,695	$ 1,047,945
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	$ 18,829	$ 4,650
Accrued legal fees	9,607	1,316
Accrued liabilities	98,762	41,433
Deferred revenue	37,045	720
Current portion of long-term debt, net	43,704	—
Total current liabilities	207,947	48,119
Deferred revenue, less current portion	23,400	—
Long-term deferred tax liabilities	29,751	29,735
Long-term debt, net	956,530	334,679
Noncurrent operating lease liabilities	69,463	13,414
Other long-term liabilities	95,637	76,898
Total liabilities	1,382,728	502,845
Commitments and contingencies (Note 15)		
Company stockholders' equity:		
Preferred stock: $0.001 par value; authorized (2020: 15,000 shares; 2019: 10,000 shares) and no shares issued and outstanding	—	—
Common stock: $0.001 par value; (2020: authorized 350,000 shares, issued 110,020 shares, outstanding 105,692 shares; 2019: authorized 150,000 shares, issued 63,622, outstanding 49,620 shares)	110	64
Additional paid-in capital	1,255,856	768,284
Treasury stock at cost (2020: 4,328 shares; 2019: 14,002 shares)	(55,920)	(368,701)
Accumulated other comprehensive income (loss)	819	(53)
Retained earnings	89,709	148,317
Total Company stockholders' equity	1,290,574	547,911
Noncontrolling interest	(4,607)	(2,811)
Total equity	1,285,967	545,100
Total liabilities and equity	$ 2,668,695	$ 1,047,945

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

XPERI HOLDING CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(unaudited)

	Nine Months Ended	
	September 30, 2020	September 30, 2019
Cash flows from operating activities:		
Net loss	$ (34,848)	$ (47,613)
Adjustments to reconcile net loss to net cash from operating activities:		
Depreciation of property and equipment	11,815	5,056
Amortization of intangible assets	105,447	75,919
Stock-based compensation expense	26,614	22,832
Deferred income taxes	(28,158)	(43,101)
Loss on debt extinguishment	8,300	—
Other	8,635	1,484
Changes in operating assets and liabilities:		
Accounts receivable	14,982	9,202
Unbilled contracts receivable	37,874	96,905
Other assets	(21,793)	2,726
Accounts payable	921	626
Accrued and other liabilities	(6,471)	(17,402)
Deferred revenue	6,115	(2,420)
Net cash from operating activities	129,433	104,214
Cash flows from investing activities:		
Purchases of property and equipment	(2,975)	(7,956)
Proceeds from sale of property and equipment	—	55
Cash acquired in merger transaction	117,424	—
Purchases of intangible assets	(692)	—
Purchases of short-term investments	(68,093)	(34,475)
Proceeds from sales of investments	7,189	6,833
Proceeds from maturities of investments	19,683	22,490
Net cash from investing activities	72,536	(13,053)
Cash flows from financing activities:		
Dividend paid	(25,579)	(29,588)
Proceeds from debt, net	1,010,286	—
Repayment of debt	(357,125)	(100,000)
Repayment of assumed debt from merger transaction	(734,609)	—
Contingent consideration payments after acquisition	—	(1,200)
Proceeds from exercise of stock options	2	672
Proceeds from employee stock purchase program	4,763	5,329
Repurchase of common stock	(59,291)	(4,282)
Net cash from financing activities	(161,553)	(129,069)
Effect of exchange rate changes on cash and cash equivalents	758	—
Net increase (decrease) in cash and cash equivalents	41,174	(37,908)
Cash and cash equivalents at beginning of period	74,551	113,625
Cash and cash equivalents at end of period	$ 115,725	$ 75,717
Supplemental disclosure of cash flow information:		
Interest paid	$ 20,372	$ 16,517
Income taxes paid, net of refunds	$ 30,647	$ 12,374
Stock issued in merger transaction	$ 828,334	$ —

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

XPERI HOLDING CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF EQUITY
(in thousands)
(unaudited)

	Total Company Stockholders' Equity								
Three Months Ended September 30, 2020	Common Stock		Additional Paid-In Capital	Treasury Stock		Accumulated Other Comprehensive Income	Retained Earnings	Noncontrolling Interest	Total Equity
	Shares	Amount		Shares	Amount				
Balance at July 1, 2020	108,148	$ 109	$ 1,245,717	1,277	$ (17,572)	$ 170	$ 124,887	$ (3,844)	$ 1,349,467
Issuance of subsidiary shares to noncontrolling interest	—	—	(18)	—	—	—	—	18	—
Net loss	—	—	—	—	—	—	(29,752)	(781)	(30,533)
Other comprehensive income	—	—	—	—	—	649	—	—	649
Cash dividends paid on common stock ($0.05 per share)	—	—	—	—	—	—	(5,426)	—	(5,426)
Issuance of restricted stock, net of shares canceled	595	1	—	—	—	—	—	—	1
Repurchases of common stock, shares exchanged	(219)	—	—	219	(3,262)	—	—	—	(3,262)
Repurchases of common stock	(2,832)	—	—	2,832	(35,086)	—	—	—	(35,086)
Stock-based compensation expense	—	—	10,157	—	—	—	—	—	10,157
Balance at September 30, 2020	105,692	$ 110	$ 1,255,856	4,328	$ (55,920)	$ 819	$ 89,709	$ (4,607)	$ 1,285,967

	Total Company Stockholders' Equity								
Nine Months Ended September 30, 2020	Common Stock		Additional Paid-In Capital	Treasury Stock		Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Noncontrolling Interest	Total Equity
	Shares	Amount		Shares	Amount				
Balance at January 1, 2020	49,620	$ 64	$ 768,284	14,002	$ (368,701)	$ (53)	$ 148,317	$ (2,811)	$ 545,100
Issuance of subsidiary shares to noncontrolling interest	—	—	(23)	—	—	—	—	23	—
Net loss	—	—	—	—	—	—	(33,029)	(1,819)	(34,848)
Other comprehensive income	—	—	—	—	—	872	—	—	872
Cash dividends paid on common stock ($0.45 per share)	—	—	—	—	—	—	(25,579)	—	(25,579)
Issuance of common stock in connection with employee stock purchase plan	355	—	4,763	—	—	—	—	—	4,763
Issuance of restricted stock, net of shares canceled	1,929	2	—	—	—	—	—	—	2
Repurchases of common stock, shares exchanged	(602)	—	—	602	(9,206)	—	—	—	(9,206)
Repurchases of common stock	(3,910)	—	—	3,910	(50,085)	—	—	—	(50,085)
Common stock issued in merger transaction	58,300	58	828,276	—	—	—	—	—	828,334
Retirement of treasury stock	—	(14)	(372,058)	(14,186)	372,072	—	—	—	—
Stock-based compensation expense	—	—	26,614	—	—	—	—	—	26,614
Balance at September 30, 2020	105,692	$ 110	$ 1,255,856	4,328	$ (55,920)	$ 819	$ 89,709	$ (4,607)	$ 1,285,967

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

XPERI HOLDING CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF EQUITY (continued)
(in thousands)
(unaudited)

Three Months Ended September 30, 2019	Total Company Stockholders' Equity: Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Treasury Stock Shares	Treasury Stock Amount	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Noncontrolling Interest	Total Equity
Balance at July 1, 2019	49,338	$ 63	$ 749,187	13,990	$ (368,459)	$ (60)	$ 199,759	$ (2,001)	$ 578,489
Issuance of subsidiary shares to noncontrolling interest	—	—	(4)	—	—	—	—	4	—
Net loss	—	—	—	—	—	—	(15,614)	(407)	(16,021)
Other comprehensive income	—	—	—	—	—	53	—	—	53
Cash dividends paid on common stock ($0.20 per share)	—	—	—	—	—	—	(9,902)	—	(9,902)
Issuance of common stock in connection with exercise of stock options	9	—	152	—	—	—	—	—	152
Issuance of common stock in connection with employee stock purchase plan	158	—	2,218	—	—	—	—	—	2,218
Issuance of restricted stock, net of shares canceled	32	—	—	—	—	—	—	—	—
Repurchases of common stock, shares exchanged	(1)	—	—	1	(18)	—	—	—	(18)
Stock-based compensation expense	—	—	7,988	—	—	—	—	—	7,988
Balance at September 30, 2019	49,536	$ 63	$ 759,541	13,991	$ (368,477)	$ (7)	$ 174,243	$ (2,404)	$ 562,959

Nine Months Ended September 30, 2019	Total Company Stockholders' Equity: Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Treasury Stock Shares	Treasury Stock Amount	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Noncontrolling Interest	Total Equity
Balance at January 1, 2019	48,408	$ 62	$ 730,695	13,804	$ (364,195)	$ (328)	$ 253,208	$ (1,295)	$ 618,147
Issuance of subsidiary shares to noncontrolling interest	—	—	14	—	—	—	—	(14)	—
Net loss	—	—	—	—	—	—	(46,518)	(1,095)	(47,613)
Other comprehensive income	—	—	—	—	—	321	—	—	321
Other (1)	—	—	—	—	—	—	(2,859)	—	(2,859)
Cash dividends paid on common stock ($0.60 per share)	—	—	—	—	—	—	(29,588)	—	(29,588)
Issuance of common stock in connection with exercise of stock options	40	—	671	—	—	—	—	—	671
Issuance of common stock in connection with employee stock purchase plan	386	—	5,329	—	—	—	—	—	5,329
Issuance of restricted stock, net of shares canceled	889	1	—	—	—	—	—	—	1
Repurchases of common stock, shares exchanged	(187)	—	—	187	(4,282)	—	—	—	(4,282)
Stock-based compensation expense	—	—	22,832	—	—	—	—	—	22,832
Balance at September 30, 2019	49,536	$ 63	$ 759,541	13,991	$ (368,477)	$ (7)	$ 174,243	$ (2,404)	$ 562,959

(1) Refer to "Note 1 – *The Company and Basis of Presentation.*"

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

NOTE 1 – THE COMPANY AND BASIS OF PRESENTATION

On December 18, 2019, Xperi Corporation ("Xperi") entered into an Agreement and Plan of Merger and Reorganization with TiVo Corporation ("TiVo") to combine in an all-stock merger of equals transaction (the "Mergers"). Immediately following the consummation of the Mergers on June 1, 2020, (the "Merger Date"), Xperi Holding Corporation (the "Company"), a Delaware corporation founded in December 2019 under the name "XRAY-TWOLF HoldCo Corporation," became the parent company of both Xperi and TiVo. The common stock of Xperi and TiVo were de-registered after completion of the Mergers. On June 2, 2020, Xperi Holding Corporation's common stock, par value $0.001 per share, commenced trading on the Nasdaq Global Select Market ("Nasdaq") under the ticker symbol "XPER." See "Note 7 – Business Combination" for a more detailed description of the Mergers.

Xperi was determined to be the accounting acquirer in the Mergers. As a result, the historical financial statements of Xperi for periods prior to the Mergers are considered to be the historical financial statements of Xperi Holding Corporation. As used herein, the "Company" refers to Xperi when referring to periods prior to June 1, 2020 and to Xperi Holding Corporation when referring to periods subsequent to June 1, 2020. The Company's results of operations include the operations of TiVo after June 1, 2020, and TiVo's assets and liabilities were recorded at their estimated fair values in the Company's Condensed Consolidated Balance Sheets as of June 1, 2020. See "Note 7 – Business Combination" for additional information on the Mergers.

Xperi Holding Corporation is a leading consumer and entertainment technology licensing company and one of the industry's largest intellectual property (IP) licensing platforms, with a diverse portfolio of media and semiconductor intellectual property and more than 11,000 patents and applications. The Company invents, develops, and delivers technologies that enable extraordinary experiences. The Company's technologies, delivered via its brands (DTS, HD Radio, IMAX Enhanced, Invensas, and TiVo) and by its subsidiary Perceive Corporation, make entertainment more entertaining, and smart devices smarter. The Company's technologies are integrated into billions of consumer devices, media platforms, and semiconductors worldwide, driving increased value for customers, partners and consumers. The Company shapes how millions of consumers access and experience entertainment content, and the Company's innovations are found in billions of devices and hundreds of millions of interfaces around the globe.

The Company has two principal businesses, a product business and an IP licensing business. The product business consists primarily of licensing Company-developed audio, digital radio, imaging, edge-based machine learning and multi-channel video user experience ("UX") solutions. Edge based machine learning, audio, digital radio, and imaging solutions include the delivery of software and/or hardware-based solutions to the Company's consumer electronics ("CE") customers, automotive manufacturers or their supply chain partners. UX products and services revenue is primarily derived from multi-channel video service providers and CE manufacturers, licensing the TiVo service and selling TiVo-enabled devices, Personalized Content Discovery, enriched Metadata, viewership data and advertising.

The IP licensing business consists primarily of licensing of the Company's innovations to leading companies in the media and semiconductor industries. Licensing arrangements include access to one or more of the Company's foundational patent portfolios and may also include access to industry-leading technologies and proven know-how. In the media industry, the Company's licensees include pay television ("Pay-TV") providers, both in the United States and internationally, consumer electronics manufacturers, and other providers of video experiences across various platforms, including over-the-top (OTT) video. In the semiconductor industry, the Company's licensees include semiconductor manufacturers, fabless companies, foundries, and packaging companies.

The accompanying interim unaudited condensed consolidated financial statements as of September 30, 2020 and 2019, and for the three and nine months then ended, have been prepared by the Company in accordance with generally accepted accounting principles ("GAAP") in the United States ("U.S.") for interim financial information. The amounts as of December 31, 2019 have been derived from the Company's annual audited financial statements. Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted in accordance with such rules and regulations. In the opinion of management, the accompanying unaudited condensed consolidated financial statements reflect all adjustments necessary (consisting of normal recurring adjustments) to state fairly the financial position of the Company and its results of operations and cash flows as of and for the periods presented. These financial statements should be read in conjunction with the annual audited financial statements and notes thereto as of and for the year ended December 31, 2019, included in Xperi's Annual Report on Form 10-K for the year ended December 31, 2019

and TiVo's Annual Report on Form 10-K for the year ended December 31, 2019, both of which were filed on February 18, 2020.

The results of operations for the three and nine months ended September 30, 2020 are not necessarily indicative of the results that may be expected for the full year ending December 31, 2020 or any future period and the Company makes no representations related thereto.

In the fourth quarter of 2018, the Company funded a new subsidiary, Perceive Corporation ("Perceive"), which was created to focus on delivering edge inference solutions. As a result of issuing new shares in Perceive to noncontrolling interests, the Company's ownership interest in Perceive was approximately 81% as of September 30, 2020. The operating results of Perceive have been consolidated in the Company's condensed consolidated financial statements for all periods presented.

In the first quarter of 2019, the Company recorded an out-of-period adjustment to decrease current unbilled receivables and decrease retained earnings by $2.9 million to correct an error that originated in the first quarter of 2018 in connection with its adoption of Accounting Standards Update ("ASU") No. 2014-09 (Topic 606) "*Revenue from Contracts with Customers*." The adjustment relates to an error in the Company's interpretation of the payment terms of a contract entered into in a prior year. The Company determined that the error was not material to any of its prior annual and interim period financial statements, and the impact of such correction was not considered to be material to the financial statements for the three and nine months ended September 30, 2019.

Reclassification

As a result of the Mergers, certain reclassifications of prior period amounts have been made to improve comparability and conform to the current period presentation. Presentation changes were made to the Condensed Consolidated Statements of Operations. In addition, certain reclassifications of prior period data have been made in the Notes to Condensed Consolidated Financial Statements to conform to the current period presentation.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Company's significant accounting policies are detailed in "Note 2 – Summary of Significant Accounting Policies" in its Form 10-K for the year ended December 31, 2019. Certain updates to its revenue recognition policy as a result of the Mergers are provided in "Note 3 – Revenue."

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. The accounting estimates and assumptions that require management's most significant, challenging, and subjective judgment include the estimation of licensees' quarterly royalties prior to receiving the royalty reports, the determination of stand-alone selling price and the transaction price in an arrangement with multiple performance obligations, the estimation of variable consideration, judgment used to estimate the progress toward completion in the Company's engineering services, the collectability of accounts receivable, other intangible assets and investments, the assessment of the recoverability of goodwill, the assessment of useful lives and recoverability of other intangible assets and long-lived assets, recognition and measurement of current and deferred income tax assets and liabilities, the assessment of unrecognized tax benefits, and purchase accounting resulting from business combinations, among others. Actual results experienced by the Company may differ from management's estimates.

The COVID-19 pandemic has resulted in a global slowdown of economic activity which is likely to reduce the future demand for a broad variety of goods and services, while also disrupting sales channels, marketing activities and supply chains for an unknown period of time until the virus is fully contained. The Company's business operations have been negatively impacted by the COVID-19 pandemic and related events and the Company expects this disruption to continue to have a negative impact on its revenue and results of operations, the size and duration of which is currently difficult to predict. The impact to date has included a decline in demand in various markets and industries, particularly the automotive market. For example, the Company anticipates approximately 20% decline in its royalty revenue in 2020 from the products sold to the automotive market, such as HD Radio, as compared to the prior year. Although the Company is unable to predict the full impact and duration of COVID-19 on its business, the Company is actively managing its financial expenditures in response to the current uncertainty.

The impact of the COVID-19 pandemic and related events, including actions taken by various government authorities in response, have increased market volatility and make the estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes more difficult. As of the date of issuance of the financial statements, the Company is not aware of any specific event or circumstance that would require it to update its estimates, judgments or revise

the carrying value of its assets or liabilities. These estimates may change, as new events occur and additional information is obtained, and are recognized in the consolidated financial statements as soon as they become known.

Recently Adopted Accounting Pronouncements

In September 2016, the Financial Accounting Standards Board ("FASB") issued ASU No. 2016-13, "*Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*" ("ASU 2016-13"), which introduces an approach based on expected losses to estimate credit losses on certain types of financial instruments. 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. On January 1, 2020, the Company adopted the new standard 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. The adoption of this standard did not have a material impact on the Company's consolidated financial statements. For additional detail, refer to "Note 3 – *Revenue*."

In August 2018, the FASB issued ASU 2018-15, "*Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*" ("ASU 2018-15") modifying 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 Company adopted the standard on January 1, 2020 and applied the modified requirements prospectively to all implementation costs incurred after the date of adoption. The adoption did not have a material impact on the Company's consolidated financial statements.

Recent Accounting Pronouncements

In December 2019, the FASB released ASU 2019-12, "*Simplifying the Accounting for Income Taxes*" ("ASU 2019-12"). The purpose of the update is to reduce the complexity pertaining to certain areas in accounting for income taxes. Key amendments from ASU 2019-12 include, but are not limited to, the accounting for hybrid tax regimes, step-up in tax basis for goodwill in non-business combination transactions, intraperiod tax allocation exception to the incremental approach, and interim period accounting for enacted changes in tax law. ASU 2019-12 is effective for the Company in the first quarter of the year ending December 31, 2021. The Company is in the process of evaluating the impact of the adoption of this new standard on its consolidated financial statements and does not currently anticipate a material impact.

In March 2020, the FASB issued ASU 2020-04, Reference Rate Reform (Topic 848): *Facilitation of the Effects of Reference Rate Reform on Financial Reporting* ("ASU 2020-04"). ASU 2020-04 provides optional expedients and exceptions for applying GAAP to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. The amendments in ASU 2020-04 apply only to contracts, hedging relationships, and other transactions that reference the London Interbank Offered Rate ("LIBOR") or another reference rate expected to be discontinued because of reference rate reform. ASU 2020-04 is effective beginning on March 12, 2020 and may be applied prospectively through December 31, 2022. The Company is currently assessing the potential impact of the standard on its consolidated financial statements.

NOTE 3 – REVENUE

Revenue Recognition

General

Revenue is recognized when control of the promised goods or services is transferred to a customer in an amount that reflects the consideration the Company expects to receive in exchange for those goods or services, which may include various combinations of goods and services which are generally capable of being distinct and accounted for as separate performance obligations. Revenue is recognized net of sales taxes collected from customers which are subsequently remitted to governmental authorities. In situations where foreign withholding taxes are withheld by the Company's licensee, revenue is recognized gross of withholding taxes that are remitted directly by the licensee to a local tax authority.

Arrangements with Multiple Performance Obligations

Some of the Company's contracts with customers contain multiple performance obligations. For these contracts, the individual performance obligations are separately accounted for if they are distinct. In an arrangement with multiple performance obligations, the transaction price is allocated among the separate performance obligations on a relative stand-alone selling price basis. The determination of stand-alone selling price considers market conditions, the size and scope of the contract, customer and geographic information, and other factors. When observable prices are not available, stand-alone selling price for separate performance obligations is based on the cost-plus-margin approach, considering overall pricing objectives. The allocation of transaction price among performance obligations in a contract may impact the amount and timing of revenue recognized in the Consolidated Statements of Operations during a given period.

Contract Modifications

Contracts may be modified due to changes in contract specifications or customer requirements. Contract modifications occur when the change in terms either creates new enforceable rights and obligations or changes existing enforceable rights and obligations. The effect of a contract modification for goods and services that are not distinct in the context of the contract on the transaction price is recognized as an adjustment to revenue on a cumulative catch-up basis. Contract modifications that result in goods or services that are distinct from the existing goods or services are accounted for as separate contracts if they are sold at their stand-alone selling price, or otherwise prospectively.

Variable Consideration

When a contract with a customer includes a variable transaction price, an estimate of the consideration which the Company expects to be entitled to for transferring the promised goods or services is made at contract inception. Depending on the terms of the contract, variable consideration is estimated using either the expected value approach or the most likely value approach. Under either approach to estimating variable consideration, the estimate considers all information (historical, current and forecast) that is reasonably available at contract inception. The amount of variable consideration is estimated at contract inception and updated as additional information becomes available. The estimate of variable consideration is included in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. Subsequent changes in the transaction price resulting from changes in the estimate of variable consideration are allocated to the performance obligations in the contract on the same basis as at contract inception. Certain payments to licensees, retailers and distributors, such as market development funds and revenue shares, are treated as a reduction of the transaction price, and therefore a reduction to revenue, unless the payment is in exchange for a distinct good or service that the licensee, retailer or distributor transfers to the Company.

When variable consideration is in the form of a sales-based or usage-based royalty in exchange for a license of IP, or when a license of IP is the predominant item to which the variable consideration relates, revenue is recognized at the later of when the subsequent sale or usage occurs or the performance obligation to which some or all of the sales-based or usage-based royalty has been allocated has been satisfied or partially satisfied.

Nature of Goods and Services

The following is a discussion of the principal activities from which the Company generates its revenue.

License Agreements

The Company operates in two business segments. In its Product segment, the Company licenses its audio, imaging, edge-based machine learning and multi-channel video user experience ("UX") solutions. In its IP Licensing segment, the Company licenses its media patent portfolios ("IP Media licensing") to Pay-TV, CE manufacturers and other providers of video experiences across various platforms. In addition, the Company licenses its semiconductor technologies and associated patent portfolios ("IP Semiconductor licensing") to semiconductor manufacturers, fabless companies, foundries and packaging companies. The Company licenses its technologies and portfolios under three revenue models: (i) fixed-fee IP Media licensing, (ii) fixed-fee or minimum guarantee Product or IP Semiconductor licensing, and (iii) per-unit or per-subscriber royalty licenses.

Fixed-fee IP Media licensing

The Company's long-term fixed-fee IP Media licensing agreements provide its customers with rights to future patented technologies over the term of the agreement that are highly interdependent or highly interrelated to the patented technologies provided at the inception of the agreement. The Company treats these rights as a single performance obligation with revenue recognized on a straight-line basis over the term of the fixed-fee license agreement.

At times, the Company enters into license agreements in which a licensee is released from past patent infringement claims or is granted a license to ship an unlimited number of units or for an unlimited number of subscribers over a future period for a fixed fee. In these arrangements, the Company allocates the transaction price between the release for past patent infringement claims and the future license. In determining the stand-alone selling price of the release for past patent infringement claims and the future license, the Company considers such factors as the number of units shipped in the past or the number of past subscribers and the relevant geographies of the shipped units or subscribers, the future number of subscribers or units, as well as the licensing rate the Company generally receives for per subscriber or units shipped in the same geographies. As the release from past patent infringement claims is generally satisfied at execution of the agreement, the transaction price allocated to the release from past patent infringement claims is generally recognized in the period the agreement is executed and the amount of transaction price allocated to the future license is recognized ratably over the future license term.

Fixed-fee or minimum guarantee IP Semiconductor or Product licensing

The Company enters into IP Semiconductor or Product licenses that have fixed fee or minimum guarantee arrangements, whereby licensees pay a fixed fee for the right to incorporate the Company’s technology in the licensee's products over the license term. In arrangements with a minimum guarantee, the fixed fee component corresponds to a minimum number of units or dollars that the customer must produce or pay, with additional per-unit fees for any units or dollars exceeding the minimum. In most cases, the customer pays the fixed license fee in specified installments over the license term. For both fixed fee and minimum guarantee agreements for IP Semiconductor or Product licensing, the Company recognizes the full fixed fee as revenue at the beginning of the license term, when the licensee has the right to use the IP and begins to benefit from the license.

If the contract term of a fixed fee or minimum guarantee arrangement is longer than one year, the Company also considers the scheduled payment arrangements to determine whether a significant financing component exists. In general, if the payment arrangements extend beyond the initial twelve months of the contract, the Company treats a portion of the payments as a significant financing component. The discount rate used for each arrangement reflects the rate that would be used in a separate financing transaction between the Company and the licensee at contract inception and takes into account the credit characteristics of the licensee and market interest rates as of the date of the agreement. As such, the amount of fixed fee revenue recognized at the beginning of the license term will be reduced by the calculated financing component. As payments are received from the licensee, the Company recognizes a portion of the financing component as interest income, reported as other income and expense in the Consolidated Statements of Operations.

Per-unit or per-subscriber royalty licenses

The Company recognizes revenue from per-unit or per-subscriber royalty licenses in the period in which the licensee's sales or production are estimated to have occurred, which results in an adjustment to revenue when actual sales or production are subsequently reported by the licensee, which is generally in the month or quarter following usage or shipment. The Company generally recognizes revenue from royalty licenses on a per-subscriber per-month model for licenses with service providers and a per-unit shipped or manufactured model for licenses with CE manufacturers.

Compliance Audits

The Company actively monitors and enforces its IP, including seeking appropriate compensation from customers that have under-reported royalties owed under a license agreement and from third parties that utilize the Company’s intellectual property without a license. As a result of these activities, the Company may, from time to time, recognize revenue from payments resulting from periodic compliance audits of licensees for underreporting royalties incurred in prior periods, as part of a settlement of a patent infringement dispute, or from legal judgments in a license dispute. These recoveries and settlements may cause revenue to be higher than expected during a particular reporting period and such recoveries may not occur in subsequent periods. The Company recognizes revenue from recoveries when a binding agreement has been executed and the Company concludes collection under that agreement is likely.

Arrangements with Multiple System Operators for the TiVo Service

The Company's arrangements with multiple system operators ("MSOs") typically include software customization and set-up services, associated maintenance and support, limited training, post-contract support, TiVo-enabled DVRs, non-DVR Set-Top Boxes (“STBs”), and the TiVo service.

The Company has two types of arrangements with MSOs that include technology deployment and engineering services. In instances where the Company hosts the TiVo service, non-refundable payments received for customization and set-up services are deferred and recognized as revenue ratably over the hosting term. The related cost of such services is capitalized to the extent it is deemed recoverable and amortized to cost of revenue over the same period as the related TiVo service revenue is

recognized. The Company estimates the stand-alone selling prices for training, DVRs, non-DVR STBs and maintenance and support based on the price charged in stand-alone sales of the promised good or service. The stand-alone selling price for the TiVo service is determined by considering the size of the MSO and expected volume of deployment, market conditions, competitive landscape, internal costs and total gross margin objectives. For a term license to the TiVo service, the Company receives license fees for the hosted TiVo service on either a per-subscriber per-month basis or a fixed fee. The Company recognizes revenue from per-subscriber per-month licenses during the month the TiVo service is provided to the customer and recognizes revenue from fixed fee licenses ratably over the license period.

In arrangements where the Company does not host the TiVo service, which includes engineering services that are essential to the functionality of the licensed technology or involve significant customization or modification of the software, the Company recognizes revenue as progress toward completion is made using an input method based on the ratio of costs incurred to date to total estimated costs of the project. Project costs are primarily labor related to specific activities required for the project. Costs related to general infrastructure or uncommitted platform development are not included in the project cost estimates and are expensed as incurred. Estimating project costs requires forecasting costs, tracking progress toward completion and projecting the remaining effort to complete the project. These estimates are reassessed throughout the term of the arrangement, and revisions to estimates are recognized on a cumulative catch-up basis when the changed conditions become known. Provisions for losses are recorded when estimates indicate it is probable that a loss will be incurred for the contract. The Company generally recognizes revenue from license fees for the TiVo service that the Company does not host on a per-subscriber per-month basis due to the recognition constraint on intellectual property usage-based royalties.

Subscription Services

Subscription services revenue primarily consists of fees to provide customers with access to one or more of the Company's hosted products such as its iGuide interactive program guide (“IPG”), advanced search and recommendations, metadata and analytics products, including routine customer support. The Company generally receives per-subscriber per-month fees for its iGuide IPG and search and recommendations service and revenue is recorded in the month the customer uses the service. The Company generally receives a monthly or quarterly fee from its metadata or analytics licenses for the right to use the metadata or access its analytics platform and to receive regular updates. Revenue from the Company's metadata and analytics service is recognized ratably over the subscription period.

TiVo-enabled DVRs and TiVo Service

The Company sells TiVo-enabled DVRs and the related service directly to customers through sales programs via the TiVo.com website and licenses the sale of TiVo-enabled DVRs through a limited number of retailers. All customers have the right to cancel their subscription to the TiVo service within 30 days of subscription activation for a full refund. After the initial subscription period, all customers have various pricing options when they renew their subscription.

The transaction price allocated to the DVR is recognized as revenue upon shipment to the customer and the transaction price allocated to the TiVo service is recognized as revenue ratably over the service period. Subscription revenue from lifetime subscriptions are recognized ratably over the estimated useful life of the DVR associated with the subscription. The estimated useful life for a DVR depends on a number of assumptions, including, but not limited to, customer retention rates, the timing of new product introductions and historical experience. The Company periodically reassesses the estimated useful life of a DVR. When the actual useful life of the DVR materially differs from the Company's estimate, the estimated useful life of the DVR is adjusted, which could result in the recognition of revenue over a longer or shorter period of time.

Significant Judgments

Determining whether promises to transfer multiple goods and services in contracts with customers are considered distinct performance obligations that should be accounted for separately requires significant judgment, including related to the level of integration and interdependency between the performance obligations. In addition, judgment is necessary to allocate the transaction price to the distinct performance obligations, including whether there is a discount or significant financing component to be allocated based on the relative stand-alone selling price of the various performance obligations.

Significant judgment is required to determine the stand-alone selling price for each distinct performance obligation when an observable price is not available. In instances where stand-alone selling price is not directly observable, such as when the Company does not sell the good or service separately, the stand-alone selling price is determined using a range of inputs that includes market conditions and other observable inputs. More than one stand-alone selling price may exist for individual goods and services due to the stratification of those goods and services, considering attributes such as the size of the customer and geographic region.

Due to the nature of the work required to be performed on some performance obligations, significant judgment may be required to determine the transaction price. It is common for the Company's license agreements to contain provisions that can either increase or decrease the transaction price. These variable amounts are generally estimated based on usage. In addition to estimating variable consideration, significant judgment is necessary to identify forms of variable consideration, determine whether the variable consideration relates to a sales-based or usage-based royalty of intellectual property and determine whether, and when to include estimates of variable consideration in the transaction price.

For certain licensees, royalty revenue is generated based on a licensee's production or shipment of licensed products incorporating the Company's intellectual property, technologies or software. Licensees with a per-unit or per-subscriber arrangement pay a per-unit royalty for each product manufactured or sold, or for each subscriber, as set forth in its license agreement. Licensees generally report manufacturing, sales or subscriber information in the month or quarter subsequent to when the production, shipment or subscription activity takes place. The Company estimates the royalties earned each quarter based on its forecast of manufacturing and sales activity by its licensees in that quarter. Any differences between actual royalties owed by a licensee and the Company's estimate are recognized when the licensee's royalty report is received. Estimating licensees' quarterly royalties prior to receiving the royalty reports requires the Company to make significant assumptions and judgments related to forecasted trends and growth rates used to estimate quantities manufactured, shipped or subscribed by licensees, which could have a material impact on the amount of revenue recognized.

Some hardware products are sold with a right of return and, in certain circumstances, credits or incentives may be provided to customers or resellers at the time of sale. Such credits and incentives are accounted for as variable consideration and recognized as a reduction to revenue. Estimates of returns, credits and incentives are made at contract inception and updated each reporting period.

In contracts where the Company does not host the TiVo service and that include engineering services that are essential to the functionality of the licensed technology or involve significant customization or modification of software, or where the Company provides non-recurring engineering ("NRE") services, the Company recognizes revenue as progress toward completion occurs using an input method based on the ratio of costs incurred to date to total estimated costs of the project. Significant judgment is required to estimate the remaining effort to complete the project. These estimates are reassessed throughout the term of the arrangement.

Management evaluates its estimates, inputs and assumptions related to revenue recognition on an ongoing basis. The use of different estimates, inputs or assumptions may materially affect the reported amounts of assets and liabilities as of the date of the financial statements and the results of operations for the reporting period.

Practical Expedients and Exemptions

The Company applies a practical expedient to not perform an evaluation of whether a contract includes a significant financing component when the timing of revenue recognition differs from the timing of cash collection by one year or less.

The Company applies a practical expedient to expense costs to obtain a contract with a customer as incurred as a component of selling, general and administrative expenses when the amortization period would have been one year or less.

The Company applies a practical expedient when disclosing revenue expected to be recognized from unsatisfied performance obligations to exclude contracts with customers with an original duration of less than one year; contracts for which revenue is recognized based on the amount which the Company has the right to invoice for services performed and amounts attributable to variable consideration arising from (i) a sales-based or usage-based royalty of an intellectual property license or (ii) when variable consideration is allocated entirely to a wholly unsatisfied performance obligation; or to a wholly unsatisfied promise to transfer a distinct good or service that forms part of a single performance obligation.

For additional detail on the Company's revenue disaggregated by geographic location, refer to "Note 16 – *Segment and Geographic Information*."

Contract Balances

Contracts Assets

Contract assets primarily consist of unbilled contracts receivable that are expected to be received from customers in future periods, where the revenue recognized to date (or cumulative adjustments to retained earnings in the initial period of adopting Topic 606) exceeds the amount billed. The amount of unbilled contracts receivable may not exceed their net realizable value and are classified as long-term assets if the payments are expected to be received more than one year from the reporting date.

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, and deferred engineering costs for significant software customization or modification and set-up services to the extent deemed recoverable. Contract assets were recorded in the Condensed Consolidated Balance Sheets as follows (in thousands):

	September 30, 2020	December 31, 2019
Unbilled contracts receivable	$ 164,138	$ 121,826
Other current assets	566	—
Long-term unbilled contracts receivable	15,083	26,672
Other long-term assets	1,360	—
Total contract assets	$ 181,147	$ 148,498

Contract Liabilities

Contract liabilities are mainly comprised of deferred 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 while the promised good or service is transferred to the customer at a future date or over time. Deferred revenue also includes amounts received related to professional services to be performed in the future. Deferred revenue arises when cash payments are received, including amounts which are refundable, in advance of performance obligations being completed.

Allowance for Credit Losses

The allowance for credit losses, which includes the allowance for accounts receivable and unbilled contracts receivable, represents the Company's best estimate of lifetime expected credit losses inherent in those financial assets. The Company's lifetime expected credit losses are determined using relevant information about past events (including historical experience), current conditions, and reasonable and supportable forecasts that affect collectability. The Company monitors its credit exposure through ongoing credit evaluations of its customers' financial condition and limits the amount of credit extended when deemed necessary. In addition, the Company performs routine credit management activities such as timely account reconciliations, dispute resolution, and payment confirmations. The Company may employ collection agencies and legal counsel to pursue recovery of defaulted receivables.

The Company's long-term unbilled contracts receivable is derived from fixed-fee or minimum-guarantee arrangements, primarily with large well-capitalized companies. It is considered to be of high credit quality due to past collection history and the nature of the customers.

The following table presents the activity in the allowance for credit losses for the three and nine months ended September 30, 2020 (in thousands):

	Three Months Ended September 30, 2020		Nine Months Ended September 30, 2020	
	Accounts Receivable	Unbilled Contracts Receivable	Accounts Receivable	Unbilled Contracts Receivable
Beginning balance	$ 2,469	$ 357	$ 566	$ —
Provision for credit losses	1,163 (1)	232	3,391 (1)	589
Recoveries/charged-off	(8)	1	(333)	1
Balance at end of period	$ 3,624	$ 590	$ 3,624	$ 590

(1) The increase in provision for credit losses was due to late payments and collection issues with certain of the Company's customers in the third quarter of 2020.

(2)The increase in provision for credit losses was based on assessment of current conditions including the COVID-19 pandemic and anticipation of delayed or delinquent payments on existing accounts receivable as a result of the declining financial health and liquidity positions of certain of the Company's customers during the first quarter, as well as late payments and collection issues in the third quarter of 2020.

Additional Disclosures Under Topic 606

The following table presents additional revenue and contract disclosures (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Revenue recognized in the period from:				
Amounts included in deferred revenue at the beginning of the period	$ 12,364	$ 175	$ 50	$ 3,130
Performance obligations satisfied in previous periods (true ups, licensee reporting adjustments and settlements)*	$ 12,232	$ 1,349	$ 66,454	$ 2,941

*True ups represent the differences between the Company's quarterly estimates of per unit royalty revenue and actual production/sales-based royalties reported by licensees in the following period. Licensee reporting adjustments represent corrections or revisions to previously reported per unit royalties by licensees, generally resulting from the Company's inquiries or compliance audits. Settlements represent resolutions of litigation during the period for past royalties owed pursuant to expired or terminated IP license agreements.

Remaining revenue under contracts with performance obligations represents the aggregate amount of the transaction price allocated to the performance obligations that are unsatisfied (or partially unsatisfied) under the Company's fixed-fee IP, software-as-a-service agreements and engineering services contracts. The Company's remaining revenue under contracts with performance obligations was as follows (in thousands):

	As of	
	September 30, 2020	December 31, 2019
Revenue from contracts with performance obligations expected to be satisfied in:		
2020 (remaining 3 months)	$ 48,032	$ 5,337
2021	145,813	990
2022	99,594	345
2023	89,523	—
2024	75,883	—
Thereafter	74,079	—
Total	$ 532,924	$ 6,672

NOTE 4 – COMPOSITION OF CERTAIN FINANCIAL STATEMENT CAPTIONS

Other current assets consisted of the following (in thousands):

	September 30, 2020	December 31, 2019
Prepaid income taxes	$ 3,895	$ 2,364
Prepaid expenses	21,707	8,802
Inventory	6,154	79
Other	4,328	2,490
	$ 36,084	$ 13,735

Property and equipment, net, consisted of the following (in thousands):

	September 30, 2020	December 31, 2019
Equipment, furniture and other	$ 58,366	$ 32,504
Building and improvements	18,309	18,258
Land	5,300	5,300
Leasehold improvements	26,149	8,103
	108,124	64,165
Less: accumulated depreciation and amortization	(42,692)	(31,288)
	$ 65,432	$ 32,877

Other long-term assets consisted of the following (in thousands):

	September 30, 2020	December 31, 2019
Non-current income tax receivable	$ 109,745	$ 64,570
Long-term deferred tax assets	5,735	3,660
Other assets	20,915	3,106
	$ 136,395	$ 71,336

Accrued liabilities consisted of the following (in thousands):

	September 30, 2020	December 31, 2019
Employee compensation and benefits	$ 35,819	$ 18,404
Accrued expenses	22,367	7,930
Current portion of operating lease liabilities	17,577	5,845
Accrued severance	6,695	—
Third-party royalties	3,775	6,165
Other	12,529	3,089
	$ 98,762	$ 41,433

Other long-term liabilities consisted of the following (in thousands):

	September 30, 2020	December 31, 2019
Long-term income tax payable	$ 91,676	$ 76,767
Other	3,961	131
	$ 95,637	$ 76,898

Accumulated other comprehensive income (loss) consisted of the following (in thousands):

	September 30, 2020	December 31, 2019
Foreign currency translation adjustment, net of tax	$ 895	$ —
Unrealized loss on available-for-sale debt securities, net of tax	(76)	(53)
	$ 819	$ (53)

Other income and expense, net, consisted of the following (in thousands):

	Three Months Ended,		Nine Months Ended,	
	September 30, 2020	September 30, 2019	September 30, 2020	September 30, 2019
Interest income from significant financing components under Topic 606	$ 547	$ 906	$ 2,243	$ 4,626
Interest income from investments	456	420	1,248	1,702
Unrealized/realized gain (loss) on marketable equity securities	—	(1,060)	(707)	563
Other income/(expense), net	1,302	163	664	646
	$ 2,305	$ 429	$ 3,448	$ 7,537

NOTE 5 – FINANCIAL INSTRUMENTS

The Company has investments in debt securities which include corporate bonds and notes, treasury and agency notes and bills, commercial paper, certificates of deposit, and in equity securities consisting of money market funds. The Company classifies its debt securities as available-for-sale ("AFS"), which are accounted for at fair value with credit related losses recognized as a provision for credit loss expense in its Condensed Consolidated Statements of Operations and all non-credit related unrealized gains and losses recognized in accumulated other comprehensive income or loss on the Condensed Consolidated Balance Sheets. Under ASU 2016-01 (Topic 321), equity securities are measured at fair value with unrealized gains and losses recognized in other income and expense, net, on the Condensed Consolidated Statements of Operations.

The following is a summary of marketable securities at September 30, 2020 and December 31, 2019 (in thousands):

	September 30, 2020				
	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Allowance for Credit Losses	Estimated Fair Values
Marketable securities					
Corporate bonds and notes	$ 72,273	$ 61	$ (62)	$ —	$ 72,272
Treasury and agency notes and bills	4,999	—	(1)	—	4,998
Commercial paper	9,990	—	(2)	—	9,988
Total debt securities	87,262	61	(65)	—	87,258
Money market funds	4,771	—	—	—	4,771
Total equity securities	4,771	—	—	—	4,771
Total marketable securities	$ 92,033	$ 61	$ (65)	$ —	$ 92,029
Reported in:					
Cash and cash equivalents					$ 4,771
Available-for-sale debt securities					87,258
Total marketable securities					$ 92,029

	December 31, 2019			
	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Values
Marketable securities				
Corporate bonds and notes	$ 41,730	$ 29	$ (13)	$ 41,746
Commercial paper	4,052	4	—	4,056
Total debt securities	45,782	33	(13)	45,802
Money market funds	2,601	—	—	2,601
Marketable equity securities	3,405	—	(2,281)	1,124
Total equity securities	6,006	—	(2,281)	3,725
Total marketable securities	$ 51,788	$ 33	$ (2,294)	$ 49,527
Reported in:				
Cash and cash equivalents				$ 2,601
Available-for-sale debt securities				45,802
Equity securities				1,124
Total marketable securities				$ 49,527

At September 30, 2020 and December 31, 2019, the Company had $203.0 million and $121.5 million, respectively, in cash, cash equivalents and short-term investments. These balances include $111.0 million and $72.0 million in cash held in operating accounts not included in the tables above at September 30, 2020 and December 31, 2019, respectively.

Debt Securities

The gross realized gains and losses on sales of marketable debt securities were not significant during the three and nine months ended September 30, 2020 and 2019, respectively.

Unrealized losses on AFS debt securities were $0.1 million and $0.1 million, net of tax, as of September 30, 2020 and December 31, 2019, respectively. The Company evaluated whether the decline in fair value has resulted from credit losses or other factors and concluded these amounts were related to temporary fluctuations in value of AFS securities and were due primarily to changes in interest rates and market conditions of the underlying securities. In addition, the contractual terms of those investments do not permit the issuer to settle the securities at a price less than the amortized cost bases of the investments. The Company does not intend to sell the debt securities and it is more-likely-than-not that it will not be required to sell the investments before recovery of their amortized cost bases. The Company did not recognize a provision for credit loss expense related to its AFS debt securities for the three and nine months ended September 30, 2020, respectively. No impairment charges were recorded on the AFS debt securities for the three and nine months ended September 30, 2019, respectively.

The following table summarizes the fair value and gross unrealized losses related to individual AFS debt securities at September 30, 2020 and December 31, 2019, which have been in a continuous unrealized loss position, aggregated by investment category and length of time (in thousands):

	Less Than 12 Months		12 Months or More		Total	
September 30, 2020	**Fair Value**	**Gross Unrealized Losses**	**Fair Value**	**Gross Unrealized Losses**	**Fair Value**	**Gross Unrealized Losses**
Corporate bonds and notes	$ 52,933	$ (62)	$ —	$ —	$ 52,933	$ (62)
Treasury and agency notes and bills	4,998	(1)	—	—	4,998	(1)
Commercial paper	9,988	(2)	—	—	9,988	(2)
Total	$ 67,919	$ (65)	$ —	$ —	$ 67,919	$ (65)

	Less Than 12 Months		12 Months or More		Total	
December 31, 2019	**Fair Value**	**Gross Unrealized Losses**	**Fair Value**	**Gross Unrealized Losses**	**Fair Value**	**Gross Unrealized Losses**
Corporate bonds and notes	$ 20,031	$ (10)	$ 8,753	$ (3)	$ 28,784	$ (13)
Total	$ 20,031	$ (10)	$ 8,753	$ (3)	$ 28,784	$ (13)

The estimated fair value of marketable debt securities by contractual maturity at September 30, 2020 is shown below (in thousands). Actual maturities may differ from contractual maturities because issuers may have the right to call or prepay obligations without penalties.

	Estimated Fair Value
Due in one year or less	$ 47,005
Due in one to two years	40,253
Total	$ 87,258

Equity Securities

On September 19, 2018, the Company purchased 7.0 million common shares of Onkyo Corporation ("Onkyo"), a publicly traded Japanese company and a long-standing customer of the Company, pursuant to the Capital Alliance Agreement entered into between the two parties on September 3, 2018. Upon making the investment, the Company held a 6.3% ownership interest in Onkyo. Due to changes in business expectations, the Company determined not to continue discussions on the business alliance. In July 2019, the Company sold approximately 2.8 million shares of Onkyo stock and realized a gain of $0.9 million. In June 2020, the Company sold the remaining 4.2 million shares of Onkyo stock. For the nine months ended September 30, 2020, total realized loss on the Onkyo investment was approximately $0.7 million.

Non-marketable Equity Securities

Investments in non-marketable equity securities are accounted for using either the equity method or the cost method. Investments in entities over which the Company has the ability to exercise significant influence, but does not hold a controlling interest, are accounted for using the equity method. Under the equity method, the Company records its proportionate share of income or loss in other income and expense, net, in the Condensed Consolidated Statements of Operations. Investments in entities over which the Company does not have the ability to exercise significant influence are accounted for using the cost method. The Company monitors its non-marketable securities portfolio for potential impairment. When the carrying amount of an investment in a non-marketable security exceeds its fair value and the decline in fair value is determined to be other-than-temporary, the loss is recorded in other income and expense, net, in the Condensed Consolidated Statements of Operations.

Upon merging with TiVo on June 1, 2020, the Company assumed certain investments in non-marketable equity. As of September 30, 2020, other long-term assets included equity securities accounted for under the equity method with a carrying amount of $4.1 million and equity securities without a readily determinable fair value with a carrying amount of $0.1 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, 2020, respectively. The Company had no investments in non-marketable equity securities prior to June 1, 2020.

NOTE 6 – FAIR VALUE

The Company follows the authoritative guidance for fair value measurement and the fair value option for financial assets and financial liabilities. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability, or an exit price, in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The established fair value hierarchy requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. There are three levels of inputs that may be used to measure fair value:

Level 1 Quoted prices in active markets for identical assets.

Level 2 Observable market-based inputs or unobservable inputs that are corroborated by market data.

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets. Level 3 assets and liabilities include financial instruments whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation.

When applying fair value principles in the valuation of assets, the Company is required to maximize the use of quoted market prices and minimize the use of unobservable inputs. The Company calculates the fair value of its Level 1 and Level 2 instruments based on the exchange traded price of similar or identical instruments, where available, or based on other observable inputs. There were no significant transfers into or out of Level 1 or Level 2 that occurred between December 31, 2019 and September 30, 2020.

The following sets forth the fair value, and classification within the hierarchy, of the Company's assets required to be measured at fair value on a recurring basis as of September 30, 2020 (in thousands):

	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Marketable securities				
Money market funds - equity securities (1)	$ 4,771	$ 4,771	$ —	$ —
Treasury and agency notes and bills (2)	4,998	—	4,998	—
Commercial paper (2)	9,988	—	9,988	—
Corporate bonds and notes - debt securities (2)	72,272	—	72,272	—
Total Assets	$ 92,029	$ 4,771	$ 87,258	$ —

(1) Reported as cash and cash equivalents in the Condensed Consolidated Balance Sheet.
(2) Reported as AFS debt securities in the Condensed Consolidated Balance Sheet.

The following sets forth the fair value, and classification within the hierarchy, of the Company's assets required to be measured at fair value on a recurring basis as of December 31, 2019 (in thousands):

	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Marketable securities				
Money market funds - equity securities (1)	$ 2,601	$ 2,601	$ —	$ —
Marketable equity securities (2)	1,124	1,124	—	—
Commercial paper - debt securities (3)	4,056	—	4,056	—
Corporate bonds and notes - debt securities (3)	41,746	—	41,746	—
Total Assets	$ 49,527	$ 3,725	$ 45,802	$ —

(1) Reported as cash and cash equivalents in the Condensed Consolidated Balance Sheet.
(2) Reported as equity securities in the Condensed Consolidated Balance Sheet.

(3) Reported as AFS debt securities in the Condensed Consolidated Balance Sheet.

Financial Instruments Not Recorded at Fair Value

The Company's long-term debt is carried at amortized cost and is measured at fair value on a quarterly basis for disclosure purposes. The carrying amounts and estimated fair values are as follows (in thousands):

	September 30, 2020		December 31, 2019	
	Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
2020 Term B Loan Facility (1)	$ 1,000,186	$ 978,152	$ —	$ —
2021 Convertible Notes	48	48	—	—
2018 Amended Term B Loan (1)	—	—	334,679	335,642
Total long-term debt, net	$ 1,000,234	$ 978,200	$ 334,679	$ 335,642

(1) Carrying amounts of long-term debt are net of unamortized debt issuance costs of $36.7 million and $9.3 million as of September 30, 2020 and December 31, 2019, respectively. See "Note 9 – *Debt*" for additional information.

If reported at fair value in the Condensed Consolidated Balance Sheets, the Company's debt would be classified within Level 2 of the fair value hierarchy. The fair value of the debt was estimated based on the quoted market prices for the same or similar issues.

NOTE 7 – BUSINESS COMBINATION

Effective June 1, 2020, Xperi and TiVo completed the previously announced merger of equals transaction (the "Merger") contemplated by the Agreement and Plan of Merger and Reorganization, dated as of December 18, 2019, as amended on January 31, 2020, (the "Merger Agreement"), by and among Xperi, TiVo, XRAY-TWOLF HoldCo Corporation ("Xperi Holding"), XRAY Merger Sub Corporation ("Xperi Merger Sub") and TWOLF Merger Sub Corporation ("TiVo Merger Sub"). Immediately prior to the consummation of the Merger, Xperi Holding changed its name to "Xperi Holding Corporation" (the "Company"). Pursuant to the Merger Agreement, (i) Xperi Merger Sub was merged with and into Xperi, with Xperi surviving the merger as a subsidiary of Xperi Holding Corporation (the "Xperi Merger") and (ii) TiVo Merger Sub was merged with and into TiVo, with TiVo surviving the merger as a subsidiary of Xperi Holding Corporation (the "TiVo Merger" and together with the Xperi Merger, the "Mergers"). Immediately following the consummation of the Mergers, each of Xperi and TiVo became wholly-owned subsidiaries of the Company.

Upon completion of the Xperi Merger, each share of common stock, par value $0.001 per share, of Xperi (the "Xperi Common Stock") (excluding any shares of Xperi Common Stock that were held in treasury immediately prior to the effective time of the Xperi Merger, which were automatically canceled and retired for no consideration) was converted into the right to receive one fully paid and non-assessable share of common stock, par value $0.001 per share, of the Company ("Company Common Stock"). Upon completion of the TiVo Merger, (i) each share of common stock, par value $0.001 per share, of TiVo (the "TiVo Common Stock") (excluding any shares of TiVo Common Stock that were held in treasury immediately prior to the effective time of the TiVo Merger, which were automatically canceled and retired for no consideration) was converted into the right to receive 0.455 fully paid and non-assessable shares of common stock of the Company (the "Exchange Ratio"), in addition to cash in lieu of any fractional shares of the Company Common Stock.

As provided in the Merger Agreement, at the effective time of the Mergers, (i) all options, restricted shares, restricted stock unit awards and other equity awards relating to shares of Xperi Common Stock outstanding immediately prior to the effective time of the Mergers were generally automatically converted into options, restricted shares, restricted stock unit awards and other equity awards, respectively, relating to shares of Company Common Stock after giving effect to appropriate adjustments to reflect the Mergers and otherwise generally on the same terms and conditions as applied under the applicable plans and award agreements immediately prior to the effective time of the Mergers, and (ii) all options, restricted shares, restricted stock unit awards and other equity awards relating to shares of TiVo Common Stock that were outstanding immediately prior to the effective time of the Mergers (including Exchange Ratio) were generally automatically converted into options, restricted stock unit awards, restricted shares and other equity awards, respectively, relating to shares of Company Common Stock after giving effect to appropriate adjustments to reflect the Mergers and otherwise generally on the same terms and conditions as applied under the applicable plans and award agreements immediately prior to the effective time of the Mergers.

Following the Mergers, Xperi Common Stock and TiVo Common Stock were delisted from the Nasdaq Global Select Market ("Nasdaq") and deregistered under the Securities Exchange Act of 1934, as amended. Since June 2, 2020, the shares of the Company's common stock have been listed for trading on Nasdaq under the ticker symbol "XPER."

The Mergers created a leading consumer and entertainment technology and IP licensing company. The Company's IP business includes one of the industry's largest and most successful IP portfolios licensed to a diverse base of customers. On the product side, the Company offers a seamless end-to-end entertainment experience from creation to consumption; with greater scale, technology depth and breadth, and a platform relevant to one of the biggest challenges consumers of entertainment face today – how to quickly and easily find, watch and enjoy entertainment.

The Company is currently contemplating and may pursue, subject to the receipt of approval by the Company's board and any required regulatory approvals, a separation of the Company's product business and IP licensing business through a tax-efficient transaction, resulting in two independent, publicly traded companies. The Company is currently evaluating the optimal timing of the contemplated business separation.

Merger Consideration

The merger consideration of $828.3 million was calculated as follows (amounts in thousands except exchange ratio and share price):

TiVo common shares outstanding as of June 1, 2020	128,132	
TiVo exchange ratio	0.455	
Xperi Holding Corporation common stock issued in exchange	58,300	
Xperi Common Stock closing share price on June 1, 2020	$ 14.00	
		$ 816,201
Fair value of replaced TiVo equity awards relating to pre-acquisition vesting of the equity award holders' requisite service periods		12,133
Total merger consideration		$ 828,334

Assumed TiVo Equity Awards

In connection with the Mergers, the Company assumed unvested TiVo equity incentive awards with a fair value of $34.1 million, of which $12.1 million related to pre-acquisition services and was included in the purchase price, and $22.0 million related to post-acquisition services. The Company valued the restricted stock units at the Company's closing stock price and stock options using a Black-Scholes pricing model as of the date of acquisition. The fair value relating to post-acquisition services will be amortized as stock-based compensation expense over an estimated weighted average remaining service period of 2.5 years.

Preliminary Purchase Price Allocation

Based on an evaluation of the provisions of ASC 805, "Business Combinations," Xperi was determined to be the accounting acquirer in the Mergers. The Company has applied the acquisition method of accounting that requires, among other things, that identifiable assets acquired and liabilities assumed generally be recognized on the balance sheet at fair value as of the acquisition date. In determining the fair value, the Company utilized various forms of the income, cost and market approaches depending on the asset or liability being fair valued. The estimation of fair value required significant judgment related to future net cash flows (including revenue, operating expenses, and working capital), discount rates reflecting the risk inherent in each cash flow stream, competitive trends, market comparables and other factors. Inputs were generally determined by taking into account historical data (supplemented by current and anticipated market conditions) and growth rates.

The table below presents the preliminary fair value that was allocated to TiVo's assets and liabilities based upon fair values as determined by the Company. The initial allocation of the purchase price was based on preliminary valuations and assumptions and is subject to change within the measurement period, including current indirect taxes payable, current and non-current income taxes payable and deferred taxes as additional information is received and tax returns are finalized. The Company expects to finalize the allocation of the purchase price within the measurement period. Final determination of the fair values may result in further adjustments to the values presented in the following table ($ in thousands):

	Estimated Useful Life (years)		Estimated Fair Value
Cash and cash equivalents			$ 117,424
Accounts receivable			105,778
Unbilled contracts receivable			69,058
Other current assets			21,690
Long-term unbilled contracts receivable			129
Property and equipment			41,307
Operating lease right-of-use assets			71,444
Identifiable intangible assets:			
Patents	10	457,400	
Customer contracts and related relationships	4-9	358,200	
Developed technology	5	34,800	
Content database	9	6,200	
Trademarks and tradenames	N/A	21,400	
Total identifiable intangible assets			878,000
Goodwill			461,129
Other long-term assets			43,700
Accounts payable			(13,258)
Accrued legal fees			(5,619)
Accrued liabilities			(79,071)
Current portion of deferred revenue			(29,291)
Current portion of long-term debt			(734,609)
Deferred revenue, less current portion			(24,319)
Long-term deferred tax liabilities			(27,949)
Long-term debt			(48)
Noncurrent operating lease liabilities			(59,291)
Other long-term liabilities			(7,870)
Total purchase price			$ 828,334

The following is a description of the methods used to determine the fair values of significant assets and liabilities.

Identifiable Intangible Assets

Identifiable intangible assets primarily consist of patents, developed technology, customer relationships, trademarks and tradenames, and content database. The fair value of intangibles was based on valuations using assumptions developed by management and other information compiled by management including, but not limited to, discounted future expected cash flows. The fair value of certain customer relationships was calculated by comparing the estimated value with customer relationships in place against the value without those customer relationships in place. The fair value of intangibles relies heavily on projected future net cash flows including, but not limited to, key assumptions for revenue, operating expenses and working capital. The discount rates used for intangible assets are based on current market rates and reflect the risk inherent in each cash flow stream. The estimated useful life reflects the time period in which the Company expects to receive the benefits of the related cash flows. Discounted future expected cash flows and other management estimates are based on significant unobservable inputs and, as a result, the intangible assets acquired would be presented in Level 3 of the fair value hierarchy.

Long-term Debt

On the Merger date, TiVo had outstanding debt under the 2019 Term Loan Facility Agreement (“TiVo 2019 Term Loan”), pursuant to which TiVo was required to pay a 3.0% prepayment premium if the loan was prepaid on or prior to November 22, 2020. Under the 2019 Term Loan Facility Agreement, the Mergers triggered certain change of control conditions that constitute an event of default, thus requiring the debt to be paid immediately following the consummation of the Mergers. In connection with the consummation of the Mergers, the Company, on June 1, 2020, paid the full amount of the outstanding loan balance, including the 3.0% prepayment penalty. See “Note 9 – Debt” for additional information.

Fair value of the TiVo 2019 Term Loan was measured based on the par value of principal outstanding plus prepayment premium, which is equal to the amount that was paid by Xperi immediately following the consummation of the Mergers. The fair value of the TiVo 2019 Term Loan would be classified in Level 2 of the fair value hierarchy.

Goodwill

The excess of the consideration transferred over the fair value of assets acquired and liabilities assumed was recognized as goodwill. The goodwill is generated from operational synergies and cost savings the Company expects to achieve from the combined operations, as well as the expected benefits from future technologies that do not meet the definition of an identifiable intangible asset and TiVo's knowledgeable and experienced workforce. See Note 8 for the allocation of goodwill to the reportable segments. Of the total goodwill acquired, $16.4 million is expected to be deductible for tax purposes; the remainder of the goodwill is not expected to be deductible for tax purposes.

TiVo Results of Operations

TiVo's results of operations and cash flows have been included in the Company's condensed consolidated financial statements for periods subsequent to June 1, 2020, and TiVo's assets and liabilities were recorded at their estimated fair values in the Company's Condensed Consolidated Balance Sheets as of June 1, 2020. For the three and nine months ended September 30, 2020, TiVo contributed $159.0 million and $211.8 million in revenue, respectively, and $28.9 million and $20.9 million in operating income, respectively, to the operating results of the Company.

Transaction and Severance Costs

In connection with the Mergers, the Company incurred significant one-time expenses in the first three quarters of 2020 such as transaction related costs (e.g. bankers fees, legal fees, consultant fees, etc.), lease impairment charges due to facilities consolidation, severance and retention costs (including stock-based compensation expense resulting from the contractually-required acceleration of equity instruments for departing executives). Total transaction related costs amounted to $1.2 million and $29.1 million for the three and nine months ended September 30, 2020, respectively. Lease impairment charges were $0.7 million and $0.7 million for the three and nine months ended September 30, 2020, respectively. In addition, post-merger severance and retention costs (including related stock-based compensation expense) were $3.6 million and $12.1 million for the three and nine months ended September 30, 2020, respectively. The Company may incur additional expenses for integration, severance and retention, and the impairment of right-of-use assets due to facilities consolidation in future quarters.

Supplemental Pro Forma Information

The following unaudited pro forma financial information assumes the companies were combined as of January 1, 2019. The unaudited pro forma financial information as presented below is for informational purposes only and is based on estimates and assumptions that have been made solely for purposes of developing such pro forma information. This is not necessarily indicative of the results of operations that would have been achieved if the Mergers had taken place on January 1, 2019, nor is it necessarily indicative of future results. Consequently, actual results could differ materially from the unaudited pro forma financial information presented below. The following table presents the pro forma operating results as if TiVo had been included in the Company's Condensed Consolidated Statements of Operations as of January 1, 2019 (unaudited, in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2020	September 30, 2019	September 30, 2020	September 30, 2019
Revenue	$ 202,797	$ 214,610	$ 708,675	$ 676,888
Net income (loss) attributable to Xperi Holding Corporation	$ (23,085)	$ (193,898)	$ (145,649)	$ (337,906)

The unaudited supplemental pro forma information above includes the estimated impact of purchase accounting and other material, nonrecurring adjustments directly attributable to the Mergers. These pro forma adjustments primarily include the following (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2020	September 30, 2019	September 30, 2020	September 30, 2019
Estimated increase (decrease) to earnings due to revenue adjustments resulting from purchase accounting	$ —	$ (1,781)	$ (4,823)	$ (5,592)
Estimated increase (decrease) to earnings to adjust for transaction related costs incurred in connection with the Mergers	$ 1,187	$ —	$ 31,835	$ (21,918)
Estimated increase (decrease) to earnings to adjust for stock-based compensation expense for TiVo equity awards	$ —	$ 524	$ 3,436	$ (1,260)
Estimated increase (decrease) to earnings to adjust for severance and retention costs incurred in connection with the Mergers	$ 3,591	$ (1,710)	$ 10,254	$ (13,696)
Estimated increase (decrease) to earnings to reflect payoff of historical debt and new debt financing in connection with the Mergers	$ 1,116	$ (3,693)	$ 21,867	$ (20,401)
Estimated increase (decrease) to earnings due to pro forma adjustments for income taxes (1)(2)	$ 117	$ (19,884)	$ 16,374	$ (39,161)

(1) For the three and nine months ended September 30, 2020, the pro forma tax adjustments relate primarily to the alignment of TiVo's methodology for interim period accounting for income taxes to Xperi's methodology, as well as the recognition by TiVo of a refund request of South Korean withholding taxes prior to the Mergers in the quarter ended June 30, 2020.

(2) For the three and nine months ended September 30, 2019, the adjustment relates primarily to the alignment of TiVo's methodology for interim period accounting for income taxes to Xperi's methodology, as well as the assumption that the combined company placed a valuation allowance on its Federal and state DTAs prior to 2019.

The unaudited supplemental pro forma information above does not include any cost saving synergies from operating efficiencies.

NOTE 8 – GOODWILL AND IDENTIFIED INTANGIBLE ASSETS

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

	Product	IP Licensing	Total
December 31, 2019	$ 378,084	$ 7,700	$ 385,784
Goodwill acquired through the Mergers (1)	146,061	315,068	461,129
September 30, 2020	$ 524,145	$ 322,768	$ 846,913

(1) In connection with the TiVo Merger, the Company recorded $461.1 million of goodwill, representing the preliminary fair value as of the effective date of the Mergers. See "Note 7 – Business Combination" for additional details.

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.

During the third quarter of 2020, the COVID-19 pandemic continued to have a significant and negative impact on business and economic activities in the U.S and around the world. The resulting global economic downturn has negatively impacted, and is expected to continue to negatively impact, the Company's consolidated financial results for the remainder of 2020 and into 2021. Due to continued reduction in demand in certain markets and industries, including the automotive market, as well as declines in the Company's share price, the Company's management concluded there were indicators of potential goodwill impairment. The Company proceeded with a quantitative interim goodwill impairment test as of September 30, 2020. Based on the quantitative assessment, the Company concluded that the fair value of the reporting units exceeded the carrying amount for both the Product and IP Licensing reporting units. As a result, no goodwill impairment charges were recognized in the three months ended September 30, 2020.

Identified intangible assets consisted of the following (in thousands):

	Average Life (Years)	September 30, 2020 Gross Assets	Accumulated Amortization	Net	December 31, 2019 Gross Assets	Accumulated Amortization	Net
Finite-lived intangible assets							
Acquired patents / core technology (1)	3-15	$ 609,085	$ (154,418)	$ 454,667	$ 151,184	$ (135,952)	$ 15,232
Existing technology / content database (2) (3)	5-10	247,959	(159,430)	88,529	206,878	(130,890)	75,988
Customer contracts and related relationships (4)	3-9	650,079	(229,450)	420,629	291,769	(174,741)	117,028
Trademarks/trade name	4-10	40,083	(19,786)	20,297	40,083	(16,056)	24,027
Non-competition agreements	1	2,231	(2,231)	—	2,231	(2,231)	—
Total finite-lived intangible assets		1,549,437	(565,315)	984,122	692,145	(459,870)	232,275
Indefinite-lived intangible assets							
TiVo Tradename/trademarks (5)	N/A	21,400	—	21,400	—	—	—
Total intangible assets		$ 1,570,837	$ (565,315)	$ 1,005,522	$ 692,145	$ (459,870)	$ 232,275

(1) In June 2020, $457.4 million of patents was acquired through the Mergers. See "Note 7 – Business Combination."
(2) In June 2020, $34.8 million of existing (developed) technology was acquired through the Mergers. See "Note 7 – Business Combination."
(3) In June 2020, $6.2 million of content database was acquired through the Mergers. See "Note 7 – Business Combination."
(4) In June 2020, $358.2 million of customer contracts and related relationships was acquired through the Mergers. See "Note 7 – Business Combination."
(5) In June 2020, $21.4 million of TiVo Tradename/trademarks was acquired through the Mergers. See "Note 7 – Business Combination."

As of September 30, 2020, the estimated future amortization expense of total finite-lived intangible assets was as follows (in thousands):

2020 (remaining 3 months)	$ 50,257
2021	195,771
2022	147,332
2023	136,452
2024	97,647
Thereafter	356,663
	$ 984,122

NOTE 9 – DEBT

The outstanding amounts of debt were as follows (in thousands):

	September 30, 2020	December 31, 2019
2020 Term B Loan Facility	$ 1,036,875	$ —
2021 Convertible Notes	48	—
2018 Amended Term B Loan	—	344,000
Unamortized debt issuance costs	(36,689)	(9,321)
	1,000,234	334,679
Less: current portion, net of debt issuance costs	(43,704)	—
Total long-term debt, net of current portion	$ 956,530	$ 334,679

2020 Term B Loan Facility

On June 1, 2020, in connection with the consummation of the Mergers with TiVo, the Company entered into a Credit Agreement (the "2020 Credit Agreement") by and among the Company, the lenders party thereto and Bank of America, N.A.,

as administrative agent and collateral agent. The 2020 Credit Agreement provides for a five-year senior secured term loan B facility in an aggregate principal amount of $1,050 million (the "2020 Term B Loan Facility"). The interest rate applicable to loans outstanding under the 2020 Term B Loan Facility is equal to, at the Company's option, either (i) a base rate plus a margin of 3.00% per annum or (ii) LIBOR plus a margin of 4.00% per annum. Commencing on September 30, 2020, the 2020 Term B Loan Facility will amortize in equal quarterly installments in aggregate quarterly amounts equal to (i) with respect to repayments occurring on or prior to June 1, 2023, 1.25% of the original principal amount of the 2020 Term B Loan Facility and (ii) with respect to repayments occurring after June 1, 2023 and prior to June 1, 2025, 1.875% of the original principal amount of the 2020 Term B Loan Facility, with the balance payable on the maturity date of the 2020 Term B Loan Facility (in each case subject to adjustment for prepayments). The 2020 Term B Loan Facility will mature on June 1, 2025. Upon the closing of the 2020 Credit Agreement, the Company borrowed $1,050 million under the 2020 Term B Loan Facility. Net proceeds were used on June 1, 2020, together with cash and cash equivalents, to refinance the existing indebtedness of the combined Company (the "Debt Financing"), including paydown of the TiVo 2019 Term Loan of $734.6 million. See "Note 7 – Business Combination" for additional information relating to the Mergers. Additionally, debt issuance costs of approximately $39.7 million were incurred and capitalized in connection with the 2020 Term B Loan Facility in June 2020.

The obligations under the 2020 Credit Agreement are guaranteed by Xperi, TiVo and certain other of the Company's wholly-owned material domestic subsidiaries (collectively, the "Guarantors") pursuant to the Guaranty, dated as of June 1, 2020 (the "Guaranty"), among Xperi, TiVo, the other Guarantors party thereto and Bank of America, N.A., as administrative agent. The obligations under the 2020 Credit Agreement are secured by a lien on substantially all of the assets of the Company and the Guarantors pursuant to the Security Agreement, dated as of June 1, 2020 (the "Security Agreement"), among the Company, Xperi, TiVo, the other pledgors party thereto and Bank of America, N.A., as collateral agent.

The 2020 Credit Agreement contains customary events of default, upon the occurrence of which, after any applicable grace period, the lenders will have the ability to accelerate all outstanding loans thereunder. The 2020 Credit Agreement also contains customary representations and warranties and affirmative and negative covenants that, among other things, restrict the ability of the Company and its subsidiaries to create or incur certain liens, incur or guarantee additional indebtedness, merge or consolidate with other companies, transfer or sell assets and make restricted payments. These covenants are subject to a number of limitations and exceptions set forth in the Credit Agreement. The Company was in compliance with all requirements as of September 30, 2020.

2018 Amended Term B Loan

On December 1, 2016, in connection with the consummation of the acquisition of DTS, the Company entered into a Credit Agreement (the "Credit Agreement") by and among the Company, Royal Bank of Canada, as administrative agent and collateral agent, and the lenders party thereto. The Credit Agreement provided for a $600.0 million seven-year term B loan facility (the "Term B Loan Facility") which matures on November 30, 2023. Upon the closing of the Credit Agreement, the Company borrowed $600.0 million under the Term B Loan facility. Net proceeds were used on December 1, 2016, together with cash and cash equivalents, to finance the acquisition of DTS.

On January 23, 2018, the Company and the loan parties entered into an amendment to the Credit Agreement (the "Amendment"). In connection with the Amendment, the Company made a voluntary prepayment of $100.0 million of the term loan outstanding under the Credit Agreement using cash on hand. The Amendment provided for, among other things, (i) a replacement of the outstanding initial term loan with the new tranche term B-1 loan (the "2018 Amended Term B Loan") in a principal amount of $494.0 million, (ii) a reduction of the interest rate margin applicable to such loan to (x) in the case of Eurodollar loans, 2.50% per annum and (y) in the case of base rate loans, 1.50% per annum, (iii) a prepayment premium of 1.00% in connection with any repricing transaction with respect to the 2018 Amended Term B Loan within six months of the closing date of the Amendment, and (iv) certain amendments to provide the Company with additional flexibility under the covenant governing restricted payments. Using cash on hand, the Company made three voluntary prepayments totaling $150.0 million during 2019. On June 1, 2020, the entire remaining balance of $344.0 million was paid off by using the proceeds from the 2020 Term B Loan Facility in connection with the Mergers. As a result of the refinancing transaction, the Company recorded a loss on early extinguishment of debt of $8.3 million, which consisted of unamortized debt issuance costs, in its Condensed Consolidated Statements of Operations during the second quarter of 2020.

2019 Term Loan Facility

In connection with the Mergers, the Company paid off the outstanding balance under the TiVo's 2019 Term Loan. The 2019 Term Loan Facility Agreement was entered into on November 22, 2019 between TiVo, as borrower, and the lenders party thereto and HPS Investment Partners, LLC as administrative agent and collateral agent. Under the 2019 Term Loan, TiVo borrowed $715.0 million, which was scheduled to mature on November 22, 2024.

Under the 2019 Term Loan Facility Agreement, TiVo was required to pay a 3.0% prepayment premium if the loan was prepaid on or prior to November 22, 2020. Further, under the same Loan Facility Agreement, the Mergers triggered certain change of control conditions that constituted an event of default, thus requiring the debt to be repaid immediately following the consummation of the Mergers. Using the proceeds from the aforementioned 2020 Term B Loan Facility, the Company, on June 1, 2020, made a full repayment of the 2019 Term Loan along with the prepayment penalty for a total payoff amount of $734.6 million.

2021 Convertible Notes

Upon consummation of the TiVo Merger on June 1, 2020, the Company assumed $48.0 thousand of Convertible Senior Notes that were issued by TiVo Solutions Inc. ("TiVo Solutions") in September 2014 and mature October 1, 2021 (the "2021 Convertible Notes"). 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.

Interest Expense and Expected Principal Payments

At September 30, 2020, $1,036.9 million in total debt was outstanding with an interest rate, including the amortization of debt issuance costs, of 5.1%. Interest is payable monthly. Interest expense was $13.4 million and $24.6 million for the three and nine months ended September 30, 2020, respectively. Interest expense was $5.5 million and $18.4 million for the three and nine months ended September 30, 2019, respectively. Amortized debt issuance costs, which were included in interest expense, amounted to $2.3 million and $4.0 million for the three and nine months ended September 30, 2020, respectively, and $0.6 million and $1.9 million for the three and nine months ended September 30, 2019, respectively.

As of September 30, 2020, future minimum principal payments for long-term debt are summarized as follows (in thousands):

2020 (remaining 3 months)	$	13,125
2021		52,548
2022		52,500
2023		72,188
2024		78,750
Thereafter		767,812
Total	$	1,036,923

Additional cash payments, as outlined in the 2020 Credit Agreement, must be made on an annual basis beginning March 31, 2022 based on certain leverage ratios and excess cash flow generated for the immediately preceding fiscal year.

NOTE 10 – NET LOSS PER SHARE

The following table sets forth the computation of basic and diluted shares (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2020	September 30, 2019	September 30, 2020	September 30, 2019
Denominator:				
Weighted average shares of common stock outstanding	107,499	49,459	75,441	49,036
Less: shares of restricted stock subject to repurchase	—	—	—	—
Total common shares-basic	107,499	49,459	75,441	49,036
Effect of dilutive securities:				
Options	—	—	—	—
Restricted stock awards and units	—	—	—	—
Total common shares-diluted	107,499	49,459	75,441	49,036

Basic net income (loss) per share is computed using the weighted average number of shares of common stock outstanding during the period, excluding any unvested restricted stock awards that are subject to repurchase. Diluted net income (loss) per share is computed using the treasury stock method to calculate the weighted average number of shares of common stock and, if dilutive, potential common shares outstanding during the period. Potentially dilutive common shares include unvested restricted stock awards and units and incremental common shares issuable upon the exercise of stock options, less shares

repurchased from assumed proceeds. The assumed proceeds calculation includes actual proceeds to be received from the employee upon exercise and the average unrecognized stock compensation cost during the period.

For the three and nine months ended September 30, 2020, there was no difference in the weighted average number of shares of common stock used for the calculation of basic and diluted loss per share as the effect of all potentially dilutive shares outstanding was anti-dilutive. A total of 5.6 million and 4.0 million shares, subject to stock options and restricted stock awards and units, were excluded from the computation of diluted net loss per share for the three and nine months ended September 30, 2020, respectively, because including them would have been anti-dilutive.

For the three and nine months ended September 30, 2019, there was no difference in the weighted average number of shares of common stock used for the calculation of basic and diluted loss per share as the effect of all potentially dilutive shares outstanding was anti-dilutive. A total of 2.5 million and 1.5 million shares, subject to stock options and restricted stock awards and units, were excluded from the computation of diluted net loss per share for the three and nine months ended September 30, 2019, respectively, because including them would have been anti-dilutive.

NOTE 11 – STOCKHOLDERS' EQUITY

As more fully described in Note 7, Xperi and TiVo completed the Mergers on June 1, 2020 to form Xperi Holding Corporation. Upon completion of the Mergers, each share of common stock of Xperi was converted into the right to receive one fully paid and non-assessable share of Company Common Stock. Further upon completion of the Mergers, each share of TiVo Common Stock was converted into the right to receive 0.455 fully paid and non-assessable shares of the Company Common Stock (the "Exchange Ratio"), in addition to cash in lieu of any fractional shares of the Company Common Stock. Following the Mergers, Xperi Common Stock and TiVo Common Stock were delisted from Nasdaq. Since June 2, 2020, the shares of Company Common Stock have been listed for trading on Nasdaq under ticker symbol "XPER."

As provided in the Merger Agreement, at the effective time of the Mergers, (i) all options and restricted stock unit awards relating to shares of Xperi Common Stock outstanding immediately prior to the effective time of the Mergers were generally automatically converted into options and restricted stock unit awards respectively, relating to shares of the Company Common Stock on a one-for-one basis and otherwise generally on the same terms and conditions (including vesting exercisability and/or settlement requirements) as applied to such options and awards under the applicable plans and award agreements immediately prior to the effective time of the Mergers, and (ii) all options and restricted stock unit awards relating to shares of TiVo Common Stock that were outstanding immediately prior to the effective time of the Mergers were generally automatically converted into options and restricted stock unit awards, respectively, relating to shares of the Company Common Stock after giving effect to appropriate adjustments to reflect the Mergers (including the Exchange Ratio) and otherwise generally on the same terms and conditions (including vesting exercisability and/or settlement requirements) as applied to such options and awards under the applicable plans and award agreements immediately prior to the effective time of the Mergers.

Equity Incentive Plans

Prior to the Merger Date, the Company had implemented and granted equity awards under the Xperi Corporation Seventh Amended and Restated 2003 Equity Incentive Plan. As of the effective date of the Mergers, no future grants will be made under the plan.

The 2020 EIP

In connection with the Mergers and immediately prior to June 1, 2020, the Company adopted the Xperi Holding Corporation 2020 Equity Incentive Plan (the "2020 EIP").

Under the 2020 EIP, the Company may grant equity-based awards to employees, non-employee directors, and consultants for services rendered to the Company (or any parent or subsidiary) in the form of stock options, stock awards, restricted stock awards, restricted stock units, stock appreciation rights, dividend equivalents and performance awards (or any combination thereof). A total of 8,000,000 shares have been reserved for issuance under the 2020 EIP provided that each share issued pursuant to "full value" awards (i.e., stock awards, restricted stock awards, restricted stock units, performance awards and dividend equivalents) are counted against shares available for issuance under the 2020 EIP on a 1.5 to 1 ratio.

The 2020 EIP provides for option grants designed as either incentive stock options or nonstatutory options. Options generally are granted with an exercise price not less than the value of the common stock on the grant date and have a term of ten years from the date of grant and vest over a four-year period. The vesting criteria for restricted stock awards and restricted stock units is generally the passage of time or meeting certain performance-based objectives, and continued employment through the

vesting period generally over four years for time-based awards. As of September 30, 2020, there were 3.2 million shares reserved for future grant under the 2020 EIP.

Assumed Plans

On June 1, 2020, the Company assumed all then-outstanding stock options, awards, and shares available and reserved for issuance under all legacy Equity Incentive Plans of TiVo (collectively, the "Assumed Plans"). Stock options assumed from the Assumed Plans generally have vesting periods of four years and a contractual term of seven years. Awards of restricted stock and restricted stock units assumed from the Assumed Plans are generally subject to a four year vesting period. The number of shares subject to stock options and restricted stock unit awards outstanding under these plans are included in the tables below. Shares reserved under the Assumed Plans will be available for future grants. As of September 30, 2020, there were 7.4 million shares reserved for future grants under the Assumed Plans.

A summary of the stock option activity is presented below (in thousands, except per share amounts):

	Options Outstanding	
	Number of Shares Subject to Options	Weighted Average Exercise Price Per Share
Balance at December 31, 2019	605	$ 26.68
Options granted	—	—
Options assumed	175	$ 49.24
Options exercised	—	—
Options canceled / forfeited / expired	(59)	$ 40.91
Balance at September 30, 2020	721	$ 31.34

Restricted Stock Awards and Units

Information with respect to outstanding restricted stock awards and units as of September 30, 2020 is as follows (in thousands, except per share amounts):

	Restricted Stock and Restricted Stock Units			
	Number of Shares Subject to Time-based Vesting	Number of Shares Subject to Performance-based Vesting	Total Number of Shares	Weighted Average Grant Date Fair Value Per Share
Balance at December 31, 2019	2,371	554	2,925	$ 25.99
Awards and units granted	3,222	994	4,216	$ 13.77
Awards and units assumed	2,185	253	2,438	$ 13.99
Awards converted	107	(107)	—	$ 29.79
Awards and units vested / earned	(1,618)	(390)	(2,008)	$ 20.78
Awards and units canceled / forfeited	(414)	(243)	(657)	$ 21.15
Balance at September 30, 2020	5,853	1,061	6,914	$ 16.28

Performance Awards and Units

Performance awards and units may be granted to employees or consultants based upon, among other things, the contributions, responsibilities and other compensation of the particular employee or consultant. The value and the vesting of such performance awards and units are generally linked to one or more performance goals or certain market conditions determined by the Company, in each case on a specified date or dates or over any period or periods determined by the Company, and may range from zero to 200 percent of the grant. For performance 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.

Employee Stock Purchase Plans

Prior to the Mergers, the Company had implemented the Xperi Corporation 2003 Employee Stock Purchase Plan and the International Employee Stock Purchase Plan, both of which were terminated immediately prior to the effective time of the Mergers.

In connection with the Mergers and immediately prior to June 1, 2020, the Company adopted the Xperi Holding Corporation 2020 Employee Stock Purchase Plan (the "2020 ESPP"). The 2020 ESPP is implemented through consecutive overlapping 24-month offering periods, each of which is comprised of four six-month purchase periods. The first offering period commenced on September 1, 2020 and will end on August 31, 2022. Each subsequent offering period under the 2020 ESPP will be twenty-four (24) months long and will commence on each September 1 and March 1 during the term of the plan. Participants may contribute up to 100% of their base earnings and commissions through payroll deductions, and the accumulated deductions will be applied to the purchase of shares on each semi-annual purchase date. The purchase price per share will equal 85% of the fair market value per share on the start date of the offering period or, if lower, 85% of the fair market value per share on the semi-annual purchase date.

An eligible employee's right to buy the Company's common stock under the 2020 ESPP may not accrue at a rate in excess of $25,000 of the fair market value of such shares per calendar year for each calendar year of an offering period. If the fair market value per share of the Company's common stock on any purchase date during an offering period is less than the fair market value per share on the start date of the 24-month offering period, then that offering period will automatically terminate and a new 24-month offering period will begin on the next business day. All participants in the terminated offering will be transferred to the new offering period.

As of September 30, 2020, there were 2.0 million shares reserved for grant under the Company's 2020 ESPP.

Stock Repurchase Programs

Following the termination of Xperi's prior stock repurchase program after the closing of the Mergers, on June 12, 2020 the Board of Directors (the "Board") of the Company authorized a new stock repurchase program providing for the repurchase of up to $150.0 million of the Company's Common Stock dependent on market conditions, share prices and other factors. As of September 30, 2020, the Company has repurchased a total of approximately 3.9 million shares of common stock, since inception of the plan, at an average price of $12.81 per share for a total cost of $50.1 million. The shares repurchased are recorded as treasury stock and are accounted for under the cost method. No expiration date has been specified for this plan. As of September 30, 2020, the total remaining amount available for repurchase was $99.9 million. The Company plans to continue to execute authorized repurchases from time to time under the plan.

In connection with the Mergers, all shares repurchased by the Company as of June 1, 2020 and recorded as treasury stock were canceled and retired. The Company accounts for stock repurchases using the cost method and records retirement of treasury stock as a reduction of the cumulative treasury stock paid-in capital balance. Once the cumulative balance is reduced to zero, any remaining difference resulting from the retirement of treasury stock is recorded as a reduction of retained earnings.

The Company issues restricted stock units as part of the equity incentive plans described above. 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, 2020 and 2019, the Company withheld 0.2 million and 0.1 million shares of common stock to satisfy $3.3 million and $0.1 million of required withholding taxes, respectively. During the nine months ended September 30, 2020 and 2019, the Company withheld 0.6 million and 0.2 million shares of common stock to satisfy $9.2 million and $4.3 million of required withholding taxes, respectively.

NOTE 12 – STOCK-BASED COMPENSATION EXPENSE

The effect of recording stock-based compensation ("SBC") expense for the three and nine months ended September 30, 2020 and 2019 is as follows (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2020	September 30, 2019	September 30, 2020	September 30, 2019
Cost of licensing, services and software revenue	$ 258	$ —	$ 332	$ —
Research, development and other related costs	3,580	3,544	9,454	10,293
Selling, general and administrative	6,319	4,444	16,828	12,539
Total stock-based compensation expense	10,157	7,988	26,614	22,832
Tax effect on stock-based compensation expense	(55)	(1,269)	(1,550)	(3,654)
Net effect on net loss	$ 10,102	$ 6,719	$ 25,064	$ 19,178

In connection with the Mergers, the Company assumed unvested TiVo equity awards with a fair value of $34.1 million, of which $22.0 million related to post-acquisition services. For the three and nine months ended September 30, 2020, the Company recognized $1.9 million and $4.1 million of SBC expense, respectively, associated with the unvested TiVo equity awards assumed. See "Note 7 – Business Combination" for additional detail.

Stock-based compensation expense categorized by various equity components for the three and nine months ended September 30, 2020 and 2019 is summarized in the table below (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2020	September 30, 2019	September 30, 2020	September 30, 2019
Restricted stock awards and units	$ 9,734	$ 7,362	$ 25,175	$ 21,013
Employee stock purchase plan	401	577	1,387	1,638
Employee stock options	22	49	52	181
Total stock-based compensation expense	$ 10,157	$ 7,988	$ 26,614	$ 22,832

There were no options granted in the three and nine months ended September 30, 2020 and 2019.

The following assumptions were used to value the restricted stock units subject to market conditions granted in the three months ended September 30, 2020:

	July 2020
Expected life (years)	3.0
Risk-free interest rate	0.16%
Dividend yield	1.4%
Expected volatility	51.3%

Previous ESPP grants occurred in February 2020 and August 2019. Pursuant to the Merger Agreement, on May 22, 2020, the Company granted its final ESPP purchases to the eligible employees under the legacy ESPP program before terminating the plan prior to the consummation of the Mergers. As stated in Note 11, the first offering period of the 2020 ESPP commenced on September 1, 2020.

The following assumptions were used to value the ESPP shares for these grants:

	September 2020	February 2020	August 2019	February 2019
Expected life (years)	2.0	2.0	2.0	2.0
Risk-free interest rate	0.13%	1.4%	1.7%	2.5%
Dividend yield	1.4%	4.0%	3.5%	5.4%
Expected volatility	57.5%	45.8%	51.7%	53.4%

NOTE 13 – INCOME TAXES

For the three months ended September 30, 2020, the Company recorded an income tax expense of $0.5 million on a pretax loss of $30.1 million and for the nine months ended September 30, 2020, the Company recorded an income tax benefit of $6.8 million on a pretax loss of $41.6 million, which resulted in an effective tax rate of 16.3% for the nine months ended September 30, 2020. The tax benefit of $6.8 million is comprised of a $12.2 million tax benefit related to the five month pre-merger period and a tax expense of $5.4 million related to the four month post-merger period. The five month pre-merger income tax benefit of $12.2 million was primarily related to a net decrease in valuation allowance as a result of the Mergers, deduction from foreign-derived intangible income, releases of unrecognized tax benefits due to the lapse of applicable statutes of limitation, and deduction from transaction expenses, offset by tax expense from operating income, shortfalls from stock-based compensation, certain non-deductible expenses, and unrealized foreign exchange losses from the prior period South Korea refund claim. The four month post-merger income tax expense of $5.4 million was primarily related to income tax expense from foreign operations, foreign withholding taxes and U.S. federal minimum tax offset by unrealized foreign exchange gains from the current period South Korea refund claim.

For the three months ended September 30, 2019, the Company recorded an income tax benefit of $14.6 million on a pretax loss of $30.6 million and for the nine months ended September 30, 2019, the Company recorded an income tax benefit of $27.1 million on a pretax loss of $74.7 million, which resulted in an effective tax rate of 36.3%. The income tax benefit for the three and nine months ended September 30, 2019 was primarily related to tax benefit from operating losses and the realization of certain tax credits, offset by foreign withholding taxes, certain non-deductible expenses, and shortfalls from stock-based compensation.

The Company's provision for income taxes is based on its worldwide estimated annualized effective tax rate, except for jurisdictions for which a loss is expected for the year and no benefit can be realized for those losses, and the tax effect of discrete items occurring during the period. The Company has applied separate effective tax rates to its pre- and post-merger activities; the Company's post-merger effective tax rate is based on its worldwide estimated tax rate for the seven-month period ended December 31, 2020. The tax for jurisdictions for which a loss is expected and no benefit can be realized for the year is computed using a separate effective tax rate. The decrease in income tax benefit for the nine months ended September 30, 2020 as compared to the prior year is largely attributable to a decrease in operating losses, increase in valuation allowance in the post-merger period, foreign withholding taxes, and U.S. federal minimum taxes, partially offset by tax benefits from the release of unrecognized tax benefits due to the lapse of applicable statute of limitation and a decrease in valuation allowance as a result of the Mergers.

During the fourth quarter of 2019, the Company filed a refund claim for foreign taxes previously withheld from licensees in South Korea based on recent court rulings in South Korea and other business factors. These previously withheld foreign taxes were claimed as a foreign tax credit in the U.S. As a result of the Company's refund claim, the Company recorded a non-current income tax receivable of $65.2 million in income tax receivable, an unrecognized tax benefit of $48.2 million in other long-term liabilities, and a reduction in deferred tax assets of $17.0 million. The Company anticipates filing a refund claim for the 2020 year-to-date South Korean withholding taxes.

During the first nine months of 2020, an additional non-current income tax receivable of $13.7 million, an unrecognized tax benefit of $8.4 million in other long-term liabilities, and a reduction in deferred tax assets of $5.0 million with an offset to valuation allowance were recorded in connection with the South Korea refund claim matter. As part of the Company's acquisition of TiVo, the Company recorded a year-to-date non-current income tax receivable of $31.9 million and a reduction in deferred tax assets of $15.5 million with a corresponding offset to valuation allowance, with the residual recorded to goodwill. At September 30, 2020, the Company had recorded a cumulative unrealized foreign exchange loss of approximately $1.2 million as a reduction in non-current income tax receivable.

The impact on the Company's pre-merger deferred tax assets and liabilities caused by the Mergers is recorded in the Company's financial statements outside of acquisition accounting. Such impact is not a part of the fair value of the assets acquired and liabilities assumed. The Company released its valuation allowance which was previously applied to certain deferred tax assets. As a result, the Company recorded an income tax benefit of $19.8 million for the pre-merger period. Due to the composition of TiVo's Federal deferred tax assets net of valuation allowance and deferred tax liabilities, the combined Company's Federal deferred tax assets net of deferred tax liabilities are fully offset by a valuation allowance. The Company has adopted the policy of using a tax-law ordering approach when determining the extent to which the Company's, or the acquired company's deferred tax liabilities are able to be used as sources of income used to recognize the Company's, or the acquired company's deferred tax assets.

As of September 30, 2020, gross unrecognized tax benefits were $181.7 million, of which $97.3 million would affect the effective tax rate if recognized. As of September 30, 2019, unrecognized tax benefits were $34.1 million (which was included in long-term deferred tax and other long-term liabilities on the Condensed Consolidated Balance Sheets), of which $21.3

million would affect the effective tax rate if recognized. The Company is unable to reasonably estimate the timing of the long-term payments or the amount by which the liability will increase or decrease.

It is the Company's policy to classify accrued interest and penalties related to unrecognized tax benefits in the provision for income taxes. For the three and nine months ended September 30, 2020 and 2019, the Company recognized an insignificant amount of interest and penalties related to unrecognized tax benefits. Accrued interest and penalties were $2.2 million and $1.2 million as of September 30, 2020 and December 31, 2019, respectively. It is the Company's policy not to consider nonrecognized subsequent events in the calculation of its worldwide estimated annualized effective tax rate nor in its assessment of the recoverability of deferred tax assets. The Company has therefore not considered the event discussed in "Note 17 – Subsequent Events" when determining its worldwide estimated annualized effective tax rate nor in its assessment of the recoverability of deferred tax assets as of September 30, 2020.

At September 30, 2020, the Company's 2015 through 2018 tax years were generally open and subject to potential examination in various jurisdictions. Earlier tax years for the Company and its subsidiaries are also open in certain jurisdictions which are currently subject to examination. In addition, in the U.S., any net operating losses or credits that were generated in prior years but not yet fully utilized in a year that is closed under the statute of limitations may also be subject to examination. The Company has submitted a withholding tax refund claim with the South Korean authorities and the final outcome is not anticipated to be settled within the next twelve months.

NOTE 14 – LEASES

The Company leases office and research facilities, data centers and office equipment under operating leases which expire through 2029. The Company's leases have remaining lease terms of one year to nine years, some of which may include options to extend the leases for five years or longer, and some of which may include options to terminate the leases within the next 6 years or less. Leases with an initial term of 12 months or less are not recorded on the balance sheets; expense for these leases is recognized on a straight-line basis over the lease term. Variable lease payments are expensed as incurred and are not included within the lease liability and right-of-use assets calculation. As a practical expedient, the Company elected, for all office and facility leases, not to separate nonlease components (e.g., common-area maintenance costs) from lease components (e.g., fixed payments including rent) and instead to account for each separate lease component and its associated non-lease components as a single lease component. As most of the leases do not provide an implicit rate, the Company generally, for purposes of discounting lease payments, uses its incremental borrowing rate based on the estimated rate of interest for collateralized borrowing over a similar term of the lease payments at commencement date.

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. Income from subleases is recognized as a reduction to selling, general and administrative expenses.

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

	Three Months Ended		Nine Months Ended	
	September 30, 2020	September 30, 2019	September 30, 2020	September 30, 2019
Fixed lease cost (1)	$ 6,184	$ 1,713	$ 11,340	$ 5,138
Variable lease cost	1,374	278	2,315	859
Less: sublease income	(2,452)	—	(3,295)	—
Total operating lease cost	$ 5,106	$ 1,991	$ 10,360	$ 5,997

(1) Includes short-term leases, which were immaterial.

Other information related to leases was as follows (in thousands, except lease term and discount rate):

	Three Months Ended,		Nine Months Ended	
	September 30, 2020	September 30, 2019	September 30, 2020	September 30, 2019
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flows from operating leases	$ 6,041	$ 1,482	$ 10,767	$ 4,498
ROU assets obtained in exchange for new lease liabilities:				
Operating leases	$ 461	$ 361	$ 4,312	$ 5,136

	September 30, 2020	December 31, 2019
Weighted-average remaining lease term (years):		
Operating leases	5.4	4.6
Weighted-average discount rate:		
Operating leases	5.2%	5.7%

Future minimum lease payments and related lease liabilities as of September 30, 2020 were as follows (in thousands):

	Operating Lease Payments (1)	Sublease Income	Net Operating Lease Payments
2020 (remaining 3 months)	$ 4,774	$ (1,647)	$ 3,127
2021	22,184	(6,257)	15,927
2022	18,105	(6,117)	11,988
2023	16,169	(6,231)	9,938
2024	15,405	(6,293)	9,112
Thereafter	23,451	(7,214)	16,237
Total lease payments	100,088	(33,759)	66,329
Less: imputed interest	(13,048)	—	(13,048)
Present value of lease liabilities:	$ 87,040	$ (33,759)	$ 53,281
Less: current obligations under leases (accrued liabilities)	17,577		
Noncurrent operating lease liabilities	$ 69,463		

(1) Future minimum lease payments exclude short-term leases as well as payments to landlords for variable common area maintenance, insurance and real estate taxes.

As of December 31, 2019, future minimum lease payments were as follows (in thousands):

	Operating Leases
2020	$ 6,387
2021	4,558
2022	3,259
2023	3,235
2024	2,619
Thereafter	1,977
Total lease payments	22,035
Less: imputed interest	(2,776)
Present value of lease liabilities:	$ 19,259
Less: current obligations under leases (accrued liabilities)	5,845
Noncurrent operating lease liabilities	$ 13,414

NOTE 15 – COMMITMENTS AND CONTINGENCIES

Inventory Purchase Commitment

The Company uses contract manufacturers to provide manufacturing services for its products. During the normal course of business, in order to manage manufacturing lead times and help ensure adequate supply, the Company enters into agreements with its contract manufacturer that either allow them to procure inventory based on criteria as defined by the Company or that establish the parameters defining the Company's requirements. A significant portion of the Company's purchase commitments arising from these agreements consist of firm, non-cancelable and unconditional purchase commitments. In certain instances, these agreements allow the Company the option to cancel, reschedule or adjust the Company's requirements based on its business needs prior to firm orders being placed. As of September 30, 2020, the Company had total purchase commitments for inventory of $6.8 million, of which $1.4 million was accrued in the Condensed Consolidated Balance Sheet.

Other Purchase Obligations

On December 31, 2019, TiVo entered into a contract requiring the Company to generate a minimum number of Qualified Referred Subscribers (as defined in the contract) over a 30 month period. In the event that the aggregate number of Qualified Referred Subscribers generated by the Company within the specified time period is less than the minimum guaranteed subscribers, the Company is required to pay an amount equal to the shortfall between the number of Qualified Referred Subscribers generated by the Company and the required minimum multiplied by a per Qualified Referred Subscribers fee, up to a maximum of $5.0 million. As of September 30, 2020, $0.1 million was accrued in the Condensed Consolidated Balance Sheets related to this contract.

Under certain other contractual arrangements, the Company may be obligated to pay up to approximately $49.6 million, which is mostly related to unconditional purchase obligations to service providers and certain contingent payments to partners. The majority of these commitments and contingent payments are due within four years.

Indemnifications

In the normal course of business, the Company provides indemnifications of varying scopes and amounts to certain of its licensees, customers, and business partners against claims made by third parties arising from the use of the Company's products, intellectual property, services or technologies. 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. To date, no such claims have been filed against the Company and no liability has been recorded in the Company's financial statements.

As permitted under Delaware law, the Company has agreements whereby it indemnifies its officers and directors for certain events or occurrences while the officer or director is, or was, serving at the Company's request in such capacity. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited; however, the Company believes, given the absence of any such payments in the Company's history, and the estimated low probability of such payments in the future, that the estimated fair value of these indemnification agreements is immaterial. In addition, the Company has directors' and officers' liability insurance coverage that is intended to reduce its financial exposure and may enable the Company to recover any payments, should they occur.

Contingencies

At each reporting period, the Company evaluates whether or not a potential loss amount or a potential range of losses is probable and reasonably estimable under the provisions of the authoritative guidance that addresses accounting for contingencies. The Company is currently unable to predict the final outcome of lawsuits to which it is a party and therefore cannot determine the likelihood of loss nor estimate a range of possible losses. An adverse decision in any of these proceedings could significantly harm the Company's business and consolidated financial position, results of operations or cash flows.

The Company and its subsidiaries are involved in litigation matters and claims in the normal course of business. In the past, the Company and its subsidiaries have litigated to enforce their respective patents and other intellectual property rights, to enforce the terms of license agreements, to protect trade secrets, to determine the validity and scope of the proprietary rights of others and to defend itself or its customers against claims of infringement or invalidity. The Company expects it or its subsidiaries will

be involved in similar legal proceedings in the future, including proceedings regarding infringement of its patents, and proceedings to ensure proper and full payment of royalties by licensees under the terms of its license agreements.

The existing and any future legal actions may harm the Company's business. For example, legal actions could cause an existing licensee or strategic partner to cease making royalty or other payments to the Company, or to challenge the validity and enforceability of patents owned by the Company's subsidiaries or the scope of license agreements with the Company's subsidiaries, or could significantly damage the Company's relationship with such licensee or strategic partner and, as a result, prevent the adoption of the Company's other technologies by such licensee or strategic partner. Litigation could also severely disrupt or shut down the business operations of licensees or strategic partners of the Company's subsidiaries, which in turn would significantly harm ongoing relations with them and cause the Company to lose royalty revenue.

The costs associated with legal proceedings are typically high, relatively unpredictable, and not completely within the Company's control. These costs may be materially higher than expected, which could adversely affect the Company's operating results and lead to volatility in the price of its common stock. Whether or not determined in the Company's favor or ultimately settled, litigation diverts managerial, technical, legal, and financial resources from the Company's business operations. Furthermore, an adverse decision in any of these legal actions could result in a loss of the Company's proprietary rights, subject the Company to significant liabilities, require the Company to seek licenses from others, limit the value of the Company's licensed technology or otherwise negatively impact the Company's stock price or its business and consolidated financial results.

NOTE 16 – SEGMENT AND GEOGRAPHIC INFORMATION

In connection with the Mergers, the Company re-evaluated its reportable segments. The Company concluded that it has two reportable segments for financial reporting purposes: (1) Product and (2) Intellectual Property ("IP") Licensing. There are certain corporate overhead costs that are not allocated to these reportable segments because these operating amounts are not considered in evaluating the operating performance of the Company's business segments.

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 Chief Executive Officer is also the CODM as defined by the authoritative guidance on segment reporting.

The Product segment consists primarily of licensing Company-developed audio, digital radio, imaging, edge-based machine learning and multi-channel video user experience ("UX") solutions. Edge based machine learning, audio, digital radio, and imaging solutions include the delivery of software and/or hardware-based solutions to the Company's consumer electronics ("CE") customers, automotive manufacturers or their supply chain partners. UX products and services revenue is primarily derived from multi-channel video service providers and CE manufacturers, licensing the TiVo service and selling TiVo-enabled devices, Personalized Content Discovery, enriched Metadata, viewership data and advertising.

The IP Licensing segment consists primarily of licensing the Company's innovations to leading companies in the media and semiconductor industries. Licensing arrangements include access to one more of the Company's foundational patent portfolios and may also include access to some of the Company's industry-leading technologies and proven know-how. In the media industry, the Company's licensees include pay television ("Pay-TV") providers, both in the United States and internationally, consumer electronics manufacturers and other providers of video experiences across various platforms, including over-the-top ("OTT") video. In the semiconductor industry, the Company's licensees include semiconductor manufacturers, fabless companies, foundries and packaging companies.

The Company does not identify or allocate assets by reportable segment, nor does the CODM evaluate reportable segments using discrete asset information. Reportable segments do not record inter-segment revenue and accordingly there are none to report. The Company does not allocate other income and expense to reportable segments. Although the CODM uses operating income to evaluate reportable segments, operating costs included in one segment may benefit other segments.

The following table sets forth the Company's segment revenue, operating expenses and operating income (loss) for the three and nine months ended September 30, 2020 and 2019 (in thousands):

	Three Months Ended			Nine Months Ended		
	September 30, 2020		September 30, 2019	September 30, 2020		September 30, 2019
Revenue:						
Product segment	$ 122,552		$ 46,028	$ 242,618		$ 152,026
IP Licensing segment	80,245		11,839	215,475		37,523
Total revenue	202,797		57,867	458,093		189,549
Operating expenses:						
Product segment	116,149		45,693	228,941		139,409
IP Licensing segment	40,020		10,113	70,765		29,859
Unallocated operating expenses (1)	65,591	(2)	27,588	170,542	(3)	84,121
Total operating expenses	221,760		83,394	470,248		253,389
Operating income (loss):						
Product segment	6,403		335	13,677		12,617
IP Licensing segment	40,225		1,726	144,710		7,664
Unallocated operating expenses (1)	(65,591)		(27,588)	(170,542)		(84,121)
Total operating loss	$ (18,963)		$ (25,527)	$ (12,155)		$ (63,840)

(1) Unallocated operating expenses consist primarily of selling, marketing, general and administrative expenses, such as administration, human resources, finance, information technology, corporate development and procurement. These expenses are not allocated because these amounts are not considered in evaluating the operating performance of the Company's business segments.

(2) Includes approximately $1.2 million in one-time transaction costs related to the Mergers and $3.6 million in post-merger severance and retention costs.

(3) Includes approximately $29.1 million in one-time transaction costs related to the Mergers and $12.1 million in post-merger severance and retention costs.

A significant portion of the Company's revenue is derived from licensees headquartered outside of the U.S., principally in Asia, and it is expected that this revenue will continue to account for a significant portion of total revenue in future periods. The table below lists the geographic revenue for the periods indicated (in thousands):

	Three Months Ended				Nine Months Ended			
	September 30, 2020		September 30, 2019		September 30, 2020		September 30, 2019	
U.S.	$ 125,753	62%	$ 9,733	17%	$ 191,847	42%	$ 33,740	18%
Japan	19,107	10	18,368	32	84,461	18	69,427	37
South Korea	14,402	7	19,086	33	102,959	23	53,002	28
Canada	12,536	6	166	—	17,133	4	441	—
Europe and Middle East	10,606	5	4,780	8	22,035	5	15,243	8
Other	20,393	10	5,734	10	39,658	8	17,696	9
	$ 202,797	100%	$ 57,867	100%	$ 458,093	100%	$ 189,549	100%

For the three months ended September 30, 2020 and 2019, there were no customers and one customer, respectively, that accounted for 10% or more of total revenue. For the nine months ended September 30, 2020 and 2019, there were one customer and two customers, respectively, that accounted for 10% or more of total revenue. As of September 30, 2020 and December 31, 2019, there were three customers and three customers, respectively, that each accounted for 10% or more of total accounts receivable.

NOTE 17 - SUBSEQUENT EVENTS

On October 28, 2020, the Board declared a cash dividend of $0.05 per share of common stock, payable on December 21, 2020 to the stockholders of record at the close of business on November 30, 2020.

On November 9, 2020, the Company and certain of its affiliates, entered into a patent license agreement (the "Agreement") with Comcast Corporation and certain of its affiliates ("Comcast"). In connection with the Agreement, the parties resolved all

of the outstanding litigation between the companies. The Agreement is effective as of the expiration of Comcast's prior agreement in 2016 and its term continues into 2031. The Agreement also provides for an initial payment by Comcast upon execution and ongoing payments through the remainder of the Agreement. As the Agreement was entered into after September 30, 2020, the Company expects to record revenue from the out-of-license settlement in the fourth quarter of 2020 and revenue from the prospective license into 2031. In addition, the Company expects to make a substantial principal payment towards the 2020 Term B Loan Facility based on the leverage ratios and excess cash flow metrics as defined in the 2020 Credit Agreement. Refer to "Note 9 – Debt" for additional information.

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

The following discussion should be read in conjunction with the attached unaudited condensed consolidated financial statements and notes thereto, and with our audited financial statements and notes thereto for the year ended December 31, 2019 found in the Form 10-K filed by Xperi Corporation on February 18, 2020 (the "Form 10-K").

This Quarterly Report contains forward-looking statements, which are subject to the safe harbor provisions created by the Private Securities Litigation Reform Act of 1995. Words such as "expects," "anticipates," "plans," "believes," "seeks," "estimates," "could," "would," "may," "intends," "targets" and similar expressions or variations of such words are intended to identify forward-looking statements, but are not the exclusive means of identifying forward-looking statements in this Quarterly Report. The identification of certain statements as "forward-looking" is not intended to mean that other statements not specifically identified are not forward-looking. All statements other than statements about historical facts are statements that could be deemed forward-looking statements, including, but not limited to, statements that relate to our future revenue, product development, demand, acceptance and market share, growth rate, competitiveness, gross margins, levels of research, development and other related costs, expenditures, the outcome or effects of and expenses related to litigation and administrative proceedings related to our patents, our intent to enforce our intellectual property, our ability to license our intellectual property, tax expenses, cash flows, our ability to liquidate and recover the carrying value of our investments, our management's plans and objectives for our current and future operations, our plans for quarterly dividends and stock repurchases, our ability to achieve cost savings through the integration of the legacy businesses, the levels of customer spending or research and development activities, general economic conditions, the impact of COVID-19 (as defined below) pandemic and related events, the impact of the Mergers (as defined below) on our financial condition and results of operations, our plans to separate the combined product and IP licensing businesses, and the sufficiency of financial resources to support future operations and capital expenditures.

Although forward-looking statements in this Quarterly Report reflect the good faith judgment of our management, such statements can only be based on facts and factors currently known by us. Consequently, forward-looking statements are inherently subject to risks, uncertainties, and changes in condition, significance, value and effect, including those discussed below under the heading "Risk Factors" within Part II, Item 1A of this Quarterly Report and other documents we file from time to time with the Securities and Exchange Commission (the "SEC"), such as our annual reports on Form 10-K, our quarterly reports on Form 10-Q and our current reports on Form 8-K. Such risks, uncertainties and changes in condition, significance, value and effect could cause our actual results to differ materially from those expressed herein and in ways not readily foreseeable. Readers are urged not to place undue reliance on these forward-looking statements, which speak only as of the date of this Quarterly Report and are based on information currently and reasonably known to us. We undertake no obligation to revise or update any forward-looking statements in order to reflect any event or circumstance that may arise after the date of this Quarterly Report, other than as required by law. Readers are urged to carefully review and consider the various disclosures made in this Quarterly Report, which attempt to advise interested parties of the risks and factors that may affect our business, financial condition, results of operations and prospects.

As used herein, the "Company," "we," "us" and "our" refer to Xperi when referring to periods prior to June 1, 2020 and Xperi Holding Corporation when referring to periods subsequent to June 1, 2020. Unless specified otherwise, the financial results in this Quarterly Report are those of the Company and its subsidiaries on a consolidated basis.

Business Overview

On December 18, 2019, Xperi Corporation ("Xperi") entered into a definitive agreement with TiVo Corporation ("TiVo"), to combine in an all-stock merger of equals transaction (the "Mergers"). Following consummation of the Mergers on June 1, 2020, Xperi Holding Corporation became the parent company of both Xperi and TiVo. The common stock of both Xperi and TiVo were de-registered after completion of the Mergers. On June 2, 2020, Xperi Holding Corporation's common stock, par value $0.001 per share, commenced trading on the Nasdaq Global Select Market ("Nasdaq") under the ticker symbol "XPER." Xperi was determined to be the accounting acquirer in the Mergers. As a result, the historical financial statements of Xperi for periods prior to the Mergers are considered to be the historical financial statements of Xperi Holding Corporation. Our results of operations include the operations of TiVo after June 1, 2020. For further discussion on the Mergers, refer to "Item 1A. Risk Factors," and "Note 7 – Business Combination" in the Notes to Condensed Consolidated Financial Statements.

In connection with the Mergers, we incurred significant one-time expenses in the first three quarters of 2020 such as transaction related costs (e.g. bankers fees, legal fees, consultant fees, etc.), lease impairment charges due to facilities consolidation, severance and retention costs (including stock-based compensation expense resulting from the contractually-required acceleration of equity instruments for departing executives). Total transaction related costs amounted to $1.2 million and $29.1 million for the three and nine months ended September 30, 2020, respectively. Lease impairment charges were $0.7 million and $0.7 million for the three and nine months ended September 30, 2020, respectively. In addition, we incurred post-merger severance and retention costs of $3.6 million and $12.1 million for the three and nine months ended September 30, 2020,

respectively. We may incur additional expenses for integration, severance and retention, and the impairment of right-of-use assets due to facilities consolidation in future quarters. We currently expect to achieve at least $50.0 million of annualized run-rate cost savings by year-end 2021 through the integration of the respective product and IP licensing businesses of the legacy companies.

We are a leading consumer and entertainment technology licensing company and one of the industry's largest intellectual property (IP) licensing platforms, with a diverse portfolio of media and semiconductor intellectual property and more than 11,000 patents and applications. We invent, develop, and deliver technologies that enable extraordinary experiences. Xperi technologies, delivered via our brands (DTS, HD Radio, IMAX Enhanced, Invensas, TiVo), and by our subsidiary, Perceive Corporation ("Perceive"), make entertainment more entertaining, and smart devices smarter. Our technologies are integrated into billions of consumer devices, media platforms, and semiconductors worldwide, driving increased value for partners, customers and consumers. We shape how millions of consumers access and experience entertainment content, and our innovations are found in billions of devices and hundreds of millions of interfaces around the globe. Headquartered in Silicon Valley with operations around the world, we have approximately 1,900 employees and over 35 years of operating experience.

We are currently contemplating and may pursue, subject to the receipt of approval by our board and any required regulatory approvals, a separation of our product business and IP licensing business through a tax-efficient transaction, resulting in two independent, publicly traded companies. We are currently evaluating the optimal timing of the contemplated business separation.

On November 9, 2020, we entered into a patent license agreement (the "Agreement") with Comcast Corporation ("Comcast") and certain of its affiliates. In connection with the Agreement, the companies resolved all of the outstanding litigation. The Agreement is effective as of the expiration of Comcast's prior agreement in 2016 and its term continues into 2031. The Agreement also provides for an initial payment by Comcast upon execution and ongoing payments through the remainder of the Agreement. As the Agreement was entered into after September 30, 2020, we expect to record revenue from the out-of-license settlement in the fourth quarter of 2020 and revenue from the prospective license into 2031. In addition, we expect to make a substantial principal payment towards the 2020 Term B Loan Facility based on the leverage ratios and excess cash flow metrics as defined in the 2020 Credit Agreement.

COVID-19 Impact

In December 2019, a novel strain of coronavirus ("COVID-19") was reported to have surfaced in Wuhan, China, and has since spread throughout the world. In March 2020, the World Health Organization declared COVID-19 a pandemic. In an effort to protect the health and safety of our employees, we took proactive, aggressive action from the earliest signs of the outbreak to adopt social distancing policies at our locations around the world, including working from home, limiting the number of employees attending meetings, and suspending employee travel. In an effort to contain COVID-19 and slow its spread, governments around the world have also enacted various measures, including orders to close business locations, isolate people to their places of residence, and mandate social distancing and other health-related practices. Such orders or restrictions have resulted in business closures, work stoppages, slowdowns and delays in commercial activities, widespread unemployment, travel restrictions and cancellation of events, among other effects. While some governments recently have permitted reopening of businesses and approved gradual easing of various restrictions, the pandemic continues to have a significant and negative impact on business and economic activities in the U.S and around the world.

These actions and the resulting global economic downturn have negatively impacted, and are expected to continue to negatively impact, our consolidated financial results for the remainder of 2020. The impact to date has included significant volatility and a decline in demand in various markets and industries, particularly the automotive market, which has been adversely impacted and is expected to continue to adversely impact our revenue. For example, we anticipate approximately 20% decline in our royalty revenue in 2020 from our products sold to the automotive market, such as HD Radio, as compared to the prior year. In addition, we recorded, in the first quarter of 2020, an incremental provision for credit losses of approximately $2.0 million due to heightened risk of nonpayment on existing accounts receivable as a result of the impaired financial condition and liquidity positions of certain of our customers.

We have been closely monitoring the COVID-19 pandemic and its impact on our business, including legislation to mitigate the impact of COVID-19 such as the Coronavirus Aid, Relief, and Economic Security (CARES) Act which was enacted on March 27, 2020. A significant portion of our anticipated revenue for 2020 is derived from fixed-fee and minimum-guarantee arrangements, primarily from large, well-capitalized customers which we believe somewhat mitigates the risks to our business. Although we are unable to predict the full impact and duration of COVID-19 on our business, we are actively managing our financial expenditures in response to the current uncertainty. Further discussion of the potential impacts on our business from the COVID-19 pandemic is provided under Part II, *Item 1A – Risk Factors*.

Results of Operations

Revenue

We generate our revenue from the following principal activities.

License Agreements

We operate in two business segments. In our Product segment, we license our audio, imaging, edge-based machine learning and multi-channel video user experience (“UX”) solutions. In our IP Licensing segment, we license (i) our media patent portfolios (“IP Media licensing”) to pay television providers, consumer electronics manufacturers and other providers of video experiences across various platforms and (ii) our semiconductor technologies and associated patent portfolios (“IP Semiconductor licensing”) to semiconductor manufacturers, fabless companies, foundries and packaging companies. We license our technologies and portfolios under three revenue models: (i) fixed-fee IP Media licensing, (ii) fixed-fee or minimum guarantee IP Semiconductor or Product licensing, and (iii) per-unit or per-subscriber royalty licenses.

Fixed-fee IP Media licensing

Our long-term fixed-fee IP Media licensing agreements provide our customers with the rights to future patented technologies over the term of the agreement that are highly interdependent or highly interrelated to the patented technologies provided at the inception of the agreement. We treat these rights as a single performance obligation with revenue recognized on a straight-line basis over the term of the fixed-fee license agreement.

At times, we enter into license agreements in which a licensee is released from past patent infringement claims and is granted a license to ship an unlimited number of units or for an unlimited number of subscribers over a future period for a fixed fee. In these arrangements, we allocate the transaction price between the release for past patent infringement claims and the future license. As the release from past patent infringement claims is generally satisfied at execution of the agreement, the transaction price allocated to the release from past patent infringement claims is generally recognized in the period the agreement is executed and the amount of transaction price allocated to the future license is recognized ratably over the future license term.

Fixed-fee or minimum guarantee IP Semiconductor or Product licensing

We enter into Product or IP Semiconductor licenses that have fixed fee or minimum guarantee arrangements, whereby licensees pay a fixed fee for the right to incorporate our technology in the licensee's products over the license term. In arrangements with a minimum guarantee, the fixed fee component corresponds to a minimum number of units or dollars that the customer must produce or pay, with additional per-unit fees for any units or dollars exceeding the minimum. In most cases, the customer pays the fixed license fee in specified installments over the license term. For both fixed fee and minimum guarantee agreements for IP Semiconductor or Product licensing, we recognize the full fixed fee as revenue at the beginning of the license term, when the licensee has the right to use the IP and begins to benefit from the license.

If the contract term of a fixed fee or minimum guarantee arrangement is longer than one year, we also consider the scheduled payment arrangements to determine whether a significant financing component exists. In general, if the payment arrangements extend beyond the initial twelve months of the contract, we treat a portion of the payments as a significant financing component. The discount rate used for each arrangement reflects the rate that would be used in a separate financing transaction between us and the licensee at contract inception and takes into account the credit characteristics of the licensee and market interest rates as of the date of the agreement. As such, the amount of fixed fee revenue recognized at the beginning of the license term will be reduced by the calculated financing component.

We actively monitor and enforce our IP, including seeking appropriate compensation from customers that have under-reported royalties owed under a license agreement and from third parties that utilize our intellectual property without a license. As a result of these activities, we may, from time to time, recognize revenue from payments resulting from periodic compliance audits of licensees for underreporting royalties incurred in prior periods, as part of a settlement of a patent infringement dispute, or from legal judgments in a license dispute. These recoveries and settlements may cause revenue to be higher than expected during a particular reporting period and such recoveries may not occur in subsequent periods. We recognize revenue from recoveries when a binding agreement has been executed and we conclude collection under that agreement is likely.

Per-unit or per-subscriber royalty licenses

We recognize revenue from per-unit or per-subscriber royalty licenses in the period in which the licensee's sales or production are estimated to have occurred, which results in an adjustment to revenue when actual sales or production are subsequently

reported by the licensee, which is generally in the month or quarter following usage or shipment. We generally recognize revenue from royalty licenses on a per-subscriber per-month model for licenses with service providers and a per-unit shipped or manufactured model for licenses with CE manufacturers. Estimating licensees' quarterly royalties prior to receiving the royalty reports requires us to make significant assumptions and judgments related to forecasted trends and growth rates used to estimate quantities shipped by customers, which could have a material impact on the amount of revenue we report on a quarterly basis.

Arrangements with Multiple System Operators for the TiVo Service

Our arrangements with multiple system operators ("MSOs") typically include software customization and set-up services, associated maintenance and support, limited training, post-contract support, TiVo-enabled DVRs, non-DVR STBs and the TiVo service.

We have two types of arrangements with MSOs that include technology deployment and engineering services. In instances where we host the TiVo service, non-refundable payments received for customization and set-up services are deferred and recognized as revenue ratably over the hosting term. The related cost of such services is capitalized to the extent it is deemed recoverable and amortized to cost of revenue over the same period as the related TiVo service revenue is recognized. We estimate the stand-alone selling prices for training, DVRs, non-DVR STBs and maintenance and support based on the price charged in stand-alone sales of the promised good or service. The stand-alone selling price for the TiVo service is determined considering the size of the MSO and expected volume of deployment, market conditions, competitive landscape, internal costs and total gross margin objectives. For a term license to the TiVo service, we receive license fees for the hosted TiVo service on either a per-subscriber per-month basis or a fixed fee. We recognize revenue from per-subscriber per-month licenses during the month the TiVo service is provided to the customer and recognize revenue from fixed fee licenses ratably over the license period.

In arrangements where we do not host the TiVo service and that include engineering services that are essential to the functionality of the licensed technology or involve significant customization or modification of the software, we recognize revenue as progress toward completion is made using an input method based on the ratio of costs incurred to date to total estimated costs of the project. Estimating project costs requires forecasting costs, tracking progress toward completion and projecting the remaining effort to complete the project. These estimates are reassessed throughout the term of the arrangement, and revisions to estimates are recognized on a cumulative catch-up basis when the changed conditions become known. We generally recognize revenue from license fees for the TiVo service that the Company does not host on a per-subscriber per-month basis due to the recognition constraint on intellectual property usage-based royalties.

Subscription Services

Subscription services revenue primarily consists of fees to provide customers with access to one or more of our hosted products such as the iGuide IPG, advanced search and recommendations, metadata and analytics products, including routine customer support. We generally receive per-subscriber per-month fees for the iGuide IPG and search and recommendations service and revenue is recorded in the month the customer uses the service. We generally receive a monthly or quarterly fee from our metadata or analytics licenses for the right to use the metadata or access our analytics platform and to receive regular updates. Revenue from our metadata and analytics service is recognized ratably over the subscription period.

TiVo-enabled DVRs and TiVo Service

We sell TiVo-enabled DVRs and the related service directly to customers through sales programs via the TiVo.com website and license the sale of TiVo-enabled DVRs through a limited number of retailers. After the initial subscription period, all customers have various pricing options when they renew their subscription.

The transaction price allocated to the DVR is recognized as revenue upon shipment to the customer and the transaction price allocated to the TiVo service is recognized as revenue ratably over the service period. Subscription revenue from lifetime subscriptions is recognized ratably over the estimated useful life of the DVR associated with the subscription. The estimated useful life for a DVR depends on a number of assumptions, including, but not limited to, customer retention rates, the timing of new product introductions and historical experience. We periodically reassess the estimated useful life of a DVR. When the actual useful life of the DVR materially differs from our estimates, the estimated useful life of the DVR is adjusted, which could result in the recognition of revenue over a longer or shorter period of time.

The following table presents our historical operating results for the periods indicated as a percentage of revenue:

	Three Months Ended		Nine Months Ended	
	September 30, 2020	September 30, 2019	September 30, 2020	September 30, 2019
Revenue:				
Licensing, services and software	96%	100%	98%	100%
Hardware	4	—	2	—
Total revenue	100	100	100	100
Operating expenses:				
Cost of licensing, services and software revenue, excluding depreciation and amortization of intangible assets	11	2	7	3
Cost of hardware revenue, excluding depreciation and amortization of intangible assets	6	—	3	—
Research, development and other related costs	28	45	27	41
Selling, general and administrative	32	48	37	45
Depreciation expense	3	3	3	3
Amortization expense	25	43	23	40
Litigation expense	4	3	3	2
Total operating expenses	109	144	103	134
Operating loss	(9)	(44)	(3)	(34)
Interest expense	7	10	5	9
Other income and expense, net	(1)	(1)	(1)	(4)
Loss on debt extinguishment	—	—	2	—
Loss before taxes	(15)	(53)	(9)	(39)
Provision for (benefit from) income taxes	—	(25)	(1)	(14)
Net loss	(15)%	(28)%	(8)%	(25)%

Total Revenue (in thousands, except for percentages):

	Three Months Ended			
	September 30, 2020	September 30, 2019	Increase/ (Decrease)	% Change
Total revenue	$ 202,797	$ 57,867	$ 144,930	250%

The $144.9 million, or 250% increase in total revenue for the three months ended September 30, 2020, compared to the same period in the prior year, was primarily due to the inclusion of revenue from the results of TiVo operations following the Mergers. Excluding TiVo revenue, legacy Xperi revenue would have decreased due primarily to a decrease in revenue from IP Semiconductor licensing revenue, partially offset by higher minimum guarantee (“MG”) revenue due to the timing and duration of MG contracts up for renewal and executed during the third quarter of 2020.

	Nine Months Ended			
	September 30, 2020	September 30, 2019	Increase/ (Decrease)	% Change
Total revenue	$ 458,093	$ 189,549	$ 268,544	142%

The $268.5 million or 142% increase in total revenue for the nine months ended September 30, 2020, compared to the same period in the prior year, was primarily due to the inclusion of revenue from the results of TiVo’s operations following the Mergers and IP Semiconductor agreements executed during the first two quarters of 2020. These increases in revenue were partially offset by a decrease in royalty revenue from existing licensing agreements.

Cost of Licensing, Services and Software Revenue, Excluding Depreciation and Amortization of Intangible Assets

Cost of licensing, services and software revenue, excluding depreciation and amortization of intangible assets, consists primarily of employee-related costs, royalties paid to third parties, maintenance costs and an allocation of facilities costs, as

well as service center and other expenses related to providing the TiVo Service, non-recurring engineering ("NRE") services and our metadata offering.

Cost of licensing, services and software revenue, excluding depreciation and amortization of intangible assets, for the three months ended September 30, 2020 was $21.9 million, as compared to $1.5 million for the three months ended September 30, 2019, an increase of $20.4 million. Cost of licensing, services and software revenue, excluding depreciation and amortization of intangible assets, for the nine months ended September 30, 2020 was $31.6 million, as compared to $6.0 million for the nine months ended September 30, 2019, an increase of $25.6 million. The increases were primarily due to the inclusion of $19.8 million and $26.6 million of post-merger TiVo expenses for the three and nine months ended September 30, 2020, respectively. Excluding TiVo expenses, the costs would have been relatively constant for the three months ended September 30, 2020 and would have decreased by $1.0 million for the nine months ended September 30, 2020, as compared to the corresponding periods in 2019. The decrease was due principally to lower royalties paid to a third party in connection with a Product segment contract in the first three quarters of 2020.

We anticipate cost of licensing, services and software revenue, excluding depreciation and amortization of intangible assets, will increase in 2020 when compared to 2019 primarily due to incremental expenses from the TiVo operations.

Cost of Hardware Revenue, Excluding Depreciation and Amortization of Intangible Assets

Cost of hardware revenue, excluding depreciation and amortization of intangible assets, includes all product-related costs associated primarily with TiVo-enabled devices, including employee-related costs, warranty costs, order fulfillment costs, certain licensing costs, and an allocation of facilities costs.

Cost of hardware revenue, excluding depreciation and amortization of intangible assets, for the three months ended September 30, 2020 was $12.2 million, as compared to $0.1 million for the three months ended September 30, 2019, an increase of $12.1 million. Cost of hardware revenue, excluding depreciation and amortization of intangible assets, for the nine months ended September 30, 2020 was $13.7 million, as compared to $0.3 million for the nine months ended September 30, 2019, an increase of $13.4 million. The increases were primarily due to the inclusion of $11.8 million and $13.2 million of post-merger TiVo expenses for the three and nine months ended September 30, 2020, respectively.

We anticipate cost of hardware revenue, excluding depreciation and amortization of intangible assets, will continue to increase in 2020 when compared to 2019 primarily due to incremental expenses from the TiVo operations.

Research, Development and Other Related Costs

Research, development and other related costs ("R&D expense") are comprised primarily of employee-related costs, stock-based compensation expense, engineering consulting expenses associated with new product and technology development, product commercialization, quality assurance and testing costs, as well as costs related to patent applications and examinations, product "tear downs" and reverse engineering, materials, supplies, equipment depreciation and an allocation of facilities costs. All research, development and other related costs are expensed as incurred.

R&D expense for the three months ended September 30, 2020 was $57.7 million, as compared to $26.0 million for the three months ended September 30, 2019, an increase of $31.7 million. R&D expense for the nine months ended September 30, 2020 was $124.6 million, as compared to $78.0 million for the nine months ended September 30, 2019, an increase of $46.6 million. The increases were due to the inclusion of $30.2 million and $40.0 million of post-merger TiVo R&D expenses for the three and nine months ended September 30, 2020, respectively, increased headcount and personnel costs in Perceive which was created to focus on delivering edge inference solutions, and severance charges incurred in connection with consolidating and optimizing post-merger operations.

We believe that a significant level of R&D expense will be required for us to remain competitive in the future. We also anticipate that R&D expense will remain higher than in the prior year due primarily to inclusion of the TiVo R&D operations.

Selling, General and Administrative

Selling expenses consist primarily of compensation and related costs for sales and marketing personnel engaged in sales and licensee support, reverse engineering personnel and services, marketing programs, public relations, promotional materials, travel, trade show expenses, and stock-based compensation expense. General and administrative expenses consist primarily of compensation and related costs for general management, information technology, finance personnel, legal fees and expenses, facilities costs, stock-based compensation expense, and professional services. Our general and administrative expenses, other than facilities-related expenses, are not allocated to other expense line items.

Selling, general and administrative expenses for the three months ended September 30, 2020 were $63.8 million, as compared to $27.6 million for the three months ended September 30, 2019, an increase of $36.2 million. The increase was due principally to the inclusion of $27.8 million of TiVo expenses, legacy Xperi merger transaction related costs of $1.2 million, post-merger severance and retention costs of $1.4 million, separation costs of $2.1 million, and an increase of $2.2 million in stock-based compensation.

Selling, general and administrative expenses for the nine months ended September 30, 2020 were $168.6 million, as compared to $84.1 million for the nine months ended September 30, 2019, an increase of $84.5 million. The increase was due principally to the inclusion of $57.3 million of TiVo expenses, legacy Xperi merger transaction related costs of $15.4 million, post-merger severance and retention costs of $3.7 million, separation costs of $2.5 million, and an increase of $2.7 million in stock-based compensation.

We anticipate selling, general and administrative expenses will remain higher than in the prior year due to inclusion of the TiVo operations.

Depreciation Expense

Depreciation expense for the three months ended September 30, 2020 was $6.8 million, as compared to $1.6 million for the three months ended September 30, 2019, an increase of $5.2 million. Depreciation expense for the nine months ended September 30, 2020 was $11.8 million, as compared to $5.1 million for the nine months ended September 30, 2019, an increase of $6.7 million. The increases were primarily attributable to depreciation expense on TiVo fixed assets added through the Mergers in June 2020.

We anticipate depreciation expense will continue to increase in 2020 as compared to 2019 as a result of the Mergers.

Amortization Expense

Amortization expense for the three months ended September 30, 2020 was $50.9 million, as compared to $25.1 million for the three months ended September 30, 2019, an increase of $25.8 million. Amortization expense for the nine months ended September 30, 2020 was $105.4 million, as compared to $75.9 million for the nine months ended September 30, 2019, an increase of $29.5 million. These increases were primarily attributable to amortization of intangible assets recorded in connection with the Mergers in June 2020.

With the Mergers, we anticipate that amortization expenses will continue to be a significant expense since we acquired approximately $878 million in intangible assets which will be amortized over the next several years. See "Note 8 – *Goodwill and Identified Intangible Assets"* in the Notes to Condensed Consolidated Financial Statements for additional information.

Litigation Expense

Litigation expense for the three months ended September 30, 2020 was $8.5 million, as compared to $1.5 million for the three months ended September 30, 2019, an increase of $7.0 million. Litigation expense for the nine months ended September 30, 2020 was $14.5 million, as compared to $4.0 million for the nine months ended September 30, 2019, an increase of $10.5 million. These increases were primarily due to inclusion of post-merger TiVo litigation expenses for the three and nine months ended September 30, 2020, respectively, and increased case activity in the first three quarters of 2020.

In 2019 and in 2020 prior to the Mergers TiVo's litigation expenses were significantly higher than Xperi's litigation expenses in the same periods. We expect that litigation expense will continue to be a material portion of our operating expenses and, as a result of the Mergers, will increase significantly in future periods. Litigation expense may fluctuate between periods because of planned or ongoing litigation, as described in Part II, Item 1 – *Legal Proceedings*, and because of litigation planned for or initiated from time to time in the future in order to enforce and protect our intellectual property and contract rights.

Upon expiration of our customers' licenses, if those licenses are not renewed, litigation may become necessary to secure payment of reasonable royalties for the use of our patented technology. If we plan for or initiate such litigation, our future litigation expenses may increase.

Stock-based Compensation Expense

The following table sets forth our stock-based compensation expense for the three and nine months ended September 30, 2020 and 2019 (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2020	September 30, 2019	September 30, 2020	September 30, 2019
Cost of licensing, services and software revenue	$ 258	$ —	$ 332	$ —
Research, development and other related costs	3,580	3,544	9,454	10,293
Selling, general and administrative	6,319	4,444	16,828	12,539
Total stock-based compensation expense	$ 10,157	$ 7,988	$ 26,614	$ 22,832

Stock-based compensation awards include employee stock options, restricted stock awards and units, and employee stock plan purchases. The increases in stock-based compensation for the three and nine months ended September 30, 2020, compared to the corresponding periods in 2019, were primarily a result of including incremental expense of $1.9 million and $4.1 million from assumed TiVo stock awards and acceleration of equity instruments for departing executives for the three and nine months ended September 30, 2020, respectively.

Interest Expense

Interest expense for the three months ended September 30, 2020 and 2019 was $13.4 million and $5.5 million, respectively. Interest expense for the nine months ended September 30, 2020 and 2019 was $24.6 million and $18.4 million, respectively. The increases in interest expense were primarily a result of a higher average debt balance as compared to the corresponding periods in 2019, primarily due to the new $1,050 million term loan that was executed on June 1, 2020 to refinance the indebtedness of the combined Company in connection with the Mergers, which was partially offset by lower interest rates on our debt for the nine months ended September 30, 2020.

We anticipate interest expense to increase in 2020 when compared to 2019 as a result of increased borrowings and amortization of debt issuance costs in connection with the Mergers in June 2020.

Other Income and Expense, Net

Other income and expense, net, for the three months ended September 30, 2020 was $2.3 million, as compared to $0.4 million for the three months ended September 30, 2019. Other income and expense, net, in the third quarter of 2020 was higher than the corresponding period in 2019 due principally to inclusion of post-merger TiVo other income, net, as well as recognition of an unrealized loss of $1.1 million on our equity investment in Onkyo Corporation ("Onkyo") common stock in 2019.

Other income and expense, net, for the nine months ended September 30, 2020 was $3.4 million, as compared to $7.5 million for the nine months ended September 30, 2019. Other income and expense, net, was lower in the first nine months of 2020 as compared to 2019 due principally to a decrease in interest income from financing components under Topic 606. Additionally, lower other income and expense in the first nine months of 2020 as compared to 2019 was attributable to recognition of a realized loss of $0.7 million in 2020, as compared to an unrealized gain of $0.6 million in the same period in 2019, on the aforementioned Onkyo investment.

Loss on Debt Extinguishment

In connection with the Mergers, we refinanced the indebtedness of the combined Company, and recognized a loss on early debt extinguishment of $8.3 million in second quarter of 2020. We did not incur a loss on early debt extinguishment in any other quarter in 2020 or the first nine months of 2019.

Provision for Income Taxes

For the three months ended September 30, 2020, we recorded an income tax expense of $0.5 million on a pretax loss of $30.1 million and for the nine months ended September 30, 2020, we recorded an income tax benefit of $6.8 million on a pretax loss of $41.6 million, which resulted in an effective tax rate of 16.3% for the nine months ended September 30, 2020. The tax benefit of $6.8 million is comprised of a $12.2 million tax benefit related to the five month pre-merger period and a tax expense of $5.4 million related to the four month post-merger period. The five month pre-merger income tax benefit of $12.2 million was primarily related to a net decrease in valuation allowance as a result of the Mergers, deduction from foreign-derived

intangible income, releases of unrecognized tax benefits due to the lapse of applicable statutes of limitation, deduction from transaction expenses, offset by tax expense from operating income, shortfalls from stock-based compensation, certain non-deductible expenses, and unrealized foreign exchange losses from the prior period South Korea refund claim. The four month post-merger income tax expense of $5.4 million was primarily related to income tax expense from foreign operations, foreign withholding taxes and U.S. federal minimum tax offset by unrealized foreign exchange gains from the current period South Korea refund claim.

For the three months ended September 30, 2019, we recorded an income tax benefit of $14.6 million on a pretax loss of $30.6 million and for the nine months ended September 30, 2019, we recorded an income tax benefit of $27.1 million on a pretax loss of $74.7 million, which resulted in an effective tax rate of 36.3% for the nine months ended September 30, 2019. The income tax benefit for the three and nine months ended September 30, 2019 was primarily related to tax benefit from operating losses and the realization of certain tax credits, offset by foreign withholding taxes, certain non-deductible expenses, and shortfalls from stock-based compensation.

Our provision for income taxes is based on our worldwide estimated annualized effective tax rate, except for jurisdictions for which a loss is expected for the year and no benefit can be realized for those losses, and the tax effect of discrete items occurring during the period. We have applied separate effective tax rates to our pre- and post-merger activities; our post-merger effective tax rate is based on our worldwide estimated tax rate for the seven-month period ended December 31, 2020. The tax for jurisdictions for which a loss is expected and no benefit can be realized for the year is computed using a separate effective tax rate. The decrease in income tax benefit for the nine months ended September 30, 2020 as compared to the prior year is largely attributable to a decrease in operating losses, increase in valuation allowance in the post-merger period, foreign withholding taxes, and U.S. federal minimum taxes, partially offset by tax benefits from the release of unrecognized tax benefits due to the lapse of applicable statute of limitation and a decrease in valuation allowance as a result of the Mergers.

During the fourth quarter of 2019, we filed a refund claim for foreign taxes previously withheld from licensees in South Korea based on recent court rulings in South Korea and other business factors. These previously withheld foreign taxes were claimed as a foreign tax credit in the U.S. As a result of our refund claim, we recorded a non-current income tax receivable of $65.2 million in income tax receivable, an unrecognized tax benefit of $48.2 million in other long-term liabilities, and a reduction in deferred tax assets of $17.0 million. We anticipate filing a refund claim for the 2020 year-to-date South Korean withholding taxes. During the first nine months of 2020, an additional non-current income tax receivable of $13.7 million, an unrecognized tax benefit of $8.4 million in other long-term liabilities, and a reduction in deferred tax assets of $5.0 million with an offset to valuation allowance were recorded in connection with the South Korea refund claim matter. As part of our acquisition of TiVo, we recorded a year-to-date non-current income tax receivable of $31.9 million and a reduction in deferred tax assets of $15.5 million with a corresponding offset to valuation allowance, with the residual recorded to goodwill. At September 30, 2020, we had recorded a cumulative unrealized foreign exchange loss of approximately $1.2 million as a reduction in non-current income tax receivable.

The need for a valuation allowance requires an assessment of both positive and negative evidence when determining whether it is more-likely-than-not that deferred tax assets are recoverable. Such assessment is required on a jurisdiction-by-jurisdiction basis. In making such assessment, significant weight is given to evidence that can be objectively verified. After considering both positive and negative evidence to assess the recoverability of our net deferred tax assets, we determined that it was not more-likely-than-not that we would realize our federal, certain state and certain foreign deferred tax assets given the substantial amount of tax attributes that will remain unutilized to offset forecasted future tax liabilities. In the future, we may release our deferred tax asset valuation allowance associated with our federal, state or foreign deferred tax assets depending on achievement of future profitability in relevant jurisdictions, or implementing tax planning strategies that enable us to utilize deferred tax assets. Specifically, we will evaluate additional evidence provided by the nonrecognized subsequent event discussed in “Note 17 – Subsequent Events” which could result in the release of a portion of our deferred tax asset valuation allowance. We continue to monitor the likelihood that we will be able to recover our deferred tax assets, including those for which a valuation allowance is recorded. There can be no assurance that we will generate profits or implement tax strategies in future periods enabling us to fully realize our deferred tax assets. The timing of recording a deferred tax asset valuation allowance or the reversal of such valuation allowance is subject to objective and subjective factors that cannot be known in advance. Adjustments could be required in the future if we conclude that it is more-likely-than-not that deferred tax assets are recoverable. The release of a deferred tax asset valuation allowance could have the effect of decreasing the income tax provision in the period the valuation allowance is released.

Segment Operating Results

In connection with the Mergers, we re-evaluated our reportable segments. We concluded that we have two reportable segments: (1) Product and (2) IP Licensing. There are certain corporate overhead costs that are not allocated to these reportable segments because these operating amounts are not considered in evaluating the operating performance of our business segments.

Our Chief Executive Officer has been determined to be the Chief Operating Decision Maker ("CODM") in consideration with the authoritative guidance on segment reporting.

The Product segment consists primarily of licensing our internally-developed audio, digital radio, imaging, edge-based machine learning and multi-channel video user experience ("UX") solutions. Edge based machine learning, audio, digital radio, and imaging solutions include the delivery of software and/or hardware-based solutions to the Company's consumer electronics ("CE") customers, automotive manufacturers or their supply chain partners. UX products and services revenue is primarily derived from multi-channel video service providers and CE manufacturers, licensing the TiVo service and selling TiVo-enabled devices, Personalized Content Discovery, enriched Metadata, viewership data and advertising.

The IP Licensing segment consists primarily of licensing our innovations to leading companies in the media and semiconductor industries. Licensing arrangements include access to one or more of our foundational patent portfolios and may also include access to some of our industry-leading technologies and proven know-how. In the media industry, our licensees include pay television ("Pay-TV") providers, both in the United States and internationally, consumer electronics manufacturers and other providers of video experiences across various platforms, including over-the-top (OTT) video. In the semiconductor industry, our licensees include semiconductor manufacturers, fabless companies, foundries and packaging companies.

We do not identify or allocate assets by reportable segment, nor does the CODM evaluate reportable segments using discrete asset information. Reportable segments do not record inter-segment revenue and accordingly there are none to report. Although the CODM uses operating income to evaluate reportable segments, operating costs included in one segment may benefit other segments.

The following table sets forth our segments' revenue, operating expenses and operating income (loss) (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2020	September 30, 2019	September 30, 2020	September 30, 2019
Revenue:				
Product segment	$ 122,552	$ 46,028	$ 242,618	$ 152,026
IP Licensing segment	80,245	11,839	215,475	37,523
Total revenue	202,797	57,867	458,093	189,549
Operating expenses:				
Product segment	116,149	45,693	228,941	139,409
IP Licensing segment	40,020	10,113	70,765	29,859
Unallocated operating expenses (1)	65,591	27,588	170,542	84,121
Total operating expenses	221,760	83,394	470,248	253,389
Operating income (loss):				
Product segment	6,403	335	13,677	12,617
IP Licensing segment	40,225	1,726	144,710	7,664
Unallocated operating expenses (1)	(65,591)	(27,588)	(170,542)	(84,121)
Total operating loss	$ (18,963)	$ (25,527)	$ (12,155)	$ (63,840)

(1) Unallocated operating expenses consist primarily of selling, marketing, general and administrative expenses, including administration, human resources, finance, information technology, corporate development and procurement. These expenses are not allocated because these amounts are not considered in evaluating the operating performance of the Company's business segments.

The revenue and operating income (loss) amounts in this section have been presented on a basis consistent with U.S. GAAP applied at the segment level. Of our $846.9 million in goodwill at September 30, 2020, approximately $524.1 million was allocated to our Product reporting segment and approximately $322.8 million was allocated to our IP Licensing reporting segment.

For the three months ended September 30, 2020, the unallocated operating expenses were $65.6 million compared to $27.6 million for the three months ended September 30, 2019. The increase of $38.0 million was due principally to the inclusion of TiVo expenses, legacy Xperi merger transaction related costs of $1.2 million, post-merger severance and retention costs of $1.4 million, separation costs of $2.1 million, and an increase of $2.2 million in stock-based compensation.

For the nine months ended September 30, 2020, the unallocated operating expenses were $170.5 million compared to $84.1 million for the nine months ended September 30, 2019. The increase of $86.4 million was due principally to the inclusion of

TiVo expenses, legacy Xperi merger transaction related costs of $15.4 million, post-merger severance and retention costs of $3.7 million, separation costs of $2.5 million, and an increase of $2.7 million in stock-based compensation.

Product Segment

	Three Months Ended		Nine Months Ended	
	September 30, 2020	September 30, 2019	September 30, 2020	September 30, 2019
Total revenue	$ 122,552	$ 46,028	$ 242,618	$ 152,026
Operating expenses:				
Total cost of revenue	33,881	1,506	45,145	6,241
Research, development and other related costs	48,850	20,172	102,479	61,275
Litigation	936	538	1,674	1,329
Depreciation	4,671	1,295	8,840	4,018
Amortization	27,811	22,182	70,803	66,546
Total operating expenses	116,149	45,693	228,941	139,409
Total operating income	$ 6,403	$ 335	$ 13,677	$ 12,617

Product revenue for the three months ended September 30, 2020 was $122.6 million as compared to $46.0 million for the three months ended September 30, 2019, an increase of $76.6 million. Product revenue for the nine months ended September 30, 2020 was $242.6 million as compared to $152.0 million for the nine months ended September 30, 2019, an increase of $90.6 million. The increases were primarily attributable to the inclusion of TiVo product revenue for the three and nine months ended September 30, 2020, respectively, partially offset by a decrease in royalty revenue from existing licensing arrangements. We anticipate Product revenue for 2020 will be higher than revenue for 2019 due principally to the additional product revenue from TiVo following the Mergers.

Operating expenses for the three months ended September 30, 2020 were $116.1 million, as compared to $45.7 million for the three months ended September 30, 2019, an increase of $70.4 million. Operating expenses for the nine months ended September 30, 2020 were $228.9 million, as compared to $139.4 million for the nine months ended September 30, 2019, an increase of $89.5 million. The increases were primarily due to the inclusion of TiVo Product expenses for the three and nine months ended September 30, 2020, respectively, increased headcount and personnel costs in Perceive, partially offset by lower legacy Xperi amortization expense due to certain intangible assets becoming fully amortized over the past twelve months.

Operating income in the three months ended September 30, 2020 was $6.4 million compared to operating income of $0.4 million in the three months ended September 30, 2019, with the variance due to the reasons stated above.

Operating income for the nine months ended September 30, 2020 was $13.7 million compared to operating income of $12.6 million in the nine months ended September 30, 2019, with the variance due to the reasons stated above.

IP Licensing Segment

	Three Months Ended		Nine Months Ended	
	September 30, 2020	September 30, 2019	September 30, 2020	September 30, 2019
Total revenue	$ 80,245	$ 11,839	$ 215,475	$ 37,523
Operating expenses:				
Total cost of revenue	189	—	189	—
Research, development and other related costs	8,881	5,826	22,086	16,729
Litigation	7,580	989	12,815	2,719
Depreciation	287	334	1,031	1,038
Amortization	23,083	2,964	34,644	9,373
Total operating expenses	40,020	10,113	70,765	29,859
Total operating income	$ 40,225	$ 1,726	$ 144,710	$ 7,664

IP Licensing revenue for the three months ended September 30, 2020 was $80.2 million as compared to $11.8 million for the three months ended September 30, 2019, an increase of $68.4 million. The increase was primarily attributable to the inclusion of TiVo IP Licensing revenue, partially offset by a decrease in revenue from IP Semiconductor licensing revenue.

IP Licensing revenue for the nine months ended September 30, 2020 was $215.5 million as compared to $37.5 million for the nine months ended September 30, 2019, an increase of $178.0 million. The increase was primarily attributable to the inclusion of TiVo IP Licensing revenue since the Mergers and IP Semiconductor agreements executed during the first two quarters of 2020, partially offset by a decrease in revenue from other IP Semiconductor license agreements.

We anticipate IP Licensing revenue for 2020 will be higher than revenue for 2019 due to the Mergers and the IP Semiconductor agreements entered into during the first two quarters of 2020.

Operating expenses for the three months ended September 30, 2020 were $40.0 million, as compared to $10.1 million for the three months ended September 30, 2019, an increase of $29.9 million. Operating expenses for the nine months ended September 30, 2020 were $70.8 million, as compared to $29.9 million for the nine months ended September 30, 2019, an increase of $40.9 million. The increases were primarily due to the inclusion of TiVo IP Licensing expenses for the three and nine months ended September 30, 2020, respectively, partially offset by lower legacy Xperi amortization expense due to certain intangible assets becoming fully amortized over the past twelve months.

In 2019 and in 2020 prior to the Mergers TiVo's litigation expenses were significantly higher than Xperi's litigation expenses in the same period. We expect that litigation expense will continue to be a material portion of our operating expenses and, as a result of the Mergers, will increase significantly in future periods. Litigation expense may fluctuate between periods because of planned or ongoing litigation, as described in Part II, Item 1 – Legal Proceedings, and because of litigation planned for or initiated from time to time in the future in order to enforce and protect our intellectual property and contract rights.

Operating income for the three months ended September 30, 2020 was $40.2 million compared to operating income of $1.7 million for the three months ended September 30, 2019, with the variance due to the reasons stated above.

Operating income for the nine months ended September 30, 2020 was $144.7 million compared to operating income of $7.7 million for the nine months ended September 30, 2019, with the variance due to the reasons stated above.

Liquidity and Capital Resources

	As of	
(in thousands, except for percentages)	**September 30, 2020**	**December 31, 2019**
Cash and cash equivalents	$ 115,725	$ 74,551
Short-term investments	87,258	46,926
Total cash, cash equivalents and short-term investments	$ 202,983	$ 121,477
Percentage of total assets	8%	12%

	Nine Months Ended	
	September 30, 2020	**September 30, 2019**
Net cash from operating activities	$ 129,433	$ 104,214
Net cash from investing activities	$ 72,536	$ (13,053)
Net cash from financing activities	$ (161,553)	$ (129,069)

Our primary sources of liquidity and capital resources are our operating cash flows and our investment portfolio. Cash, cash equivalents and short-term investments were $203.0 million at September 30, 2020, an increase of $81.5 million from $121.5 million at December 31, 2019. This increase resulted primarily from $129.4 million in cash generated from operations, $1,010.3 million in net long-term debt proceeds received, and $117.4 million in cash acquired from TiVo as a result of the Mergers, which was partially offset by $25.6 million in dividends paid, $59.3 million in repurchases of common stock and $1,091.7 million in repayment of combined legacy indebtedness and the 2020 Term B Loan Facility. Cash and cash equivalents totaled $115.7 million at September 30, 2020, an increase of $41.1 million from $74.6 million at December 31, 2019.

Cash flows provided by operations were $129.4 million for the nine months ended September 30, 2020, primarily due to our net loss of $34.8 million being adjusted for non-cash items of depreciation of $11.8 million, amortization of intangible assets of $105.4 million, stock-based compensation expense of $26.6 million, loss on debt extinguishment of $8.3 million and $31.6 million in changes in operating assets and liabilities. These increases were partially offset by a reduction of $28.2 million in deferred income taxes.

Cash flows provided by operations were $104.2 million for the nine months ended September 30, 2019, primarily due to our net loss of $47.6 million being adjusted for non-cash items of depreciation of $5.1 million, amortization of intangible assets of

$75.9 million, stock-based compensation expense of $22.8 million and $89.6 million in changes in operating assets and liabilities. These increases were partially offset by a reduction of $43.1 million in deferred income taxes.

Net cash provided by investing activities was $72.5 million for the nine months ended September 30, 2020, primarily related to maturities and sales of securities of $26.9 million and net cash acquired in the Mergers of $117.4 million, partially offset by purchases of short-term investments of $68.1 million and capital expenditures of $3.0 million.

Net cash used in investing activities was $13.1 million for the nine months ended September 30, 2019, primarily related to the purchases of short-term available-for-sales securities of $34.5 million and $8.0 million in capital expenditures partially offset by maturities and sales of securities of $29.3 million.

Net cash used in financing activities was $161.6 million for the nine months ended September 30, 2020 principally due to $1,091.7 million in repayment of indebtedness, $25.6 million in dividends paid, and $59.3 million in repurchases of common stock, partially offset by $1,010.3 million in net long-term debt proceeds and $4.8 million in proceeds due to the issuance of common stock under our employee stock option programs and employee stock purchase plans.

Net cash used in financing activities was $129.1 million for the nine months ended September 30, 2019 principally due to $100.0 million in a partial pay-down of debt principal, $29.6 million in dividends paid and $4.3 million in repurchases of common stock, partially offset by $6.0 million in proceeds due to the issuance of common stock under our employee stock option programs and employee stock purchase plans.

The primary objectives of our investment activities are to preserve principal and to maintain liquidity while at the same time capturing a market rate of return. To achieve these objectives, we maintain a diversified portfolio of securities including money market funds and debt securities including corporate bonds and notes, municipal bonds and notes, commercial paper, treasury and agency notes and bills and certificates of deposit. We invest excess cash predominantly in high-quality investment grade debt securities with less than three years to maturity. Our marketable debt securities are classified as available-for-sale (“AFS”) with credit losses recognized as a credit loss expense and non-credit related unrealized gains and losses, net of tax, recorded in accumulated other comprehensive income or loss. The fair values for our securities are determined based on quoted market prices as of the valuation date or observable prices for similar assets.

For AFS debt securities in an unrealized loss position, we first assess whether we intend to sell, or it is more-likely-than-not that we will be required to sell the security before recovery of its amortized cost basis. If either of the criteria regarding intent or requirement to sell is met, the security's amortized cost basis is written down to fair value through income. For AFS debt securities that do not meet the aforementioned criteria, we evaluate whether the decline in fair value has resulted from credit losses or other factors. In making this assessment, we consider the extent to which fair value is less than amortized cost, any changes to the credit rating of the security by a rating agency, and adverse conditions specifically related to the security, among other factors. If this assessment indicates that a credit loss exists, the present value of cash flows expected to be collected from the security are compared to the amortized cost basis of the security. If the present value of cash flows expected to be collected is less than the amortized cost basis, a credit loss exists and an allowance for credit losses is recorded for the credit loss, limited by the amount that the fair value is less than the amortized cost basis. Any impairment that has not been recorded through an allowance for credit losses is recognized in accumulated other comprehensive income or loss. For the three and nine months ended September 30, 2020, we did not recognize a provision for credit loss expense related to our AFS debt securities. For the three and nine months ended September 30, 2019, we did not record any impairment charges related to our AFS debt securities.

On December 1, 2016, we entered into a Credit Agreement with Royal Bank of Canada (“RBC”) which provided for a $600.0 million seven-year term B loan facility. The Term B Loan Facility was scheduled to mature on November 30, 2023. During 2019 we made three voluntary principal payments totaling $150.0 million, and upon consummation of the Mergers on June 1, 2020, we repaid the full remaining balance of $344.0 million under the Credit Agreement. In addition, upon consummation of the Mergers on June 1, 2020, we repaid $734.6 million of assumed TiVo debt with the proceeds from a new borrowing of $1,050 million discussed below.

On June 1, 2020, in connection with the consummation of the Mergers, we entered into a Credit Agreement (the “2020 Credit Agreement”) by and among us, the lenders party thereto and Bank of America, N.A., as administrative agent and collateral agent. The 2020 Credit Agreement provides for a five-year senior secured term loan B facility in an aggregate principal amount of $1,050 million (the “2020 Term B Loan Facility”). The interest rate applicable to loans outstanding under the 2020 Term B Loan Facility is equal to, at our option, either (i) a base rate plus a margin of 3.00% per annum or (ii) LIBOR plus a margin of 4.00% per annum. Commencing on September 30, 2020, the 2020 Term B Loan Facility will amortize in quarterly installments equal to (i) with respect to repayments occurring on or prior to June 1, 2023, 1.25% of the original principal amount of the 2020 Term B Loan Facility and (ii) with respect to repayments occurring after June 1, 2023 and prior to June 1, 2025, 1.875% of the original principal amount of the 2020 Term B Loan Facility, with the balance payable on the maturity date of the 2020 Term B Loan Facility (in each case subject to adjustment for prepayments). The 2020 Term B Loan Facility will mature on June

1, 2025. Upon the closing of the 2020 Credit Agreement, we borrowed $1,050 million under the 2020 Term B Loan Facility. Net proceeds were used on June 1, 2020, together with cash and cash equivalents, to repay existing indebtedness of the combined Company, including the aforementioned Term B Loan Facility with RBC. On September 30, 2020, we made the first required principal payment of $13.1 million.

At September 30, 2020, $1,036.9 million was outstanding under the 2020 Term B Loan Facility with an interest rate, including amortization of debt issuance costs, of 5.1%. Interest is payable monthly and nominal principal payments are due quarterly effective September 2020. We have future minimum principal payments for our debt of $52.5 million annually through 2022, then $72.2 million and $78.8 million in 2023 and 2024, respectively, with the remaining principal balance due in 2025. We are obligated to pay a portion of excess cash flow on an annual basis beginning March 31, 2022 based on certain ratios and our excess cash flow generated for the immediately preceding fiscal year. The 2020 Term B Loan Facility contains customary covenants, and as of September 30, 2020 we were in full compliance with such covenants.

In August 2007, Xperi's Board of Directors authorized a plan to repurchase Xperi's outstanding shares of common stock dependent on market conditions, share price and other factors. This authorization was terminated upon closing of the Mergers. On June 12, 2020, our Board of Directors authorized a new stock repurchase program (the "new plan") providing for the repurchase of up to $150.0 million of our common stock dependent on market conditions, share price and other factors. Since the inception of the plan, and through September 30, 2020, we have repurchased approximately 3.9 million shares of common stock at a total cost of $50.1 million at an average price of $12.81. During the three months ended September 30, 2020, our repurchases totaled $35.1 million. As of September 30, 2020, the total remaining amount available for repurchase was $99.9 million. We may continue to execute authorized repurchases from time to time under the new plan.

In October 2020, our Board of Directors authorized payment of a quarterly dividend of $0.05 per share, to be paid in December 2020. We anticipate that all quarterly dividends will be paid out of cash, cash equivalents and short-term investments.

From 2017 through the third quarter of 2020, we generated approximately $580 million of cash flows from operating activities. While we expect to continue to generate cash flows from operating activities for the remainder of 2020, the COVID-19 pandemic presents significant uncertainties to the level of such cash flows as compared to prior years and as compared to our previous forecasts. Additionally, one-time costs in connection with the Mergers, subsequent integration of the two legacy businesses and transaction costs relating to the contemplated separation of the two businesses will impact operating cash flow for the duration of 2020. Currently a significant portion of our anticipated revenue for 2020 is derived from fixed-fee and minimum-guarantee arrangements, primarily from large, well-capitalized customers which we believe somewhat mitigates the risks to our business. We have taken actions to manage cash flows by reducing discretionary spending and other variable costs, delaying employee hiring, and closely monitoring receivables and payables.

We believe that based on current levels of operations and anticipated growth, our cash from operations, together with cash, cash equivalents and investments currently available, will be sufficient to fund our operations, debt service, dividends, stock repurchases and acquisition needs for at least the next twelve months. Poor financial results, unanticipated expenses, unanticipated acquisitions of technologies or businesses or unanticipated strategic investments could give rise to additional financing requirements sooner than we expect. There can be no assurance that equity or debt financing will be available when needed or, if available, that such financing will be on terms satisfactory to us and not dilutive to our then-current stockholders.

Contractual Cash Obligations

For information about our contractual obligations, see "Contractual Cash Obligations" in Part I, Item 2 of our Quarterly Report on Form 10-Q for the quarter ended June 30, 2020. Other than the $13.1 million principal payment on the 2020 Term B Loan Facility in September 2020, our contractual obligations have not changed materially since June 30, 2020.

As of September 30, 2020, we had accrued $99.7 million of unrecognized tax benefits in long-term income taxes payable related to uncertain tax positions, which includes $2.2 million of accrued interest and penalties. At this time, we are unable to reasonably estimate the timing of the long-term payments or the amount by which the liability will increase or decrease over time. If we are successful in receiving our South Korean withholding tax refund of $109.7 million, net of interest income and foreign exchange loss, then $62.8 million of unrecognized tax benefit would be payable to the U.S. tax authorities.

See "Note 15 – Commitments and Contingencies" of the Notes to Condensed Consolidated Financial Statements for additional detail.

Off-Balance Sheet Arrangements

As of September 30, 2020, we did not have any off-balance sheet arrangements as defined in Item 303(a)(4)(ii) of Regulation S-K.

Critical Accounting Policies and Estimates

Our significant accounting policies are detailed in "Note 2 – Summary of Significant Accounting Policies" in the Form 10-K for the year ended December 31, 2019. Certain updates to our revenue recognition policy as a result of the Mergers are provided in "Note 3 – Revenue" of the Notes to Condensed Consolidated Financial Statements. See "Note 2 – Summary of Significant Accounting Policies" of the Notes to Condensed Consolidated Financial Statements for additional detail. For a discussion of our critical accounting policies and estimates, see Part II, Item 7 – Management's Discussion and Analysis of Financial Condition and Results of Operations in the Form 10-K.

Recent Accounting Pronouncements

See "Note 2 – Summary of Significant Accounting Policies" of the Notes to Condensed Consolidated Financial Statements for a full description of recent accounting pronouncements including the respective expected dates of adoption.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Other than described below, management believes that there have been no significant changes to the quantitative and qualitative disclosures about market risk as compared to those disclosed in Part II, Item 7A of our Annual Report on Form 10-K for the year ended December 31, 2019.

Interest Rate Risk from Variable Rate Indebtedness

As of September 30, 2020, we had $1,037 million of outstanding indebtedness that was subject to floating interest rates. Changes in economic conditions outside of our control could result in higher interest rates, thereby increasing our interest expense and reducing the funds available for capital investment, operations or other purposes. At September 30, 2020, a 1% increase in the effective interest rate on our outstanding debt throughout a one-year period would result in an annual increase in our interest expense of approximately $10.4 million. Any significant increase in our interest expense could negatively impact our results of operations and cash flows and also our ability to pay dividends in the future. If the U.S. Federal Reserve raises its benchmark interest rate, any increases would likely impact the borrowing rate on our outstanding indebtedness, and increase our interest expense, comparably.

Item 4. Controls and Procedures

Attached as exhibits to this Form 10-Q are certifications of Xperi Holding Corporation's Chief Executive Officer and Chief Financial Officer, which are required in accordance with Rule 13a-14 of the Exchange Act. This "Controls and Procedures" section includes information concerning the controls and controls evaluation referred to in the certifications and it should be read in conjunction with the certifications, for a more complete understanding of the topics presented.

Evaluation of Controls and Procedures

The Company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports filed pursuant to the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and 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 is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation 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 as of the end of the period covered by this report (the evaluation date). Based on this evaluation, our principal executive officer and principal financial officer concluded as of the evaluation date that our disclosure controls and procedures were effective to provide reasonable assurance that the information relating to Xperi Holding Corporation, including our consolidated subsidiaries, required to be disclosed in our SEC

reports (i) is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and (ii) is accumulated and communicated to Xperi Holding Corporation's management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Change in Internal Control over Financial Reporting

On June 1, 2020, we completed our Mergers with TiVo and have implemented new processes and internal controls to assist us in the preparation and disclosure of financial information. Given the significance of the TiVo acquisition and the complexity of its systems and business processes, we intend to exclude the acquired TiVo business from our assessment and report on internal control over financial reporting for the year ending December 31, 2020. There were no changes in our internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act, during our most recently completed fiscal quarter that materially affected or are reasonably likely to materially affect our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

In the normal course of our business we are involved in legal proceedings. In the past, we have litigated to enforce our respective patents and other intellectual property rights, to enforce the terms of license agreements, to protect trade secrets, to determine the validity and scope of the proprietary rights of others and to defend ourselves or our customers against claims of infringement or invalidity. We expect to continue to be involved in similar legal proceedings in the future, including proceedings regarding infringement of our patents, and proceedings to ensure proper and full payment of royalties by licensees under the terms of our license agreements.

Other than to the extent the proceedings described below have concluded, we cannot predict the outcome of any of the proceedings described below. An adverse decision in any of these proceedings could significantly harm our business and our consolidated financial position, results of operations, and cash flows.

Merger Litigation

On May 15, 2020, a lawsuit was filed by a purported stockholder of Xperi in connection with the merger between TiVo and Xperi. The lawsuit was brought as a putative class action and is captioned Local 464A United Food and Commercial Workers Union Pension Fund v. Darcy Antonellis, et al., No. 2020-0376-JRS (Del. Ch. filed May 15, 2020). The complaint names as defendants the Xperi Board members. The complaint alleges breaches of fiduciary duty against the Xperi Board members for failing to properly consider and disclose the non-binding proposal from Metis Ventures LLC to acquire all of the outstanding equity of Xperi for cash, violating their continuing fiduciary duty to evaluate the TiVo merger in light of the COVID-19 pandemic, and failing to adequately disclose material facts germane to the vote on the proposed merger between TiVo and Xperi. On June 29, 2020, the Court granted the plaintiff's motion for leave to supplement the complaint; the supplement contained additional allegations regarding the failure to disclose material information. The complaint seeks a judgment declaring that the Xperi Board members breached their fiduciary duties, awarding equitable relief that deprives the Xperi Board members of all benefits they would realize as a result of the merger between TiVo and Xperi, awarding class damages, awarding plaintiff's attorneys' fees, expenses, and costs, and awarding any further relief the court deems just and proper. On September 11, 2020, the Court granted the plaintiff's and Xperi's stipulation to dismiss the complaint.

Patent Infringement Litigation

From time-to-time in the ordinary course of our patent licensing business, we are required to engage in litigation to protect our intellectual property from infringement. While litigation is never our preference and we prefer to reach mutually agreeable commercial licensing arrangements with third parties, it is sometimes a necessary step to effectively protect our investment in patented technology. As a result of these lawsuits, defendants have often filed *Inter Partes* Review ("IPR") petitions with the U.S. Patent Office's Patent Trial and Appeal Board (and other similar post-grant proceedings outside of the U.S.) seeking to invalidate one or more of the patents-in-suit. We are currently engaged in multiple lawsuits with several third parties.

Comcast Patent Infringement Litigation

Since April 1, 2016, TiVo's subsidiary Rovi Corporation and various of its subsidiaries (collectively, "Rovi") have been involved in a series of lawsuits against Comcast Corporation ("Comcast") pending in the United States International Trade Commission (the "ITC") and United States District Courts. The lawsuits arose when Comcast's twelve-year patent license with Rovi (and its predecessors) expired on March 31, 2016. After being unable to agree on terms for a renewal before the license expired, Rovi initially filed multiple lawsuits against Comcast, and has since filed additional lawsuits against Comcast in various venues in the United States.

To date, Rovi has filed three ITC investigations (along with four companion district court cases asserting the same patents) and two standalone cases in various United States District Courts involving a total of 37 patents. Comcast has filed IPRs against all of the patents involved in these actions.

In the first ITC investigation, the ITC issued (1) a limited exclusion order prohibiting the unlicensed entry of certain digital video receivers and hardware and software components thereof that infringed two particular Rovi patents and (2) a cease and desist order prohibiting Comcast from conducting in the United States several enumerated activities, including, among others, selling and leasing any infringing set top boxes that it had already imported. In addition, the ITC found certain of Rovi's asserted patents either not infringed by Comcast or its set top box suppliers, lacking a domestic industry or invalid. All appeals of the first ITC investigation have been exhausted and the ITC's decision is now final.

In the second ITC investigation, the ITC issued (1) a limited exclusion order prohibiting the entry into the United States of infringing digital video receivers and related hardware and software components that infringed one of Rovi's asserted patents, and (2) a cease and desist order directed to Comcast. The ITC also found certain of Rovi's asserted patents either not infringed by Comcast, lacking a domestic industry or invalid. Both Rovi and Comcast have filed appeals of the ITC's final determination in the second ITC investigation, which appeals are pending.

In the third ITC investigation, the Administrative Law Judge issued her Final Initial Determination in which she found that Comcast's X1 platform infringes two Rovi patents and recommended the issuance of a limited exclusion order and cease and desist order. On October 13, 2020, the ITC issued its notice of its decision to review in part the Final Initial Determination and requesting written submissions on various issues. The ITC determined to review certain issues. The ITC's Final Determination is currently due on November 30, 2020.

All of the pending district court cases that Rovi has filed against Comcast are stayed pending either (a) the final outcomes in their corresponding ITC cases, or (b) final rulings (including all available appeals) of pending IPRs, with one exception being that one case is proceeding with respect to a single patent. A trial date has not been set yet in that case.

On November 9, 2020, we announced that we entered into a license agreement with Comcast. In connection with the license agreement, the parties settled all outstanding litigation. This matter is now concluded.

Videotron Patent Infringement Litigation

On June 23, 2017, Rovi Guides, Inc. and TiVo Solutions Inc. (together, "TiVo") filed a patent infringement complaint against Videotron Ltd. and Videotron G.P. (together, "Videotron") in Toronto, Canada, alleging infringement of six patents. Videotron was a prior licensee under the Rovi patent portfolio. The first week of trial on four patents was held the week of March 9, 2020. The Federal Court of Canada closed due to COVID-19 on March 16, 2020, and the trial was temporarily stayed. The trial resumed on May 25, 2020, conducted remotely by video, and concluded on June 17, 2020. The parties filed their written closing submissions on September 30, 2020. The closing oral arguments are now scheduled for January 20-22, 2021. There is no set date for the court to issue its verdict.

Bell and Telus Patent Infringement Litigation

On January 19, 2018, TiVo filed a patent infringement complaint against Bell Canada (and four of its affiliates) in Toronto, Canada, alleging infringement of six patents. On February 2, 2018, TiVo filed a patent infringement complaint against Telus Corporation (and two of its affiliates) in Toronto, Canada, alleging infringement of the same six patents. Bell Canada and Telus were previously indirectly licensed to some of Rovi's patents through a prior agreement between Rovi and one of their suppliers. The Bell and Telus cases are being heard together for purposes of pre-trial and trial proceedings. On August 27, 2019, the court issued an order bifurcating the liability phase from the damages phase of the case. There is no set trial date or procedural schedule for the damages phase of the cases. The liability and injunction trial on four patents was held from July 13 – August 6, 2020. The written closing submissions are due November 30, 2020 and the closing oral arguments are scheduled for January 14 – 15, 2021. There is no set date for the court to issue its verdict.

NVIDIA Patent Infringement Litigation

On May 8, 2019, Invensas Corporation and Tessera Advanced Technologies, Inc. filed a complaint against NVIDIA Corporation ("NVIDIA") in the United States District Court for the District of Delaware, alleging infringement of five patents, and requesting, among other things, that NVIDIA be ordered to pay compensatory damages in an amount no less than a reasonable royalty. NVIDIA answered the complaint on July 1, 2019 and subsequently moved to transfer the case to the United States District Court for the Northern District of California. The court denied NVIDIA's motion to transfer on September 17, 2019.

In September 2020, the Patent Trial and Appeal Board ("PTAB") instituted IPRs of several patents-in-suit. The parties stipulated to an order staying the litigation pending resolution of the IPR proceedings, and to dismissal of claims relating to the two patents. For the remaining IPRs, oral arguments are scheduled for June 2021, and final decisions are expected in September 2021.

Item 1A. Risk Factors

Other than described below, management believes that there have been no significant changes to the risk factors disclosed in Part II, Item 1A of our Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2020, which risk factors are incorporated by reference herein.

Our business and results of operations have been, and are expected to continue to be, impacted by the global COVID-19 pandemic.

Our business and results of operations have been adversely affected by the global COVID-19 pandemic and related events and we expect its impact to continue. Given the ongoing and dynamic nature of the circumstances, it is difficult to predict the full impact of the COVID-19 pandemic on our businesses, and there is no guarantee that we will be able to address its adverse impacts fully or effectively. The impact to date has included periods of significant volatility in various markets and industries. The volatility has had, and we anticipate it will continue to have, an adverse effect on our customers and on our business, financial condition and results of operations, and may result in an impairment of our long-lived assets, including goodwill, increased credit losses and impairments of investments in other companies. In particular, the automotive market, as well as the broad consumer electronics industries, have been and we anticipate will continue to be impacted by the pandemic and/or other events beyond our control, and further volatility could have an additional negative impact on these industries, customers, and our business. For example, we anticipate approximately a 20% decline in our royalty revenue in 2020 from our products sold to the automotive market, such as HD Radio, as compared to the prior year. In addition, the COVID-19 pandemic may impact the financial conditions of our customers who may not be able to satisfy their obligations under our agreements timely or at all. For example, we recorded, in the first quarter of 2020, an incremental provision for credit losses of approximately $2.0 million due to heightened risk of nonpayment on existing accounts receivable as a result of the impaired financial condition and liquidity positions of certain of our customers.

In addition, actions by United States federal, state and foreign governments to address the COVID-19 pandemic, including travel bans, stay-at-home orders and school, business and entertainment venue closures, also had a significant adverse effect on the markets in which we conduct our businesses. COVID-19 poses the risk that our workforce, suppliers, and other partners may be prevented from conducting normal business activities for an indefinite period of time, including due to shutdowns or stay-at-home orders that may be requested or mandated by governmental authorities. We also implemented policies to allow our employees to work remotely as a result of the pandemic as we reviewed processes related to workplace safety, including social distancing and sanitation practices recommended by the Centers for Disease Control and Prevention. The impacts of the COVID-19 pandemic could also cause delays in obtaining new customers and executing renewals and could also impact our business as consumer behavior changes in response to the slowed economic conditions. Furthermore, our integration effort following the Mergers may be delayed or interrupted due to the operational challenges and various restrictions and limitations imposed on us as result of the COVID-19 pandemic, which may adversely affect the success of the integration and anticipated benefits of the Mergers.

The extent of impacts resulting from the COVID-19 pandemic and other events beyond our control will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of the pandemic and actions taken to contain the coronavirus or its impact, among others. While some states and counties, including Santa Clara county where our headquarters is located, have announced a schedule to allow more businesses to reopen, we cannot predict when and to what extent business activities will resume, and there is no guarantee that these states and counties will not re-impose restrictions and closures if the pandemic cannot be brought under control, particularly in light of the recent global upswing in cases as the Northern Hemisphere enters the colder months. Even after the pandemic has subsided and economic activities gradually reopen and increase, we may continue to experience material and adverse impacts to our business, operating results, and financial condition as a result of the pandemic's lasting global economic impact, including any recession that has occurred or may occur in the future. The ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. We do not yet know the full extent of potential delays or impacts on our applicable business, operations or the global economy.

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

Items 2(a) and 2(b) are not applicable.

(c) Stock Repurchases

(Shares in thousands)	Total number of shares purchased	Average price paid per share	Total number of shares purchased as part of our share repurchase program	Approximate dollar value of shares that may yet be purchased under our share repurchase program (a)
2020				
July	-	$ -	-	
August	724	13.82	724	
September	2,108	11.90	2,108	
Total	2,832	$ 12.39	2,832	$99.9 million

(a) Calculated as of September 30, 2020. On June 12, 2020, our Board of Directors authorized a stock repurchase program providing for the repurchase of up to $150 million of the Company's common stock. The timing, price and volume of repurchases will be based on market conditions, relevant securities laws and other factors. The stock repurchases may be made from time to time, through solicited or unsolicited transactions in the open market, in privately negotiated transactions, or pursuant to a Rule 10b5-1 plan. The program may be discontinued or amended at any time and has no specified expiration date. All repurchases in the three months ended September 30, 2020 were made under this plan.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

Not applicable.

Item 6. Exhibits

Exhibit Number	Exhibit Title
10.1	Form of Severance Agreement, dated September 29, 2020, between the Company and each of Robert Andersen, Geir Skaaden, Paul Davis, Matthew Milne, and Michael Hawkey.
10.2	Form of Change in Control Severance Agreement, dated as of September 29, 2020, between the Company and each of Robert Andersen, Geir Skaaden, Paul Davis, Matthew Milne, and Michael Hawkey.
10.3	Amendment to Employment and Severance Agreement between Xperi Corporation and Jon Kirchner dated April 28, 2017, effective as of September 29, 2020.
31.1	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934
31.2	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934
32.1	Certification of the Chief Executive Officer and Chief Financial Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)

SIGNATURES

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

Dated: November 9, 2020

XPERI HOLDING CORPORATION

By: /s/ Robert Andersen
Robert Andersen
Chief Financial Officer

SEVERANCE AGREEMENT

This Severance Agreement ("***Agreement***") is made by and between Xperi Holding Corporation, a Delaware corporation (the "***Company***"), and [Executive] ("***Executive***"), effective as of September 29, 2020 (such date, the "***Effective Date***"). For purposes of this Agreement, the "***Company***" shall mean the Company and its subsidiaries.

The parties agree as follows:

1. Definitions. For purposes of this Agreement, the following terms shall have the following meanings:

(a) "***Board***" shall mean the Board of Directors of the Company.

(b) "***Cause***" shall mean any of the following: (i) Executive's gross negligence or willful misconduct in the performance of his or her duties to the Company and its affiliates; (ii) Executive's willful and habitual neglect of or failure to perform Executive's duties of consulting or employment (which neglect or failure is not caused by Executive's illness or mental or physical disability), which neglect or failure is not cured within thirty (30) days after written notice thereof is received by Executive (it being agreed that a failure of the Company and its affiliates to meet performance objectives shall not, alone, constitute a failure by Executive to perform his duties); (iii) Executive's commission of any material act of fraud, dishonesty or financial or accounting impropriety with respect to the Company and its affiliates which results in a personal benefit to Executive; (iv) Executive's failure to cooperate with the Company and its affiliates in any investigation or formal proceeding initiated by a governmental authority or otherwise approved by the Board or the Audit Committee of the Board (which failure is not caused by Executive's illness or mental or physical disability), which failure is not cured within thirty (30) days after written notice thereof is received by Executive; (v) Executive's conviction of or plea of guilty or *nolo contendere* to felony criminal conduct (other than moving vehicle violations); (vi) Executive's material violation of the Company's Confidentiality and Proprietary Rights Agreement (as defined below) or similar agreement that Executive has entered into with the Company and its affiliates; or (vii) Executive's material breach of any obligation or duty under this Agreement or material violation of any written employment or other Company policies that have previously been furnished to Executive, which breach or violation is not cured within thirty (30) days after written notice thereof is received by Executive, if such breach or violation is capable of being cured.

(c) "***Code***" means the Internal Revenue Code of 1986, as amended, and the Treasury Regulations and other interpretive guidance thereunder.

(d) "***Good Reason***" shall mean the occurrence of any of the following events or conditions without Executive's written consent:

(i) a material diminution in Executive's authority, duties or responsibilities;

(ii) a material diminution in Executive's base compensation or target annual bonus opportunity, unless such reduction is imposed across-the-board to senior management of the Company (and Executive and the Company agree that without limiting any argument that a lesser diminution is material, any diminution of ten percent (10%) or more measured against Executive's base compensation and target bonus opportunity as in effect on the Effective Date shall be deemed material for purposes of this clause (ii));

(iii) a material change in the geographic location at which Executive must

perform his or her duties (and the Company and Executive acknowledge and agree that a change in the

geographic location at which Executive must perform his or her duties by more than forty-five (45) miles shall constitute a material change for purposes of this Agreement); or

(iv) any other action or inaction that constitutes a material breach by the Company or any successor or affiliate of its obligations to Executive under this Agreement.

Executive must provide written notice to the Company of the occurrence of any of the foregoing events or conditions without Executive's written consent within ninety (90) days of Executive learning of the occurrence of such event. The Company or any successor or affiliate shall have a period of thirty (30) days to cure such event or condition after receipt of written notice of such event from Executive. Any voluntary Separation from Service for "Good Reason" following such thirty (30) day cure period must occur no later than the date that is six (6) months following the occurrence of one of the foregoing events or conditions without Executive's written consent.

(e) "***Permanent Disability***" means Executive's inability to perform the essential functions of his or her position, with or without reasonable accommodation, for a period of at least one hundred twenty (120) consecutive days because of a physical or mental impairment.

(f) "***Separation from Service***" means a "separation from service" within the meaning of Section 409A of the Code.

2. Term. The term of this Agreement ("the "***Term***") shall continue until the earlier of (i) the third anniversary of the Effective Date, plus a one year automatic renewal thereafter (if not first terminated by the Board), or (ii) the date on which all payments or benefits required to be made or provided hereunder have been made or provided in their entirety Notwithstanding the foregoing, the obligation of the Company to make payments or provide benefits pursuant to this Agreement to which Executive has acquired a right in accordance with the applicable provisions of this Agreement prior to the expiration of the Term shall survive the termination of this Agreement until such payments and benefits have been provided in full.

3. Severance.

(a) If Executive has a Separation from Service as a result of Executive's discharge by the Company without Cause or by reason of Executive's resignation for Good Reason, Executive shall be entitled to receive, in lieu of any severance benefits to which Executive may otherwise be entitled under any severance plan or program of the Company, the benefits provided below, which, with respect to clause (ii), will be payable in a lump sum on the day that is sixty (60) days following the date of Executive's Separation from Service:

(i) The Company shall pay to Executive his or her fully earned but unpaid base salary, when due, through the date of Executive's Separation from Service at the rate then in effect, reimbursement of business expenses incurred prior to the date of Executive's Separation from Service and properly submitted in accordance with Company policy, plus all other benefits, if any, under any Company group retirement plan, nonqualified deferred compensation plan, equity award plan or agreement, health benefits plan or other Company group benefit plan to which Executive may be entitled pursuant to the terms of such plans or agreements at the time of Executive's Separation from Service (the "***Accrued Obligations***");

(ii) Subject to Section 3(c) and Executive's continued compliance with Section 4, Executive shall be entitled to receive severance pay in an amount equal to one-hundred percent (100%) multiplied by the sum of (x) Executive's annual base salary as in effect immediately prior to the date of Executive's Separation from Service, plus (y) Executive's target annual bonus for the calendar year in which Executive's Separation from Service occurs (which bonus shall be prorated for the portion of the calendar year that has elapsed prior to the date of Executive's Separation from Service); and

(iii) Subject to Section 3(c) and Executive's continued compliance with Section 4, for the period beginning on the date of Executive's Separation from Service and ending on the date which is twelve (12) full months following the date of Executive's Separation from Service (or, if earlier, the date on which the applicable continuation period under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("***COBRA***") expires) (the "***COBRA Coverage Period***"), the Company shall continue to provide Executive and his or her eligible dependents who were covered under the Company's health insurance plans as of the date of Executive's Separation from Service with health (including medical and dental) insurance benefits substantially similar to those provided to Executive and his or her dependents immediately prior to the date of such Separation from Service. If any of the Company's health benefits are self-funded as of the date of Executive's Separation from Service, or if the Company cannot provide the foregoing benefits in a manner that is exempt from or otherwise compliant with applicable law or the provision of such benefits may result in the Company incurring penalties under applicable law (including, without limitation, Section 409A of the Code and Section 2716 of the Public Health Service Act), instead of providing continued health insurance benefits as set forth above, the Company shall instead pay to Executive an amount equal to the monthly premium payment for Executive and his or her eligible dependents who were covered under the Company's health plans as of the date of Executive's Separation from Service (calculated by reference to the premium as of the date of Separation from Service) as currently taxable compensation, in substantially equal monthly installments over the COBRA Coverage Period (or the remaining portion thereof).

(b) Other Terminations. If Executive's employment is terminated by the Company for Cause, by Executive without Good Reason, or as a result of Executive's death or Permanent Disability, the Company shall not have any other or further obligations to Executive under this Agreement (including any financial obligations) except that Executive shall be entitled to receive the Accrued Obligations. The foregoing shall be in addition to, and not in lieu of, any and all other rights and remedies which may be available to the Company under the circumstances, whether at law or in equity.

(c) Release. As a condition to Executive's receipt of any post-termination benefits pursuant to Section 3(a) above (other than the Accrued Obligations), Executive shall execute and not revoke a general release of all claims in favor of the Company (the "***Release***") in the form substantially similar to that attached hereto as Exhibit A (and any applicable revocation period applicable to such Release shall have expired) within the sixty (60) day period following the date of Executive's Separation from Service.

(d) Exclusive Remedy. Except as otherwise expressly required by law (e.g., COBRA) or as specifically provided herein, all of Executive's rights to salary, severance, benefits, bonuses and other amounts hereunder (if any) accruing after the termination of Executive's employment shall cease upon such termination. In the event of a termination of Executive's employment with the Company, and except in the event of violation of applicable law by the Company relating to Executive's employment or the termination thereof, Executive's sole remedy shall be to receive the payments and benefits described in this Section 3.

(e) No Mitigation. Executive shall not be required to mitigate the amount of any payment provided for in this Section 3 by seeking other employment or otherwise, nor shall the amount of any payment or benefit provided for in this Section 3 be reduced by any compensation earned by Executive as the result of employment by another employer or self-employment or by retirement benefits; *provided*, *however*, that loans, advances or other amounts owed by Executive to the Company and its affiliates may be offset by the Company against amounts payable to Executive under this Section 3.

(f) Return of the Company's Property. If Executive's employment is terminated for any reason, the Company shall have the right, at its option, to require Executive to vacate his or her offices prior to or on the effective date of termination and to cease all activities on the Company's behalf. Upon the termination of his or her employment in any manner, as a condition to Executive's receipt of any post- termination benefits described in this Agreement, Executive shall immediately surrender to the Company

all lists, books and records of, or in connection with, the Company's business, and all other property belonging to the Company and its affiliates, it being distinctly understood that all such lists, books and records, and other documents, are the property of the Company and its affiliates. Executive shall deliver to the Company a signed statement certifying compliance with this Section 3(f) prior to the receipt of any post-termination benefits described in this Agreement.

(g) Best Pay Provision.

(i) If any payment or benefit Executive would receive under this Agreement, when combined with any other payment or benefit Executive receives pursuant to the termination of Executive's employment with the Company and its affiliates ("***Payment***"), would (A) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (B) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "***Excise Tax***"), then such Payment shall be either (1) the full amount of such Payment or (2) such lesser amount (with cash payments being reduced before stock option compensation) as would result in no portion of the Payment being subject to the Excise Tax, whichever of the foregoing amounts, taking into account the applicable federal, state and local employment taxes, income taxes, and the Excise Tax, results in Executive's receipt, on an after-tax basis, of the greater amount of the Payment notwithstanding that all or some portion of the Payment may be subject to the Excise Tax.

(ii) All determinations required to be made under this Section 3(g), including whether and to what extent the Payments shall be reduced and the assumptions to be utilized in arriving at such determination, shall be made by the nationally recognized certified public accounting firm used by the Company immediately prior to the effective date of the change in control giving rise to the application of this Section 3(g) or, if such firm declines to serve, such other nationally recognized certified public accounting firm as may be designated by the Company (the "***Accounting Firm***"). The Accounting Firm shall provide detailed supporting calculations both to Executive and the Company at such time as is requested by the Company. All fees and expenses of the Accounting Firm shall be borne solely by the Company. Any determination by the Accounting Firm shall be binding upon Executive and the Company. For purposes of making the calculations required by this Section 3(g), the Accounting Firm may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good-faith interpretations concerning the application of Sections 280G and 4999 of the Code.

4. Confidentiality and Proprietary Rights. Executive and the Company have executed the Company's Confidentiality and Proprietary Rights Agreement, a copy of which is attached to this Agreement as Exhibit B and incorporated herein by reference (the "***Confidentiality and Proprietary Rights Agreement***"). The Company shall be entitled to cease all severance payments and benefits to Executive in the event of his or his material breach of this Section 4. Nothing in this Agreement or in the Confidentiality and Proprietary Rights Agreement shall be deemed to restrict Executive's right to communicate directly with, cooperate with, provide information to, or report possible violations of federal law or regulation to, any governmental agency or entity in accordance with the provisions of and rules promulgated under Section 21F of the Securities Exchange Act of 1934 or Section 806 of the Sarbanes-Oxley Act of 2002, or any other whistleblower protection provisions of state or federal law or regulation, including, but not limited to, the U.S. Securities and Exchange Commission, the U.S. Commodity Futures Trading Commission, or the U.S. Department of Justice.

5. Agreement to Arbitrate. Any dispute, claim or controversy based on, arising out of or relating to Executive's employment or this Agreement shall be settled by final and binding arbitration in San Jose, California, before a single neutral arbitrator in accordance with the Employment Arbitration Rules and Procedures (the "***Rules***") of Judicial Arbitration and Mediation Services ("***JAMS***"), and judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction. The Rules may be found online at www.jamsadr.com. Arbitration may be compelled pursuant to the California Arbitration Act (Code of Civil Procedure §§ 1280 et seq.). If the parties are unable to agree upon an arbitrator, one

shall be appointed by JAMS in accordance with its Rules. Each party shall pay the fees of its own attorneys, the expenses of its witnesses and all other expenses connected with presenting its case; *provided*, *however*, Executive and the Company agree that, to the extent permitted by law, the arbitrator may, in his or her discretion, award reasonable attorneys' fees to the prevailing party; *provided*, *further*, that the prevailing party shall be reimbursed for such fees, costs and expenses within forty-five (45) days following any such award, but in no event later than the last day of the Executive's taxable year following the taxable year in which the fees, costs and expenses were incurred; *provided*, *further*, that the parties' obligations pursuant to this sentence shall terminate on the tenth (10th) anniversary of the date of Executive's termination of employment; *provided*, *however*, that Executive shall retain the right to file administrative charges with or seek relief through any government agency of competent jurisdiction, and to participate in any government investigation, including but not limited to (a) claims for workers' compensation, state disability insurance or unemployment insurance; (b) claims for unpaid wages or waiting time penalties brought before the California Division of Labor Standards Enforcement; *provided*, *however*, that any appeal from an award or from denial of an award of wages and/or waiting time penalties shall be arbitrated pursuant to the terms of this Agreement; and (c) claims for administrative relief from the United States Equal Employment Opportunity Commission and/or the California Department of Fair Employment and Housing (or any similar agency in any applicable jurisdiction other than California); *provided*, *further*, that Executive shall not be entitled to obtain any monetary relief through such agencies other than workers' compensation benefits or unemployment insurance benefits. Other costs of the arbitration, including the cost of any record or transcripts of the arbitration, JAMS' administrative fees, the fee of the arbitrator, and all other fees and costs, shall be borne by the Company. This Section 5 is intended to be the exclusive method for resolving any and all claims by the parties against each other for payment of damages under this Agreement or relating to Executive's employment; *provided*, *however*, that neither this Agreement nor the submission to arbitration shall limit the parties' right to seek provisional relief, including without limitation injunctive relief, in any court of competent jurisdiction pursuant to California Code of Civil Procedure § 1281.8 or any similar statute of an applicable jurisdiction. Seeking any such relief shall not be deemed to be a waiver of such party's right to compel arbitration. Both Executive and the Company expressly waive their right to a jury trial.

6. At-Will Employment Relationship. Executive's employment with the Company is at-will and not for any specified period and may be terminated at any time, with or without Cause or advance notice, by either Executive or the Company. Any change to the at-will employment relationship must be by specific, written agreement signed by Executive and an authorized representative of the Company. Nothing in this Agreement is intended to or should be construed to contradict, modify or alter this at-will relationship.

7. General Provisions.

7.1 Successors and Assigns. The rights of the Company under this Agreement may, without the consent of Executive, be assigned by the Company, in its sole and unfettered discretion, to any person, firm, corporation or other business entity which at any time, whether by purchase, merger or otherwise, directly or indirectly, acquires all or substantially all of the assets or business of the Company. The Company will require any successor (whether direct or indirect, by purchase, merger or otherwise) to all or substantially all of the business or assets of the Company expressly to assume and to agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform it if no such succession had taken place; *provided*, *however*, that no such assumption shall relieve the Company of its obligations hereunder; *provided*, *further*, that the failure of any such successor to so assume this Agreement shall constitute a material breach of this Agreement. As used in this Agreement, the "***Company***" shall mean the Company as hereinbefore defined and any successor to its business and/or assets as aforesaid which assumes and agrees to perform this Agreement by operation of law or otherwise. Executive shall not be entitled to assign any of Executive's rights or obligations under this Agreement. This Agreement shall inure to the benefit of and be enforceable by Executive's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

7.2 Severability. In the event any provision of this Agreement is found to be unenforceable by an arbitrator or court of competent jurisdiction, such provision shall be deemed modified to the extent necessary to allow enforceability of the provision as so limited, it being intended that the parties shall receive the benefit contemplated herein to the fullest extent permitted by law. If a deemed modification is not satisfactory in the judgment of such arbitrator or court, the unenforceable provision shall be deemed deleted, and the validity and enforceability of the remaining provisions shall not be affected thereby.

7.3 Interpretation; Construction. The headings set forth in this Agreement are for convenience only and shall not be used in interpreting this Agreement. This Agreement has been drafted by legal counsel representing the Company, but Executive has participated in the negotiation of its terms. Furthermore, Executive acknowledges that Executive has had an opportunity to review and revise the Agreement and have it reviewed by legal counsel, if desired, and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement. Either party's failure to enforce any provision of this Agreement shall not in any way be construed as a waiver of any such provision, or prevent that party thereafter from enforcing each and every other provision of this Agreement.

7.4 Governing Law and Venue. This Agreement will be governed by and construed in accordance with the laws of the United States and the State of California applicable to contracts made and to be performed wholly within such State, and without regard to the conflicts of laws principles thereof. Any suit brought hereon shall be brought in the state or federal courts sitting in Santa Clara County, California, the Parties hereby waiving any claim or defense that such forum is not convenient or proper. Each party hereby agrees that any such court shall have in personam jurisdiction over it and consents to service of process in any manner authorized by California law.

7.5 Notices. Any notice required or permitted by this Agreement shall be in writing and shall be delivered as follows with notice deemed given as indicated: (a) by personal delivery when delivered personally; (b) by overnight courier upon written verification of receipt; (c) by telecopy or facsimile transmission upon acknowledgment of receipt of electronic transmission; or (d) by certified or registered mail, return receipt requested, upon verification of receipt. Notice shall be sent to Executive at the address set forth below and to the Company at its principal place of business, or such other address as either party may specify in writing.

7.6 Survival. Sections 1 ("Definitions"), 3 ("Severance"), 4 ("Confidentiality and Proprietary Rights"), 5 ("Agreement to Arbitrate") and 7 ("General Provisions") of this Agreement shall survive termination of Executive's employment by the Company.

7.7 Entire Agreement. This Agreement and the Confidentiality and Proprietary Rights Agreement incorporated herein by reference together constitute the entire agreement between the parties in respect of the subject matter contained herein and therein and supersede all prior or simultaneous representations, discussions, negotiations, and agreements, whether written or oral, including, without limitation, any previous severance agreement between the Company (or any of the Company's subsidiaries) and Executive (other than the CIC Severance Agreement (as defined below)). This Agreement may be amended or modified only with the written consent of Executive and an authorized representative of the Company. No oral waiver, amendment or modification will be effective under any circumstances whatsoever. Notwithstanding the foregoing or anything herein to the contrary, although severance provided under this Agreement may offset severance provided under the Executive's Change in Control Severance Agreement made by and between the Company and the Executive effective as of Effective Date (the "***CIC Severance Agreement***") (as specified in Section 3(a)(v) thereof), the CIC Severance Agreement is outside the scope of the foregoing integration provision and shall continue in full force and effect.

7.8 Code Section 409A.

(a) To the extent applicable, this Agreement shall be interpreted in accordance with Code Section 409A and Department of Treasury regulations and other interpretive guidance issued thereunder. Each series of installment payments made under this Agreement is hereby designated as a series of "separate payments" within the meaning of Section 409A of the Code.

(b) If the Executive is a "specified employee" (as defined in Section 409A of the Code), as determined by the Company in accordance with Section 409A of the Code, on the date of the Executive's Separation from Service, to the extent that the payments or benefits under this Agreement are subject to Section 409A of the Code and the delayed payment or distribution of all or any portion of such amounts to which Executive is entitled under this Agreement is required in order to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code, then such portion deferred pursuant to this Section 7.8(b) shall be paid or distributed to Executive in a lump sum on the earlier of (i) the date that is six (6)- months following Executive's Separation from Service, (ii) the date of Executive's death or (iii) the earliest date as is permitted under Section 409A of the Code. Any remaining payments due under the Agreement shall be paid as otherwise provided herein.

(c) Notwithstanding anything to the contrary in this Agreement, in-kind benefits and reimbursements provided under this Agreement during any tax year of Executive shall not affect in-kind benefits or reimbursements to be provided in any other tax year of Executive and are not subject to liquidation or exchange for another benefit. Notwithstanding anything to the contrary in this Agreement, reimbursement requests must be timely submitted by Executive and, if timely submitted, reimbursement payments shall be made to Executive as soon as administratively practicable following such submission, but in no event later than the last day of Executive's taxable year following the taxable year in which the expense was incurred. In no event shall Executive be entitled to any reimbursement payments after the last day of Executive's taxable year following the taxable year in which the expense was incurred. This section shall only apply to in-kind benefits and reimbursements that would result in taxable compensation income to Executive.

7.9 Consultation with Legal and Financial Advisors. By executing this Agreement, Executive acknowledges that this Agreement confers significant legal rights, and may also involve the waiver of rights under other agreements; that the Company has encouraged Executive to consult with Executive's personal legal and financial advisors; and that Executive has had adequate time to consult with Executive's advisors before executing this Agreement.

7.10 Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.

(Signature Page Follows)

THE PARTIES TO THIS AGREEMENT HAVE READ THE FOREGOING AGREEMENT AND FULLY UNDERSTAND EACH AND EVERY PROVISION CONTAINED HEREIN. WHEREFORE, THE PARTIES HAVE EXECUTED THIS AGREEMENT ON THE DATES SHOWN BELOW.

XPERI HOLDING CORPORATION

Dated:

By:

Name:
Title:

EXECUTIVE

Dated:

Print Name:

Address:

EXHIBIT A GENERAL RELEASE OF CLAIMS

[*The language in this Release may change based on legal developments and evolving best practices; provided, however, that no new post-termination covenants shall be imposed on Executive; this form is provided as an example of what will be included in the final Release document.*]

This General Release of Claims ("***Release***") is entered into as of this _____ day of __________, between __________ ("***Executive***"), and Xperi Holding Corporation, a Delaware corporation (the "***Company***") (collectively referred to herein as the "***Parties***").

WHEREAS, Executive and the Company are parties to that certain Severance Agreement dated as of __________ (the "***Agreement***");

WHEREAS, the Parties agree that Executive is entitled to certain severance benefits under the Agreement, subject to Executive's execution of this Release; and

WHEREAS, the Company and Executive now wish to fully and finally to resolve all matters between them.

NOW, THEREFORE, in consideration of, and subject to, the severance benefits payable to Executive pursuant to the Agreement, the adequacy of which is hereby acknowledged by Executive, and which Executive acknowledges that he or she would not otherwise be entitled to receive, Executive and the Company hereby agree as follows:

1. General Release of Claims by Executive.

(a) Executive, on behalf of himself or herself and his or her executors, heirs, administrators, representatives and assigns, hereby agrees to release and forever discharge the Company and all predecessors, successors and their respective parent corporations, affiliates, related, and/or subsidiary entities, and all of their past and present investors, directors, shareholders, officers, general or limited partners, employees, attorneys, agents and representatives, and the employee benefit plans in which Executive is or has been a participant by virtue of his or her employment with or service to the Company (collectively, the "***Company Releasees***"), from any and all claims, debts, demands, accounts, judgments, rights, causes of action, equitable relief, damages, costs, charges, complaints, obligations, promises, agreements, controversies, suits, expenses, compensation, responsibility and liability of every kind and character whatsoever (including attorneys' fees and costs), whether in law or equity, known or unknown, asserted or unasserted, suspected or unsuspected (collectively, "***Claims***"), which Executive has or may have had against such entities based on any events or circumstances arising or occurring on or prior to the date hereof or on or prior to the date hereof, arising directly or indirectly out of, relating to, or in any other way involving in any manner whatsoever Executive's employment by or service to the Company or the termination thereof, including any and all claims arising under federal, state, or local laws relating to employment, including without limitation claims of wrongful discharge, breach of express or implied contract, fraud, misrepresentation, defamation, or liability in tort, and claims of any kind that may be brought in any court or administrative agency including, without limitation, claims under Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. Section 2000, et seq.; the Americans with Disabilities Act, as amended, 42 U.S.C. § 12101 et seq.; the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 701 et seq.; the Civil Rights Act of 1866, and the Civil Rights Act of 1991; 42 U.S.C. Section 1981, et seq.; the Age Discrimination in Employment Act, as amended, 29 U.S.C. Section 621, et seq. (the "***ADEA***"); the

Equal Pay Act, as amended, 29 U.S.C. Section 206(d); regulations of the Office of Federal Contract Compliance, 41 C.F.R. Section 60, et seq.; the Family and Medical Leave Act, as amended, 29 U.S.C. § 2601 et seq.; the Fair Labor Standards Act of 1938, as amended, 29 U.S.C. § 201 et seq.; the Employee Retirement Income Security Act, as amended, 29 U.S.C. § 1001 et seq.; and the California Fair Employment and Housing Act, California Government Code Section 12940, et seq.

Notwithstanding the generality of the foregoing, Executive does not release the following claims:

(i) Claims for unemployment compensation or any state disability insurance benefits pursuant to the terms of applicable state law;

(ii) Claims for workers' compensation insurance benefits under the terms of any worker's compensation insurance policy or fund of the Company;

(iii) Claims pursuant to the terms and conditions of the federal law known as COBRA;

(iv) Claims for indemnity under the bylaws of the Company, as provided for by California law or under any applicable insurance policy or indemnification agreement with respect to Executive's liability as an employee, director or officer of the Company;

(v) Claims based on any right Executive may have to enforce the Company's executory obligations under the Agreement (including, for the avoidance of doubt, Claims to enforce the Company's obligations to pay or provide payments and benefits that are contingent on the effectiveness of this Release); and

(vi) Claims Executive may have to vested or earned compensation and benefits.

(b) EXECUTIVE ACKNOWLEDGES THAT HE OR SHE HAS BEEN ADVISED OF AND IS FAMILIAR WITH THE PROVISIONS OF CALIFORNIA CIVIL CODE SECTION 1542, WHICH PROVIDES AS FOLLOWS:

"A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY."

BEING AWARE OF SAID CODE SECTION, EXECUTIVE HEREBY EXPRESSLY WAIVES ANY RIGHTS HE OR SHE MAY HAVE THEREUNDER, AS WELL AS UNDER ANY OTHER STATUTES OR COMMON LAW PRINCIPLES OF SIMILAR EFFECT.

(c) Executive acknowledges that this Release was presented to him or her on the date indicated above and that Executive is entitled to have twenty-one (21) days' time in which to consider it. Executive further acknowledges that the Company has advised him or her that he or she is waiving his or her rights under the ADEA, and that Executive should consult with an attorney of his or her choice before signing this Release, and Executive has had sufficient time to consider the terms of this Release. Executive represents and acknowledges that if Executive executes this Release before twenty-one (21) days have elapsed, Executive does so knowingly, voluntarily, and upon the advice and with the approval of Executive's legal counsel (if any), and that Executive voluntarily waives any remaining consideration period.

(d) Executive understands that after executing this Release, Executive has the right to revoke it within seven (7) days after his or her execution of it. Executive understands that this Release will not become effective and enforceable unless the seven (7) day revocation period passes and Executive does not revoke the Release in writing. Executive understands that this Release may not be revoked after the seven (7) day revocation period has passed. Executive also understands that any revocation of this Release must be made in writing and delivered to the Company at its principal place of business within the seven (7) day period.

(e) Executive understands that this Release shall become effective, irrevocable, and binding upon Executive on the eighth (8th) day after his or her execution of it, so long as Executive has not revoked it within the time period and in the manner specified in clause (d) above. Executive further understands that Executive will not be given any severance benefits under the Agreement unless this Release is effective on or before the date that is sixty (60) days following the date of Executive's Separation from Service (as defined in the Agreement).

(f) Nothing in this Release shall be deemed to restrict Executive's right to communicate directly with, cooperate with, provide information to, or report possible violations of federal law or regulation to, any governmental agency or entity in accordance with the provisions of and rules promulgated under Section 21F of the Securities Exchange Act of 1934 or Section 806 of the Sarbanes-Oxley Act of 2002, or any other whistleblower protection provisions of state or federal law or regulation, including, but not limited to, the U.S. Securities and Exchange Commission, the U.S. Commodity Futures Trading Commission, or the U.S. Department of Justice.

2. No Assignment. Executive represents and warrants to the Company Releasees that there has been no assignment or other transfer of any interest in any Claim that Executive may have against the Company Releasees. Executive agrees to indemnify and hold harmless the Company Releasees from any liability, claims, demands, damages, costs, expenses and attorneys' fees incurred as a result of any such assignment or transfer from Executive.

3. Severability. In the event any provision of this Release is found to be unenforceable by an arbitrator or court of competent jurisdiction, such provision shall be deemed modified to the extent necessary to allow enforceability of the provision as so limited, it being intended that the parties shall receive the benefit contemplated herein to the fullest extent permitted by law. If a deemed modification is not satisfactory in the judgment of such arbitrator or court, the unenforceable provision shall be deemed deleted, and the validity and enforceability of the remaining provisions shall not be affected thereby.

4. Interpretation; Construction. The headings set forth in this Release are for convenience only and shall not be used in interpreting this Agreement. This Release has been drafted by legal counsel representing the Company, but Executive has participated in the negotiation of its terms. Furthermore, Executive acknowledges that Executive has had an opportunity to review and revise the Release and have it reviewed by legal counsel, if desired, and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Release. Either party's failure to enforce any provision of this Release shall not in any way be construed as a waiver of any such provision, or prevent that party thereafter from enforcing each and every other provision of this Release.

5. Governing Law and Venue. This Release will be governed by and construed in accordance with the laws of the United States of America and the State of California applicable to contracts made and to be performed wholly within such State, and without regard to the conflicts of laws principles thereof. Any suit brought hereon shall be brought in the state or federal courts sitting in Santa Clara County, California, the Parties hereby waiving any claim or defense that such forum is not convenient or proper.

Each party hereby agrees that any such court shall have in personam jurisdiction over it and consents to service of process in any manner authorized by California law.

6. Entire Agreement. This Release and the Agreement constitute the entire agreement of the Parties in respect of the subject matter contained herein and therein and supersede all prior or simultaneous representations, discussions, negotiations and agreements, whether written or oral. This Release may be amended or modified only with the written consent of Executive and an authorized representative of the Company. No oral waiver, amendment or modification will be effective under any circumstances whatsoever.

7. Counterparts. This Release may be executed in multiple counterparts, each of which shall be deemed to be an original but all of which together shall constitute one and the same instrument.

(Signature Page Follows)

IN WITNESS WHEREOF, and intending to be legally bound, the Parties have executed the foregoing Release as of the date first written above.

EXECUTIVE	**XPERI HOLDING CORPORATION**
	By:
Print Name:	Print Name:
	Title:

EXHIBIT B

CONFIDENTIALITY AND PROPRIETARY RIGHTS AGREEMENT

[Attached]

CHANGE IN CONTROL SEVERANCE AGREEMENT

This Change in Control Severance Agreement ("***Agreement***") is made by and between Xperi Holding Corporation, a Delaware corporation (the "***Company***"), and [Executive] ("***Executive***"), effective as of September 29, 2020 (such date, the "***Effective Date***"). For purposes of this Agreement (other than Section 1(c) below), the "***Company***" shall mean the Company and its subsidiaries.

The parties agree as follows:

1. Definitions. For purposes of this Agreement, the following terms shall have the following meanings:

(a) "***Board***" shall mean the Board of Directors of the Company.

(b) "***Cause***" shall mean any of the following: (i) Executive's gross negligence or willful misconduct in the performance of his or her duties to the Company and its affiliates; (ii) Executive's willful and habitual neglect of or failure to perform Executive's duties of consulting or employment (which neglect or failure is not caused by Executive's illness or mental or physical disability), which neglect or failure is not cured within thirty (30) days after written notice thereof is received by Executive (it being agreed that a failure of the Company and its affiliates to meet performance objectives shall not, alone, constitute a failure by Executive to perform his duties); (iii) Executive's commission of any material act of fraud, dishonesty or financial or accounting impropriety with respect to the Company and its affiliates which results in a personal benefit to Executive; (iv) Executive's failure to cooperate with the Company and its affiliates in any investigation or formal proceeding initiated by a governmental authority or otherwise approved by the Board or the Audit Committee of the Board (which failure is not caused by Executive's illness or mental or physical disability), which failure is not cured within thirty (30) days after written notice thereof is received by Executive; (v) Executive's conviction of or plea of guilty or *nolo contendere* to felony criminal conduct (other than moving vehicle violations); (vi) Executive's material violation of the Company's Confidentiality and Proprietary Rights Agreement (as defined below) or similar agreement that Executive has entered into with the Company; or (vii) Executive's material breach of any obligation or duty under this Agreement or material violation of any written employment or other Company policies that have previously been furnished to Executive, which breach or violation is not cured within thirty (30) days after written notice thereof is received by Executive, if such breach or violation is capable of being cured.

(c) "***Change in Control***" shall mean and include each of the following:

(i) A transaction or series of transactions (other than an offering of the Company's common stock to the general public through a registration statement filed with the Securities and Exchange Commission) whereby any "person" or related "group" of "persons" (as such terms are used in Sections 13(d) and 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "***Exchange Act***")) (other than the Company, any of its subsidiaries, an employee benefit plan maintained by the Company or any of its subsidiaries or a "person" that, prior to such transaction, directly or indirectly controls, is controlled by, or is under common control with, the Company) directly or indirectly acquires beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act) of securities of the Company possessing more than fifty percent (50%) of the total combined voting power of the Company's securities outstanding immediately after such acquisition; or

(ii) The consummation by the Company (whether directly involving the Company or indirectly involving the Company through one or more intermediaries) of (x) a merger, consolidation, reorganization, or business combination or (y) a sale or other disposition of all or

substantially all of the Company's assets in any single transaction or series of related transactions or (z) the acquisition of assets or stock of another entity, in each case other than a transaction:

(A) Which results in the Company's voting securities outstanding immediately before the transaction continuing to represent (either by remaining outstanding or by being converted into voting securities of the Company or the person that, as a result of the transaction, controls, directly or indirectly, the Company or owns, directly or indirectly, all or substantially all of the Company's assets or otherwise succeeds to the business of the Company (the Company or such person, the "***Successor Entity***")) directly or indirectly, at least a majority of the combined voting power of the Successor Entity's outstanding voting securities immediately after the transaction, and

(B) After which no person or group beneficially owns voting securities representing fifty percent (50%) or more of the combined voting power of the Successor Entity; *provided, however,* that no person or group shall be treated for purposes of this Section 1(c)(ii)(B) as beneficially owning fifty percent (50%) or more of combined voting power of the Successor Entity solely as a result of the voting power held in the Company prior to the consummation of the transaction.

The Board shall have full and final authority, which shall be exercised in its discretion, to determine conclusively whether a Change in Control of the Company has occurred pursuant to the above definition, and the date of the occurrence of such Change in Control and any incidental matters relating thereto.

Notwithstanding the foregoing, to the extent required by Section 409A of the Code, if a Change in Control would give rise to a payment or benefit event with respect to any payment or benefit hereunder that constitutes "nonqualified deferred compensation," the transaction or event constituting the Change in Control must also constitute a "change in control event" (as defined in Treasury Regulation §1.409A-3(i)(5)) in order to give rise to the payment or benefit, to the extent required by Section 409A of the Code.

(d) "***Code***" means the Internal Revenue Code of 1986, as amended, and the Treasury Regulations and other interpretive guidance thereunder.

(e) "***Good Reason***" shall mean the occurrence of any of the following events or conditions without Executive's written consent:

(i) a material diminution in Executive's authority, duties or responsibilities;

(ii) a material diminution in Executive's base compensation or target annual bonus opportunity, unless such reduction is imposed across-the-board to senior management of the Company (and Executive and the Company agree that without limiting any argument that a lesser diminution is material, any diminution of ten percent (10%) or more measured against Executive's base compensation and target bonus opportunity as in effect on the Effective Date shall be deemed material for purposes of this clause (ii));

(iii) a material change in the geographic location at which Executive must perform his or her duties (and the Company and Executive acknowledge and agree that a change in the geographic location at which Executive must perform his or her duties by more than forty-five (45) miles shall constitute a material change for purposes of this Agreement); or

(iv) any other action or inaction that constitutes a material breach by the Company or any successor or affiliate of its obligations to Executive under this Agreement.

Executive must provide written notice to the Company of the occurrence of any of the foregoing events or conditions without Executive's written consent within ninety (90) days of Executive learning of the occurrence of such event. The Company or any successor or affiliate shall have a period of thirty (30) days to cure such event or condition after receipt of written notice of such event from Executive. Any voluntary Separation from Service for "Good Reason" following such thirty (30) day cure period must occur no later than the date that is six (6) months following the occurrence of one of the foregoing events or conditions without Executive's written consent.

(f) "***Performance Awards***" means any Stock Awards granted to Executive providing for vesting based upon the Executive's or the Company's performance.

(g) "***Permanent Disability***" means Executive's inability to perform the essential functions of his or her position, with or without reasonable accommodation, for a period of at least one hundred twenty (120) consecutive days because of a physical or mental impairment.

(h) "***Separation from Service***" means a "separation from service" within the meaning of Section 409A of the Code.

(i) "***Stock Awards***" means all stock options, restricted stock units and such other equity-based awards granted pursuant to the Company's equity award plans or agreements.

2. Term.

(a) The term of this Agreement (the "***Term***") shall continue until the earlier of (i) the third anniversary of the Effective Date, plus a one year automatic renewal thereafter (if not first terminated by the Board), or (ii) the date on which all payments or benefits required to be made or provided hereunder have been made or provided in their entirety, except to the extent the Term is automatically extended pursuant to Section 2(b).

(b) Notwithstanding the provisions of Section 2(a), the then-effective Term shall automatically be extended in the event that the Term would otherwise expire during the period commencing upon the first public announcement of a definitive agreement that would result in a Change in Control (even though still subject to approval of the Company's stockholders and other conditions and contingencies) and ending on the date that is eighteen (18) months following the occurrence of such Change in Control. Such extension shall be upon the terms and conditions of this Agreement as then in effect, provided that such extension of the Term of this Agreement shall expire upon the first to occur of the first public announcement of the termination of such definitive agreement or the date that is eighteen (18) months following the occurrence of such Change in Control.

(c) Notwithstanding the provisions of Sections 2(a) and (b), the obligation of the Company to make payments or provide benefits pursuant to this Agreement to which Executive has acquired a right in accordance with the applicable provisions of this Agreement prior to the expiration of the Term shall survive the termination of this Agreement until such payments and benefits have been provided in full.

3. Severance.

(a) If Executive has a Separation from Service as a result of Executive's discharge by the Company without Cause or by reason of Executive's resignation for Good Reason, in either case within sixty (60) days prior to a Change in Control or within eighteen (18) months following a Change in Control, Executive shall be entitled to receive, in lieu of any severance benefits to which Executive may otherwise be entitled under any severance plan or program of the Company, the benefits provided below, which, with respect to clause (ii), will be payable in a lump sum on the day that is sixty (60) days following the date of

Executive's Separation from Service:

(i) The Company shall pay to Executive his or her fully earned but unpaid base salary, when due, through the date of Executive's Separation from Service at the rate then in effect, reimbursement of business expenses incurred prior to the date of Executive's Separation from Service and properly submitted in accordance with Company policy, plus all other benefits, if any, under any Company group retirement plan, nonqualified deferred compensation plan, equity award plan or agreement (other than any such plan or agreement pertaining to Stock Awards whose treatment is prescribed by Section 3(a)(iv) below), health benefits plan or other Company group benefit plan to which Executive may be entitled pursuant to the terms of such plans or agreements at the time of Executive's Separation from Service (the "***Accrued Obligations***");

(ii) Subject to Section 3(c) and Executive's continued compliance with Section 4, Executive shall be entitled to receive severance pay in an amount equal to one hundred percent (100%) multiplied by the sum of (x) Executive's annual base salary as in effect immediately prior to the date of Executive's Separation from Service, plus (y) Executive's target annual bonus for the calendar year in which Executive's Separation from Service occurs;

(iii) Subject to Section 3(c) and Executive's continued compliance with Section 4, for the period beginning on the date of Executive's Separation from Service and ending on the date which is twelve (12) full months following the date of Executive's Separation from Service (or, if earlier, the date on which the applicable continuation period under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("***COBRA***") expires) (the "***COBRA Coverage Period***"), the Company shall continue to provide Executive and his or her eligible dependents who were covered under the Company's health insurance plans as of the date of Executive's Separation from Service with health (including medical and dental) insurance benefits substantially similar to those provided to Executive and his or her dependents immediately prior to the date of such Separation from Service. If any of the Company's health benefits are self-funded as of the date of Executive's Separation from Service, or if the Company cannot provide the foregoing benefits in a manner that is exempt from or otherwise compliant with applicable law or the provision of such benefits may result in the Company incurring penalties under applicable law (including, without limitation, Section 409A of the Code and Section 2716 of the Public Health Service Act), instead of providing continued health insurance benefits as set forth above, the Company shall instead pay to Executive an amount equal to the monthly premium payment for Executive and his or her eligible dependents who were covered under the Company's health plans as of the date of Executive's Separation from Service (calculated by reference to the premium as of the date of Separation from Service) as currently taxable compensation in substantially equal monthly installments over the COBRA Coverage Period (or the remaining portion thereof);

(iv) Subject to Section 3(c) and Executive's continued compliance with Section 4, the vesting and/or exercisability of each of Executive's outstanding Stock Awards (other than Performance Awards, which will vest as to the "target" number of shares subject to such performance Awards, except to the extent alternative acceleration is specifically provided for pursuant to the grant documents) shall be accelerated in full effective as of the later of (A) the date of Executive's Separation from Service or (B) the date of the Change in Control (provided that payment or settlement of such Stock Awards may be delayed as provided in the grant documents to the extent required by Section 409A of the Code). Nothing in this Section 3(a)(iv) shall be construed to limit any more favorable vesting applicable to Executive's Stock Awards in the Company's equity plan(s) and/or the stock award agreements under which the Stock Awards were granted. The foregoing provisions are hereby deemed to be a part of each Stock Award and to supersede any less favorable provision in any agreement or plan regarding such Stock Award; and

(v) Notwithstanding any other provision of this Agreement to the contrary, any severance benefits payable to Executive under this Agreement shall be reduced by any severance benefits payable by the Company or an affiliate of the Company to such individual under any other policy,

plan, program, agreement or arrangement, including, without limitation, any severance agreement between such individual and any entity.

(b) Other Terminations. If Executive's employment is terminated by the Company without Cause or by Executive for Good Reason more than sixty (60) days prior to a Change in Control or more than eighteen (18) months following a Change in Control, or at any time by the Company for Cause, by Executive without Good Reason, or as a result of Executive's death or Permanent Disability, the Company shall not have any other or further obligations to Executive under this Agreement (including any financial obligations) except that Executive shall be entitled to receive the Accrued Obligations. The foregoing shall be in addition to, and not in lieu of, any and all other rights and remedies which may be available to the Company under the circumstances, whether at law or in equity.

(c) Release. As a condition to Executive's receipt of any post-termination benefits pursuant to Section 3(a) above (other than the Accrued Obligations), Executive shall execute and not revoke a general release of all claims in favor of the Company (the "***Release***") in the form substantially similar to that attached hereto as Exhibit A (and any applicable revocation period applicable to such Release shall have expired) within the sixty (60) day period following the date of Executive's Separation from Service.

(d) Exclusive Remedy. Except as otherwise expressly required by law (e.g., COBRA) or as specifically provided herein, all of Executive's rights to salary, severance, benefits, bonuses and other amounts hereunder (if any) accruing after the termination of Executive's employment shall cease upon such termination. In the event of a termination of Executive's employment with the Company, and except in the event of violation of applicable law by the Company relating to Executive's employment or the termination thereof, Executive's sole remedy shall be to receive the payments and benefits described in this Section 3 plus, subject to Section 3(a)(v) above, any payments due to Executive under the Severance Agreement (defined below).

(e) No Mitigation. Executive shall not be required to mitigate the amount of any payment provided for in this Section 3 by seeking other employment or otherwise, nor shall the amount of any payment or benefit provided for in this Section 3 be reduced by any compensation earned by Executive as the result of employment by another employer or self-employment or by retirement benefits; *provided*, *however*, that loans, advances or other amounts owed by Executive to the Company may be offset by the Company and its affiliates against amounts payable to Executive under this Section 3.

(f) Return of the Company's Property. If Executive's employment is terminated for any reason, the Company shall have the right, at its option, to require Executive to vacate his or her offices prior to or on the effective date of termination and to cease all activities on the Company's behalf. Upon the termination of his or her employment in any manner, as a condition to Executive's receipt of any post- termination benefits described in this Agreement, Executive shall immediately surrender to the Company all lists, books and records of, or in connection with, the Company's business, and all other property belonging to the Company and its affiliates, it being distinctly understood that all such lists, books and records, and other documents, are the property of the Company and its affiliates. Executive shall deliver to the Company a signed statement certifying compliance with this Section 3(f) prior to the receipt of any post-termination benefits described in this Agreement.

(g) Best Pay Provision.

(i) If any payment or benefit Executive would receive under this Agreement, when combined with any other payment or benefit Executive receives pursuant to the termination of Executive's employment with the Company and its affiliates ("***Payment***"), would (A) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (B) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "***Excise Tax***"), then such Payment shall be either (1) the full amount of such Payment or (2) such lesser amount (with cash payments being reduced

before stock option compensation) as would result in no portion of the Payment being subject to the Excise Tax, whichever of the foregoing amounts, taking into account the applicable federal, state and local employment taxes, income taxes, and the Excise Tax, results in Executive's receipt, on an after-tax basis, of the greater amount of the Payment notwithstanding that all or some portion of the Payment may be subject to the Excise Tax.

(ii) All determinations required to be made under this Section 3(g), including whether and to what extent the Payments shall be reduced and the assumptions to be utilized in arriving at such determination, shall be made by the nationally recognized certified public accounting firm used by the Company immediately prior to the effective date of the Change in Control or, if such firm declines to serve, such other nationally recognized certified public accounting firm as may be designated by the Company (the "***Accounting Firm***"). The Accounting Firm shall provide detailed supporting calculations both to Executive and the Company at such time as is requested by the Company. All fees and expenses of the Accounting Firm shall be borne solely by the Company. Any determination by the Accounting Firm shall be binding upon Executive and the Company. For purposes of making the calculations required by this Section 3(g), the Accounting Firm may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good-faith interpretations concerning the application of Sections 280G and 4999 of the Code.

4. Confidentiality and Proprietary Rights. Executive and the Company have executed the Company's Confidentiality and Proprietary Rights Agreement, a copy of which is attached to this Agreement as Exhibit B and incorporated herein by reference (the "***Confidentiality and Proprietary Rights Agreement***"). The Company shall be entitled to cease all severance payments and benefits to Executive in the event of his or his material breach of this Section 4. Nothing in this Agreement or in the Confidentiality and Proprietary Rights Agreement shall be deemed to restrict Executive's right to communicate directly with, cooperate with, provide information to, or report possible violations of federal law or regulation to, any governmental agency or entity in accordance with the provisions of and rules promulgated under Section 21F of the Securities Exchange Act of 1934 or Section 806 of the Sarbanes-Oxley Act of 2002, or any other whistleblower protection provisions of state or federal law or regulation, including, but not limited to, the U.S. Securities and Exchange Commission, the U.S. Commodity Futures Trading Commission, or the U.S. Department of Justice.

5. Agreement to Arbitrate. Any dispute, claim or controversy based on, arising out of or relating to Executive's employment or this Agreement shall be settled by final and binding arbitration in San Jose, California, before a single neutral arbitrator in accordance with the Employment Arbitration Rules and Procedures (the "***Rules***") of Judicial Arbitration and Mediation Services ("***JAMS***"), and judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction. The Rules may be found online at www.jamsadr.com. Arbitration may be compelled pursuant to the California Arbitration Act (Code of Civil Procedure §§ 1280 et seq.). If the parties are unable to agree upon an arbitrator, one shall be appointed by JAMS in accordance with its Rules. Each party shall pay the fees of its own attorneys, the expenses of its witnesses and all other expenses connected with presenting its case; *provided*, *however*, Executive and the Company agree that, to the extent permitted by law, the arbitrator may, in his or her discretion, award reasonable attorneys' fees to the prevailing party; *provided*, *further*, that the prevailing party shall be reimbursed for such fees, costs and expenses within forty-five (45) days following any such award, but in no event later than the last day of the Executive's taxable year following the taxable year in which the fees, costs and expenses were incurred; *provided*, *further*, that the parties' obligations pursuant to this sentence shall terminate on the tenth (10th) anniversary of the date of Executive's termination of employment; *provided*, *however*, that Executive shall retain the right to file administrative charges with or seek relief through any government agency of competent jurisdiction, and to participate in any government investigation, including but not limited to (a) claims for workers' compensation, state disability insurance or unemployment insurance; (b) claims for unpaid wages or waiting time penalties brought before the California Division of Labor Standards Enforcement; *provided*, *however*, that any appeal from an award or from denial of an award of wages and/or waiting time penalties shall be arbitrated pursuant to the terms of

this Agreement; and (c) claims for administrative relief from the United States Equal Employment Opportunity Commission and/or the California Department of Fair Employment and Housing (or any similar agency in any applicable jurisdiction other than California); *provided*, *further*, that Executive shall not be entitled to obtain any monetary relief through such agencies other than workers' compensation benefits or unemployment insurance benefits. Other costs of the arbitration, including the cost of any record or transcripts of the arbitration, JAMS' administrative fees, the fee of the arbitrator, and all other fees and costs, shall be borne by the Company. This Section 5 is intended to be the exclusive method for resolving any and all claims by the parties against each other for payment of damages under this Agreement or relating to Executive's employment; *provided*, *however*, that neither this Agreement nor the submission to arbitration shall limit the parties' right to seek provisional relief, including without limitation injunctive relief, in any court of competent jurisdiction pursuant to California Code of Civil Procedure § 1281.8 or any similar statute of an applicable jurisdiction. Seeking any such relief shall not be deemed to be a waiver of such party's right to compel arbitration. Both Executive and the Company expressly waive their right to a jury trial.

6. At-Will Employment Relationship. Executive's employment with the Company is at-will and not for any specified period and may be terminated at any time, with or without Cause or advance notice, by either Executive or the Company. Any change to the at-will employment relationship must be by specific, written agreement signed by Executive and an authorized representative of the Company. Nothing in this Agreement is intended to or should be construed to contradict, modify or alter this at-will relationship.

7. General Provisions.

7.1 Successors and Assigns. The rights of the Company under this Agreement may, without the consent of Executive, be assigned by the Company, in its sole and unfettered discretion, to any person, firm, corporation or other business entity which at any time, whether by purchase, merger or otherwise, directly or indirectly, acquires all or substantially all of the assets or business of the Company. The Company will require any successor (whether direct or indirect, by purchase, merger or otherwise) to all or substantially all of the business or assets of the Company expressly to assume and to agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform it if no such succession had taken place; *provided*, *however*, that no such assumption shall relieve the Company of its obligations hereunder; *provided*, *further*, that the failure of any such successor to so assume this Agreement shall constitute a material breach of this Agreement. As used in this Agreement, the "***Company***" shall mean the Company as hereinbefore defined and any successor to its business and/or assets as aforesaid which assumes and agrees to perform this Agreement by operation of law or otherwise. Executive shall not be entitled to assign any of Executive's rights or obligations under this Agreement. This Agreement shall inure to the benefit of and be enforceable by Executive's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

7.2 Severability. In the event any provision of this Agreement is found to be unenforceable by an arbitrator or court of competent jurisdiction, such provision shall be deemed modified to the extent necessary to allow enforceability of the provision as so limited, it being intended that the parties shall receive the benefit contemplated herein to the fullest extent permitted by law. If a deemed modification is not satisfactory in the judgment of such arbitrator or court, the unenforceable provision shall be deemed deleted, and the validity and enforceability of the remaining provisions shall not be affected thereby.

7.3 Interpretation; Construction. The headings set forth in this Agreement are for convenience only and shall not be used in interpreting this Agreement. This Agreement has been drafted by legal counsel representing the Company, but Executive has participated in the negotiation of its terms. Furthermore, Executive acknowledges that Executive has had an opportunity to review and revise the Agreement and have it reviewed by legal counsel, if desired, and, therefore, the normal rule of construction

to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement. Either party's failure to enforce any provision of this Agreement shall not in any way be construed as a waiver of any such provision, or prevent that party thereafter from enforcing each and every other provision of this Agreement.

7.4 Governing Law and Venue. This Agreement will be governed by and construed in accordance with the laws of the United States and the State of California applicable to contracts made and to be performed wholly within such State, and without regard to the conflicts of laws principles thereof. Any suit brought hereon shall be brought in the state or federal courts sitting in Santa Clara County, California, the Parties hereby waiving any claim or defense that such forum is not convenient or proper. Each party hereby agrees that any such court shall have in personam jurisdiction over it and consents to service of process in any manner authorized by California law.

7.5 Notices. Any notice required or permitted by this Agreement shall be in writing and shall be delivered as follows with notice deemed given as indicated: (a) by personal delivery when delivered personally; (b) by overnight courier upon written verification of receipt; (c) by telecopy or facsimile transmission upon acknowledgment of receipt of electronic transmission; or (d) by certified or registered mail, return receipt requested, upon verification of receipt. Notice shall be sent to Executive at the address set forth below and to the Company at its principal place of business, or such other address as either party may specify in writing.

7.6 Survival. Sections 1 ("Definitions"), 3 ("Severance"), 4 ("Confidentiality and Proprietary Rights"), 5 ("Agreement to Arbitrate") and 7 ("General Provisions") of this Agreement shall survive termination of Executive's employment by the Company.

7.7 Entire Agreement. This Agreement and the Confidentiality and Proprietary Rights Agreement incorporated herein by reference together constitute the entire agreement between the parties in respect of the subject matter contained herein and therein and supersede all prior or simultaneous representations, discussions, negotiations, and agreements, whether written or oral, including, without limitation, any previous severance agreement between the Company (or any of the Company's subsidiaries) and Executive (other than the Severance Agreement (as defined below)). This Agreement may be amended or modified only with the written consent of Executive and an authorized representative of the Company. No oral waiver, amendment or modification will be effective under any circumstances whatsoever. Notwithstanding the foregoing or anything herein to the contrary, although severance provided under the Executive's Severance Agreement made by and between the Company and the Executive effective as of the Effective Date (the "***Severance Agreement***") may offset severance provided hereunder (as specified in Section 3(a)(v)), the Severance Agreement is outside the scope of the foregoing integration provision and shall continue in full force and effect.

7.8 Code Section 409A.

(a) To the extent applicable, this Agreement shall be interpreted in accordance with Code Section 409A and Department of Treasury regulations and other interpretive guidance issued thereunder. Each series of installment payments made under this Agreement is hereby designated as a series of "separate payments" within the meaning of Section 409A of the Code.

(b) If the Executive is a "specified employee" (as defined in Section 409A of the Code), as determined by the Company in accordance with Section 409A of the Code, on the date of the Executive's Separation from Service, to the extent that the payments or benefits under this Agreement are subject to Section 409A of the Code and the delayed payment or distribution of all or any portion of such amounts to which Executive is entitled under this Agreement is required in order to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code, then such portion deferred pursuant to this Section 7.8(b) shall be paid or distributed to Executive in a lump sum on the earlier of (i) the date that is six (6)-

months following Executive's Separation from Service, (ii) the date of Executive's death or (iii) the earliest date as is permitted under Section 409A of the Code. Any remaining payments due under the Agreement shall be paid as otherwise provided herein.

(c) Notwithstanding anything to the contrary in this Agreement, in-kind benefits and reimbursements provided under this Agreement during any tax year of Executive shall not affect in-kind benefits or reimbursements to be provided in any other tax year of Executive and are not subject to liquidation or exchange for another benefit. Notwithstanding anything to the contrary in this Agreement, reimbursement requests must be timely submitted by Executive and, if timely submitted, reimbursement payments shall be made to Executive as soon as administratively practicable following such submission, but in no event later than the last day of Executive's taxable year following the taxable year in which the expense was incurred. In no event shall Executive be entitled to any reimbursement payments after the last day of Executive's taxable year following the taxable year in which the expense was incurred. This section shall only apply to in-kind benefits and reimbursements that would result in taxable compensation income to Executive.

7.9 Consultation with Legal and Financial Advisors. By executing this Agreement, Executive acknowledges that this Agreement confers significant legal rights, and may also involve the waiver of rights under other agreements; that the Company has encouraged Executive to consult with Executive's personal legal and financial advisors; and that Executive has had adequate time to consult with Executive's advisors before executing this Agreement.

7.10 Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.

(Signature Page Follows)

THE PARTIES TO THIS AGREEMENT HAVE READ THE FOREGOING AGREEMENT AND FULLY UNDERSTAND EACH AND EVERY PROVISION CONTAINED HEREIN. WHEREFORE, THE PARTIES HAVE EXECUTED THIS AGREEMENT ON THE DATES SHOWN BELOW.

XPERI HOLDING CORPORATION

Dated: By:

Name:
Title:

EXECUTIVE

Dated:

Print Name:

Address:

EXHIBIT A

GENERAL RELEASE OF CLAIMS

[The language in this Release may change based on legal developments and evolving best practices; provided, however, that no new post-termination covenants shall be imposed on Executive; this form is provided as an example of what will be included in the final Release document.]

This General Release of Claims ("***Release***") is entered into as of this day of , between ("***Executive***"), and Xperi Holding Corporation, a Delaware corporation (the "***Company***") (collectively referred to herein as the "***Parties***").

WHEREAS, Executive and the Company are parties to that certain Change in Control Severance Agreement dated as of , (the "***Agreement***");

WHEREAS, the Parties agree that Executive is entitled to certain severance benefits under the Agreement, subject to Executive's execution of this Release; and

WHEREAS, the Company and Executive now wish to fully and finally to resolve all matters between them.

NOW, THEREFORE, in consideration of, and subject to, the severance benefits payable to Executive pursuant to the Agreement, the adequacy of which is hereby acknowledged by Executive, and which Executive acknowledges that he or she would not otherwise be entitled to receive, Executive and the Company hereby agree as follows:

1. General Release of Claims by Executive.

(a) Executive, on behalf of himself or herself and his or her executors, heirs, administrators, representatives and assigns, hereby agrees to release and forever discharge the Company and all predecessors, successors and their respective parent corporations, affiliates, related, and/or subsidiary entities, and all of their past and present investors, directors, shareholders, officers, general or limited partners, employees, attorneys, agents and representatives, and the employee benefit plans in which Executive is or has been a participant by virtue of his or her employment with or service to the Company (collectively, the "***Company Releasees***"), from any and all claims, debts, demands, accounts, judgments, rights, causes of action, equitable relief, damages, costs, charges, complaints, obligations, promises, agreements, controversies, suits, expenses, compensation, responsibility and liability of every kind and character whatsoever (including attorneys' fees and costs), whether in law or equity, known or unknown, asserted or unasserted, suspected or unsuspected (collectively, "***Claims***"), which Executive has or may have had against such entities based on any events or circumstances arising or occurring on or prior to the date hereof or on or prior to the date hereof, arising directly or indirectly out of, relating to, or in any other way involving in any manner whatsoever Executive's employment by or service to the Company or the termination thereof, including any and all claims arising under federal, state, or local laws relating to employment, including without limitation claims of wrongful discharge, breach of express or implied contract, fraud, misrepresentation, defamation, or liability in tort, and claims of any kind that may be brought in any court or administrative agency including, without limitation, claims under Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. Section 2000, et seq.; the Americans with Disabilities Act, as amended, 42 U.S.C. § 12101 et seq.; the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 701 et seq.; the Civil Rights Act of 1866, and the Civil Rights Act of 1991; 42 U.S.C. Section 1981, et seq.; the Age Discrimination in Employment Act, as amended, 29 U.S.C. Section 621, et seq. (the "***ADEA***"); the

Equal Pay Act, as amended, 29 U.S.C. Section 206(d); regulations of the Office of Federal Contract Compliance, 41 C.F.R. Section 60, et seq.; the Family and Medical Leave Act, as amended, 29 U.S.C. § 2601 et seq.; the Fair Labor Standards Act of 1938, as amended, 29 U.S.C. § 201 et seq.; the Employee Retirement Income Security Act, as amended, 29 U.S.C. § 1001 et seq.; and the California Fair Employment and Housing Act, California Government Code Section 12940, et seq.

Notwithstanding the generality of the foregoing, Executive does not release the following claims:

(i) Claims for unemployment compensation or any state disability insurance benefits pursuant to the terms of applicable state law;

(ii) Claims for workers' compensation insurance benefits under the terms of any worker's compensation insurance policy or fund of the Company;

(iii) Claims pursuant to the terms and conditions of the federal law known as COBRA;

(iv) Claims for indemnity under the bylaws of the Company, as provided for by California law or under any applicable insurance policy or indemnification agreement with respect to Executive's liability as an employee, director or officer of the Company;

(v) Claims based on any right Executive may have to enforce the Company's executory obligations under the Agreement (including, for the avoidance of doubt, Claims to enforce the Company's obligations to pay or provide payments and benefits that are contingent on the effectiveness of this Release); and

(vi) Claims Executive may have to vested or earned compensation and benefits.

(b) EXECUTIVE ACKNOWLEDGES THAT HE OR SHE HAS BEEN ADVISED OF AND IS FAMILIAR WITH THE PROVISIONS OF CALIFORNIA CIVIL CODE SECTION 1542, WHICH PROVIDES AS FOLLOWS:

"A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY."

BEING AWARE OF SAID CODE SECTION, EXECUTIVE HEREBY EXPRESSLY WAIVES ANY RIGHTS HE OR SHE MAY HAVE THEREUNDER, AS WELL AS UNDER ANY OTHER STATUTES OR COMMON LAW PRINCIPLES OF SIMILAR EFFECT.

(c) Executive acknowledges that this Release was presented to him or her on the date indicated above and that Executive is entitled to have twenty-one (21) days' time in which to consider it. Executive further acknowledges that the Company has advised him or her that he or she is waiving his or her rights under the ADEA, and that Executive should consult with an attorney of his or her choice before signing this Release, and Executive has had sufficient time to consider the terms of this Release. Executive represents and acknowledges that if Executive executes this Release before twenty-one (21) days have elapsed, Executive does so knowingly, voluntarily, and upon the advice and with the approval of Executive's legal counsel (if any), and that Executive voluntarily waives any remaining consideration period.

(d) Executive understands that after executing this Release, Executive has the right to revoke it within seven (7) days after his or her execution of it. Executive understands that this Release will not become effective and enforceable unless the seven (7) day revocation period passes and Executive does not revoke the Release in writing. Executive understands that this Release may not be revoked after the seven (7) day revocation period has passed. Executive also understands that any revocation of this Release must be made in writing and delivered to the Company at its principal place of business within the seven (7) day period.

(e) Executive understands that this Release shall become effective, irrevocable, and binding upon Executive on the eighth (8th) day after his or her execution of it, so long as Executive has not revoked it within the time period and in the manner specified in clause (d) above. Executive further understands that Executive will not be given any severance benefits under the Agreement unless this Release is effective on or before the date that is sixty (60) days following the date of Executive's Separation from Service (as defined in the Agreement).

(f) Nothing in this Release shall be deemed to restrict Executive's right to communicate directly with, cooperate with, provide information to, or report possible violations of federal law or regulation to, any governmental agency or entity in accordance with the provisions of and rules promulgated under Section 21F of the Securities Exchange Act of 1934 or Section 806 of the Sarbanes-Oxley Act of 2002, or any other whistleblower protection provisions of state or federal law or regulation, including, but not limited to, the U.S. Securities and Exchange Commission, the U.S. Commodity Futures Trading Commission, or the U.S. Department of Justice.

2. No Assignment. Executive represents and warrants to the Company Releasees that there has been no assignment or other transfer of any interest in any Claim that Executive may have against the Company Releasees. Executive agrees to indemnify and hold harmless the Company Releasees from any liability, claims, demands, damages, costs, expenses and attorneys' fees incurred as a result of any such assignment or transfer from Executive.

3. Severability. In the event any provision of this Release is found to be unenforceable by an arbitrator or court of competent jurisdiction, such provision shall be deemed modified to the extent necessary to allow enforceability of the provision as so limited, it being intended that the parties shall receive the benefit contemplated herein to the fullest extent permitted by law. If a deemed modification is not satisfactory in the judgment of such arbitrator or court, the unenforceable provision shall be deemed deleted, and the validity and enforceability of the remaining provisions shall not be affected thereby.

4. Interpretation; Construction. The headings set forth in this Release are for convenience only and shall not be used in interpreting this Agreement. This Release has been drafted by legal counsel representing the Company, but Executive has participated in the negotiation of its terms. Furthermore, Executive acknowledges that Executive has had an opportunity to review and revise the Release and have it reviewed by legal counsel, if desired, and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Release. Either party's failure to enforce any provision of this Release shall not in any way be construed as a waiver of any such provision, or prevent that party thereafter from enforcing each and every other provision of this Release.

5. Governing Law and Venue. This Release will be governed by and construed in accordance with the laws of the United States of America and the State of California applicable to contracts made and to be performed wholly within such State, and without regard to the conflicts of laws principles thereof. Any suit brought hereon shall be brought in the state or federal courts sitting in Santa Clara County, California, the Parties hereby waiving any claim or defense that such forum is not convenient or proper.

Each party hereby agrees that any such court shall have in personam jurisdiction over it and consents to service of process in any manner authorized by California law.

6. Entire Agreement. This Release and the Agreement constitute the entire agreement of the Parties in respect of the subject matter contained herein and therein and supersede all prior or simultaneous representations, discussions, negotiations and agreements, whether written or oral. This Release may be amended or modified only with the written consent of Executive and an authorized representative of the Company. No oral waiver, amendment or modification will be effective under any circumstances whatsoever.

7. Counterparts. This Release may be executed in multiple counterparts, each of which shall be deemed to be an original but all of which together shall constitute one and the same instrument.

(Signature Page Follows)

IN WITNESS WHEREOF, and intending to be legally bound, the Parties have executed the foregoing Release as of the date first written above.

EXECUTIVE	**XPERI HOLDING CORPORATION**
	By:
Print Name:	Print Name:
	Title:

EXHIBIT B

CONFIDENTIALITY AND PROPRIETARY RIGHTS AGREEMENT

[Attached]

DocuSign Envelope ID: 0DC6196D-9EF0-4DB6-B946-560B7AE1FC00

Exhibit 10.3

AMENDMENT TO EMPLOYMENT AND SEVERANCE AGREEMENT

This AMENDMENT TO EMPLOYMENT AND SEVERANCE AGREEMENT (“***Amendment***”), is made by and between Xperi Holding Corporation, a Delaware corporation (“***Company***”), and Jon Kirchner (“***Executive***”) (collectively the “***Parties***”), effective as of September 29, 2020 (“***Effective Date***”).

WHEREAS, Executive and Xperi Corporation entered into a certain Employment and Severance Agreement dated April 28, 2017 (the “***Agreement***”);

WHEREAS, since entering into the Agreement, Xperi Corporation and TiVo Corporation merged to form Xperi Holding Corporation; and

WHEREAS, the Parties wish to extend Executive’s role with the Company on the terms set forth in the Agreement, as amended hereby;

NOW, THEREFORE, in consideration of the representations, warranties, covenants and agreements contained in the Agreement as hereby amended, and other good and valuable consideration, the sufficiency of which the Parties acknowledge, the Parties agree as follows:

1. References throughout the Agreement to *Xperi Corporation* are hereby replaced by *Xperi Holding Corporation*;

2. Section 2(a) of the Agreement is hereby replaced in its entirety by the following:

The term of this Agreement (the “***Term***”) shall continue through June 1, 2024, and shall automatically extend for an additional twelve (12) months (such extension, if it occurs, also considered to be part of the “*Term*”) unless either party provides the other party at least ninety (90) days’ advanced written notice of non-renewal prior to the current expiration of the Term. In the event the Company chooses not to renew the Agreement so that the Term is not extended for the additional twelve (12) months, then Executive’s employment will be deemed terminated without Cause as of June 1, 2024. In the event the Term expires at the end of the additional twelve (12) month extension period, then such expiration shall not be deemed a termination without Cause and Executive shall not be entitled to severance hereunder as a result of such expiration.

3. Section 4(a) of the Agreement shall be amended to reflect a modified Base Salary of $670,000 per annum, less applicable deductions and withholdings, payable in accordance with the Company’s standard payroll practices.

4. Section 4(b) of the Agreement shall be amended to reflect that Executive will be eligible for additional Stock Awards in accordance with the Company’s annual grant cycle, with consideration for the grant for 2021. All additional Stock Awards shall be subject to approval by the Compensation Committee of the Board, and subject to the Plan.

5. Section 9.9 of the Agreement shall be amended to reflect that Executive may be reimbursed for reasonable attorneys’ fees incurred in connection with negotiating and executing this Amendment, not to exceed $30,000, in accordance with the Company’s stand expense reimbursement policies and procedures.

6. Reference to California Civil Code Section 1542, set forth in Section 1(b) of General Release of Claims (Exhibit A to the Agreement) is hereby replaced by the following:

"A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY."

7. Except as expressly amended hereby, all other terms of the Agreement shall remain unchanged and in full force and effect.

8. This Amendment shall be deemed part of and is incorporated into the Agreement. The Agreement, as amended, constitutes the entire agreement and understanding of the Parties with respect to the subject matter herein.

DocuSigned by: Jon Kirchner DocuSigned by: Paul Davis IN WITNESS WHEREOF, this Amendment has been agreed to by the Parties effective as of the date set forth above.

Xperi Holding Corporation	**Executive**
By: Paul Davis Chief Legal Counsel	Jon Kirchner

Exhibit 31.1

Certification of the Chief Executive Officer
Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934

I, Jon Kirchner, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Xperi Holding 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 functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect 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 9, 2020

/s/ Jon Kirchner
Jon Kirchner
Chief Executive Officer and President

Exhibit 31.2

Certification of the Chief Financial Officer
Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934

I, Robert Andersen, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Xperi Holding 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 functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect 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 9, 2020

/s/ Robert Andersen
Robert Andersen
Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
RULE 13a-14(b) OF THE SECURITIES EXCHANGE ACT OF 1934
AND 18 U.S.C. SECTION 1350

In connection with the Quarterly Report of Xperi Holding Corporation, a Delaware corporation (the "Company"), on Form 10-Q for the three months ended September 30, 2020 as filed with the Securities and Exchange Commission (the "Report"), I, Jon Kirchner, Chief Executive Officer and President, certify, pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

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

/s/ Jon Kirchner
Jon Kirchner
Chief Executive Officer and President
November 9, 2020

CERTIFICATION PURSUANT TO
RULE 13a-14(b) OF THE SECURITIES EXCHANGE ACT OF 1934
AND 18 U.S.C. SECTION 1350

In connection with the Quarterly Report of Xperi Holding Corporation, a Delaware corporation (the "Company"), on Form 10-Q for the three months ended September 30, 2020 as filed with the Securities and Exchange Commission (the "Report"), I, Robert Andersen, Chief Financial Officer of the Company, certify, pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

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

/s/ Robert Andersen
Robert Andersen
Chief Financial Officer
November 9, 2020

A signed original of this written statement required by Rule 13a-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350 has been provided to the Registrant and will be retained by the Registrant and furnished to the Securities and Exchange Commission or its staff upon request.