UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

☒ **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**

For the transition period from to

Commission file number 000-22418

ITRON, INC.

(Exact name of registrant as specified in its charter)

Washington	**91-1011792**
(State of Incorporation)	**(I.R.S. Employer Identification Number)**

2111 N Molter Road, Liberty Lake, Washington 99019
(509) 924-9900
(Address and telephone number of registrant's principal executive offices)

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, no par value	ITRI	NASDAQ Global Select Market

Securities registered pursuant to Section 12(g) of the Act: None

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	☐	(Do not check if a smaller reporting company)	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 ☒

As of October 30, 2020, there were outstanding 40,396,909 shares of the registrant's common stock, no par value, which is the only class of common stock of the registrant.

Itron, Inc.

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PART I: FINANCIAL INFORMATION

Item 1: Financial Statements (Unaudited)

ITRON, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(UNAUDITED)

In thousands, except per share data	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Revenues				
Product revenues	$ 470,658	$ 552,897	$ 1,437,780	$ 1,663,794
Service revenues	69,526	71,577	210,413	210,293
Total revenues	540,184	624,474	1,648,193	1,874,087
Cost of revenues				
Product cost of revenues	358,297	389,778	1,072,271	1,176,913
Service cost of revenues	38,636	38,292	122,588	122,293
Total cost of revenues	396,933	428,070	1,194,859	1,299,206
Gross profit	143,251	196,404	453,334	574,881
Operating expenses				
Sales, general and administrative	64,982	83,666	215,018	264,640
Research and development	46,224	50,612	148,999	150,551
Amortization of intangible assets	11,183	16,095	33,488	48,185
Restructuring	44,462	6,592	41,531	7,685
Loss on sale of business	380	—	57,295	—
Total operating expenses	167,231	156,965	496,331	471,061
Operating income (loss)	(23,980)	39,439	(42,997)	103,820
Other income (expense)				
Interest income	354	517	2,165	1,379
Interest expense	(10,810)	(12,868)	(33,771)	(39,899)
Other income (expense), net	(2,607)	(2,759)	(3,414)	(6,463)
Total other income (expense)	(13,063)	(15,110)	(35,020)	(44,983)
Income (loss) before income taxes	(37,043)	24,329	(78,017)	58,837
Income tax benefit (provision)	11,985	(6,152)	(366)	(20,692)
Net income (loss)	(25,058)	18,177	(78,383)	38,145
Net income attributable to noncontrolling interests	299	1,330	1,092	3,759
Net income (loss) attributable to Itron, Inc.	$ (25,357)	$ 16,847	$ (79,475)	$ 34,386
Net income (loss) per common share - Basic	$ (0.63)	$ 0.43	$ (1.98)	$ 0.87
Net income (loss) per common share - Diluted	$ (0.63)	$ 0.42	$ (1.98)	$ 0.86
Weighted average common shares outstanding - Basic	40,337	39,478	40,199	39,508
Weighted average common shares outstanding - Diluted	40,337	39,903	40,199	39,884

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

ITRON, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(UNAUDITED)

	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands	2020	2019	2020	2019
Net income (loss)	$ (25,058)	$ 18,177	$ (78,383)	$ 38,145
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments	13,988	(16,345)	(147)	(13,544)
Foreign currency translation adjustment reclassified to net income on sale of business	(14)	2,443	52,074	2,443
Net unrealized gain (loss) on derivative instruments, designated as cash flow hedges	(1)	695	(2,157)	(804)
Pension benefit obligation adjustment	(159)	502	889	1,156
Total other comprehensive income (loss), net of tax	13,814	(12,705)	50,659	(10,749)
Total comprehensive income (loss), net of tax	(11,244)	5,472	(27,724)	27,396
Comprehensive income attributable to noncontrolling interests, net of tax	299	1,330	1,092	3,759
Comprehensive income (loss) attributable to Itron, Inc.	$ (11,543)	$ 4,142	$ (28,816)	$ 23,637

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

ITRON, INC.
CONSOLIDATED BALANCE SHEETS
(UNAUDITED)

In thousands	September 30, 2020	December 31, 2019
ASSETS		
Current assets		
Cash and cash equivalents	$ 586,167	$ 149,904
Accounts receivable, net	386,920	472,925
Inventories	205,178	227,896
Other current assets	173,906	146,526
Total current assets	1,352,171	997,251
Property, plant, and equipment, net	205,930	233,228
Deferred tax assets, net	72,305	63,899
Other long-term assets	47,929	44,686
Operating lease right-of-use assets, net	78,190	79,773
Intangible assets, net	144,888	185,097
Goodwill	1,114,511	1,103,907
Total assets	$ 3,015,924	$ 2,707,841
LIABILITIES AND EQUITY		
Current liabilities		
Accounts payable	$ 232,236	$ 328,128
Other current liabilities	76,509	63,785
Wages and benefits payable	91,225	119,220
Taxes payable	15,482	22,193
Current portion of debt	21,406	—
Current portion of warranty	32,118	38,509
Unearned revenue	117,729	99,556
Total current liabilities	586,705	671,391
Long-term debt, net	1,313,459	932,482
Long-term warranty	10,969	14,732
Pension benefit obligation	103,273	98,712
Deferred tax liabilities, net	1,854	1,809
Operating lease liabilities	68,847	68,919
Other long-term obligations	133,552	118,981
Total liabilities	2,218,659	1,907,026
Equity		
Preferred stock, no par value, 10,000 shares authorized, no shares issued or outstanding	—	—
Common stock, no par value, 75,000 shares authorized, 40,356 and 39,941 shares issued and outstanding	1,381,774	1,357,600
Accumulated other comprehensive loss, net	(154,013)	(204,672)
Accumulated deficit	(455,865)	(376,390)
Total Itron, Inc. shareholders' equity	771,896	776,538
Noncontrolling interests	25,369	24,277
Total equity	797,265	800,815
Total liabilities and equity	$ 3,015,924	$ 2,707,841

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

ITRON, INC.
CONSOLIDATED STATEMENTS OF EQUITY
(UNAUDITED)

	Common Stock						
In thousands	Shares	Amount	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Itron, Inc. Shareholders' Equity	Noncontrolling Interests	Total Equity
Balances at January 1, 2020	39,941	$ 1,357,600	$ (204,672)	$ (376,390)	$ 776,538	$ 24,277	$ 800,815
Net income				8,684	8,684	478	9,162
Other comprehensive income (loss), net of tax			(25,211)		(25,211)		(25,211)
Net stock issues and repurchases	235	2,247			2,247		2,247
Stock-based compensation expense		8,482			8,482		8,482
Balances at March 31, 2020	40,176	1,368,329	(229,883)	(367,706)	770,740	24,755	795,495
Net income (loss)				(62,802)	(62,802)	315	(62,487)
Other comprehensive income (loss), net of tax			62,056		62,056		62,056
Net stock issues and repurchases	58	706			706		706
Stock-based compensation expense		7,099			7,099		7,099
Balances at June 30, 2020	40,234	1,376,134	(167,827)	(430,508)	777,799	25,070	802,869
Net income (loss)				(25,357)	(25,357)	299	(25,058)
Other comprehensive income (loss), net of tax			13,814		13,814		13,814
Net stock issues and repurchases	122	583			583		583
Stock-based compensation expense		5,057			5,057		5,057
Balances at September 30, 2020	40,356	$ 1,381,774	$ (154,013)	$ (455,865)	$ 771,896	$ 25,369	$ 797,265

	Common Stock						
In thousands	Shares	Amount	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Itron, Inc. Shareholders' Equity	Noncontrolling Interests	Total Equity
Balances at January 1, 2019	39,498	$ 1,334,364	$ (196,305)	$ (425,396)	$ 712,663	$ 21,385	$ 734,048
Net income (loss)				(1,907)	(1,907)	1,758	(149)
Other comprehensive income (loss), net of tax			(1,780)		(1,780)		(1,780)
Distributions to noncontrolling interests						(517)	(517)
Net stock issues and repurchases	360	1,195			1,195		1,195
Stock-based compensation expense		7,048			7,048		7,048
Stock repurchased	(165)	(7,814)			(7,814)		(7,814)
Balances at March 31, 2019	39,693	1,334,793	(198,085)	(427,303)	709,405	22,626	732,031
Net income				19,446	19,446	671	20,117
Other comprehensive income (loss), net of tax			3,736		3,736		3,736
Net stock issues and repurchases	66	1,481			1,481		1,481
Stock-based compensation expense		6,420			6,420		6,420
Stock repurchased	(364)	(17,186)			(17,186)		(17,186)
Balances at June 30, 2019	39,395	1,325,508	(194,349)	(407,857)	723,302	23,297	746,599
Net Income				16,847	16,847	1,330	18,177
Other comprehensive income (loss), net of tax			(12,705)		(12,705)		(12,705)
Net stock issues and repurchases	138	2,722			2,722		2,722
Stock-based compensation expense		7,123			7,123		7,123
Balances at September 30, 2019	39,533	$ 1,335,353	$ (207,054)	$ (391,010)	$ 737,289	$ 24,627	$ 761,916

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

ITRON, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

In thousands	Nine Months Ended September 30, 2020	2019
Operating activities		
Net income (loss)	$ (78,383)	$ 38,145
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation and amortization	72,306	85,691
Non-cash operating lease expense	15,252	13,847
Stock-based compensation	20,638	21,064
Amortization of prepaid debt fees	3,029	3,686
Deferred taxes, net	(9,439)	4,990
Loss on sale of business	57,295	—
Restructuring, non-cash	6,518	(2,147)
Other adjustments, net	3,856	(6,121)
Changes in operating assets and liabilities		
Accounts receivable	82,087	(39,385)
Inventories	8,978	(15,762)
Other current assets	(12,862)	(10,494)
Other long-term assets	(2,547)	7,945
Accounts payable, other current liabilities, and taxes payable	(82,775)	(4,063)
Wages and benefits payable	(28,446)	30,220
Unearned revenue	15,098	6,746
Warranty	(10,894)	(5,506)
Other operating, net	10,860	(756)
Net cash provided by operating activities	70,571	128,100
Investing activities		
Net payments related to the sale of business	(748)	—
Acquisitions of property, plant, and equipment	(36,297)	(44,570)
Other investing, net	3,573	9,977
Net cash used in investing activities	(33,472)	(34,593)
Financing activities		
Proceeds from borrowings	400,000	50,000
Payments on debt	—	(100,313)
Issuance of common stock	5,059	7,117
Repurchase of common stock	—	(25,000)
Prepaid debt fees	(184)	(175)
Other financing, net	(2,285)	(5,221)
Net cash provided by (used in) financing activities	402,590	(73,592)
Effect of foreign exchange rate changes on cash, cash equivalents, and restricted cash	(3,426)	(543)
Increase in cash, cash equivalents, and restricted cash	436,263	19,372
Cash, cash equivalents, and restricted cash at beginning of period	149,904	122,328
Cash, cash equivalents, and restricted cash at end of period	$ 586,167	$ 141,700
Supplemental disclosure of cash flow information:		
Cash paid (received) during the period for:		
Income taxes, net	$ (349)	$ 8,842
Interest	34,327	39,523

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

ITRON, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
September 30, 2020
(UNAUDITED)

In this Quarterly Report on Form 10-Q, the terms "we," "us," "our," "Itron," and the "Company" refer to Itron, Inc. and its subsidiaries.

Note 1: Summary of Significant Accounting Policies

Financial Statement Preparation

The consolidated financial statements presented in this Quarterly Report on Form 10-Q are unaudited and reflect entries necessary for the fair presentation of the Consolidated Statements of Operations and the Consolidated Statements of Comprehensive Income (Loss) for the three and nine months ended September 30, 2020 and 2019, Consolidated Statements of Equity for the three months ended September 30, 2020 and 2019, June 30, 2020 and 2019, and March 31, 2020 and 2019, the Consolidated Statements of Cash Flows for the nine months ended September 30, 2020 and 2019, and the Consolidated Balance Sheets as of September 30, 2020 and December 31, 2019, of Itron, Inc. and its subsidiaries. All entries required for the fair presentation of the financial statements are of a normal recurring nature, except as disclosed. The results of operations for the three and nine months ended September 30, 2020 are not necessarily indicative of the results expected for the full year or for any other period.

Certain information and notes normally included in financial statements prepared in accordance with U.S. generally accepted accounting principles (GAAP) have been partially or completely omitted pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (SEC) regarding interim results. These consolidated financial statements should be read in conjunction with the consolidated financial statements and the notes thereto for the fiscal year ended December 31, 2019 filed with the SEC in our Annual Report on Form 10-K on February 27, 2020 (2019 Annual Report). There have been no significant changes in financial statement preparation or significant accounting policies since December 31, 2019.

Risks and Uncertainties

The COVID-19 pandemic has had global economic impacts including disrupting global supply chains and creating market volatility. The extent of the recent pandemic and its ongoing impact on our operations is volatile, but is being monitored closely by our management. We expect that certain of our customers' projects and deployments may shift to 2021. At this time, we have not identified any significant decrease in long-term customer demand for our products and services. Nonetheless, a prolonged pandemic could adversely impact the efficiency and effectiveness of our organization, further impact our global supply chain network, result in delays or decreases in customer collections, reduce demand for our products and services, and inhibit our sales efforts, any of which could further materially impact our revenues, results of operations, cash flows and financial condition.

Restricted Cash and Cash Equivalents

Cash and cash equivalents that are contractually restricted from operating use are classified as restricted cash and cash equivalents.

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the Consolidated Balance Sheets that sum to the total of the same such amounts shown in the Consolidated Statements of Cash Flows:

In thousands	September 30, 2020	December 31, 2019	September 30, 2019
Cash and cash equivalents	$ 586,167	$ 149,904	$ 140,938
Current restricted cash included in other current assets	—	—	—
Long-term restricted cash	—	—	762
Total cash, cash equivalents, and restricted cash	$ 586,167	$ 149,904	$ 141,700

Accounts Receivable, net

Accounts receivable are recognized for invoices issued to customers in accordance with our contractual arrangements. Interest and late payment fees are minimal. Unbilled receivables are recognized when revenues are recognized upon product shipment or service delivery and invoicing occurs at a later date. We recognize an allowance for doubtful accounts representing our estimate of the expected losses in accounts receivable at the date of the balance sheet based on our historical experience of bad debts, our specific review of outstanding receivables, and our review of current and expected economic conditions. Accounts receivable are written-off against the allowance when we believe an account, or a portion thereof, is no longer collectible.

Recently Adopted Accounting Standards

In June 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments.* Subsequent to 2016-13 the FASB also issued codification improvements and transition relief in ASU 2019-04, ASU 2019-05, ASU 2019-11, ASU 2020-02, and ASU 2020-03, hereafter collectively referred to as Accounting Standards Codification (ASC) 326. ASC 326 replaces the incurred loss impairment methodology in previous GAAP with a methodology based on expected credit losses, which results in losses being recognized earlier. The estimate of expected credit losses uses a broader range of reasonable and supportable information. We adopted ASC 326 on January 1, 2020, and the impacts on our consolidated financial position, results of operations, and cash flows were immaterial.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement*, which amended the disclosure requirements under ASC 820. This update clarifies and unifies the disclosure of Level 3 fair value instruments. We adopted this standard on January 1, 2020, and it did not materially impact our consolidated financial statements.

In August 2018, the FASB issued ASU 2018-14, *Compensation—Retirement Benefits—Defined Benefit Plans—General (Subtopic 715-20): Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans,* which amends the disclosure requirements under ASC 715-20. This update clarifies annual disclosures for Defined Benefit Plans. We adopted this standard on January 1, 2020, and it did not materially impact our consolidated financial statements.

Recent Accounting Standards Not Yet Adopted

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which modifies certain provisions of ASC 740, in an effort to reduce the complexity of accounting for income taxes. ASU 2019-12 is effective for us beginning with our interim financial reports for the first quarter of 2021. We are currently evaluating the effects and do not believe this standard will have a material impact on our consolidated financial position, results of operations, or cash flows.

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,* which provides optional expedients and exceptions for applying GAAP to contracts, hedging relationships, and other transactions affected by reference rate reform. ASU 2020-04 applies to contracts that reference LIBOR or another reference rate expected to be terminated because of reference rate reform. An entity may elect certain optional expedients for hedging relationships that exist as of December 31, 2022, and maintain those optional expedients through the end of the hedging relationship. ASU 2020-04 can be adopted as of March 12, 2020. We do not currently have any contracts that have been changed to a new reference rate, but we will continue to evaluate our contracts and the effects of this standard on our consolidated financial position, results of operations, and cash flows prior to adoption.

Note 2: Earnings Per Share

The following table sets forth the computation of basic and diluted earnings (loss) per share (EPS):

	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands, except per share data	**2020**	**2019**	**2020**	**2019**
Net income (loss) available to common shareholders	$ (25,357)	$ 16,847	$ (79,475)	$ 34,386
Weighted average common shares outstanding - Basic	40,337	39,478	40,199	39,508
Dilutive effect of stock-based awards	—	425	—	376
Weighted average common shares outstanding - Diluted	40,337	39,903	40,199	39,884
Net income (loss) per common share - Basic	$ (0.63)	$ 0.43	$ (1.98)	$ 0.87
Net income (loss) per common share - Diluted	$ (0.63)	$ 0.42	$ (1.98)	$ 0.86

Stock-based Awards

For stock-based awards, the dilutive effect is calculated using the treasury stock method. Under this method, the dilutive effect is computed as if the awards were exercised at the beginning of the period (or at time of issuance, if later) and assumes the related proceeds were used to repurchase our common stock at the average market price during the period. Related proceeds include the amount the employee must pay upon exercise and the future compensation cost associated with the stock award. Approximately 0.8 million stock-based awards were excluded from the calculation of diluted EPS for the three and nine months ended September 30, 2020 because they were anti-dilutive. Approximately 0.2 million and 0.4 million stock-based awards were excluded from the calculation of diluted EPS for the three and nine months ended September 30, 2019 because they were anti-dilutive. These stock-based awards could be dilutive in future periods.

Note 3: Certain Balance Sheet Components

A summary of accounts receivable from contracts with customers is as follows:

Accounts receivable, net *In thousands*	September 30, 2020	December 31, 2019
Trade receivables (net of allowance of $1,846 and $3,064)	$ 314,183	$ 415,887
Unbilled receivables	72,737	57,038
Total accounts receivable, net	$ 386,920	$ 472,925

Allowance for doubtful accounts activity	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands	2020	2019	2020	2019
Beginning balance	$ 2,102	$ 4,360	$ 3,064	$ 6,331
Provision for (release of) doubtful accounts, net	(21)	(1)	318	(1,739)
Accounts written-off	(278)	(468)	(1,489)	(740)
Effect of change in exchange rates	43	(105)	(47)	(66)
Ending balance	$ 1,846	$ 3,786	$ 1,846	$ 3,786

Inventories *In thousands*	September 30, 2020	December 31, 2019
Raw materials	$ 124,662	$ 120,861
Work in process	9,016	11,105
Finished goods	71,500	95,930
Total inventories	$ 205,178	$ 227,896

Property, plant, and equipment, net *In thousands*	September 30, 2020	December 31, 2019
Machinery and equipment	$ 306,367	$ 323,003
Computers and software	113,639	109,924
Buildings, furniture, and improvements	151,795	149,471
Land	13,771	14,988
Construction in progress, including purchased equipment	33,661	54,490
Total cost	619,233	651,876
Accumulated depreciation	(413,303)	(418,648)
Property, plant, and equipment, net	$ 205,930	$ 233,228

Depreciation expense	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands	2020	2019	2020	2019
Depreciation expense	$ 12,893	$ 12,528	$ 38,818	$ 37,506

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Note 4: Intangible Assets and Liabilities

The gross carrying amount and accumulated amortization (accretion) of our intangible assets and liabilities, other than goodwill, were as follows:

	September 30, 2020			December 31, 2019		
In thousands	Gross	Accumulated (Amortization) Accretion	Net	Gross	Accumulated (Amortization) Accretion	Net
Intangible Assets						
Core-developed technology	$ 509,222	$ (476,689)	$ 32,533	$ 507,669	$ (458,109)	$ 49,560
Customer contracts and relationships	372,539	(264,075)	108,464	381,288	(251,509)	129,779
Trademarks and trade names	77,864	(74,485)	3,379	78,837	(73,732)	5,105
Other	12,023	(11,511)	512	12,020	(11,367)	653
Total intangible assets	$ 971,648	$ (826,760)	$ 144,888	$ 979,814	$ (794,717)	$ 185,097
Intangible Liabilities						
Customer contracts and relationships	$ (23,900)	$ 19,472	$ (4,428)	$ (23,900)	$ 13,450	$ (10,450)

A summary of intangible assets and liabilities activity is as follows:

	Nine Months Ended September 30,	
In thousands	2020	2019
Intangible Assets, gross beginning balance	$ 979,814	$ 981,160
Intangibles disposed in sale of business	(18,140)	—
Effect of change in exchange rates	9,974	(15,574)
Intangible Assets, gross ending balance	$ 971,648	$ 965,586
Intangible Liabilities, gross beginning balance	$ (23,900)	$ (23,900)
Effect of change in exchange rates	—	—
Intangible Liabilities, gross ending balance	$ (23,900)	$ (23,900)

On January 5, 2018, we completed our acquisition of Silver Spring Networks, Inc. (SSNI) and acquired intangible assets including in-process research and development (IPR&D), which were completed during 2019 and are now included within core-developed technology. Assumed intangible liabilities reflect the present value of the projected cash outflows for an existing contract where remaining costs are expected to exceed projected revenues.

The disposal of intangible assets was related to the sale of our Latin America business. The net book value of these assets was $0.8 million at the disposal date. Refer to "Note 17: Sale of Business" for additional information on the transaction.

Estimated future annual amortization (accretion) is as follows:

Year Ending December 31,	Amortization	Accretion	Estimated Annual Amortization, net
In thousands			
2020 (amount remaining at September 30, 2020)	$ 13,252	$ (2,006)	$ 11,246
2021	37,757	(1,963)	35,794
2022	27,368	(459)	26,909
2023	19,778	—	19,778
2024	15,605	—	15,605
Thereafter	31,128	—	31,128
Total intangible assets subject to amortization (accretion)	$ 144,888	$ (4,428)	$ 140,460

Note 5: Goodwill

The following table reflects changes in the carrying amount of goodwill for the nine months ended September 30, 2020:

In thousands	Device Solutions	Networked Solutions	Outcomes	Total Company
Goodwill balance at January 1, 2020	$ 54,930	$ 908,088	$ 140,889	$ 1,103,907
Goodwill allocated to business sold	(3,000)	—	—	(3,000)
Effect of change in exchange rates	574	11,277	1,753	13,604
Goodwill balance at September 30, 2020	$ 52,504	$ 919,365	$ 142,642	$ 1,114,511

We recognized a $3.0 million reduction in Device Solutions goodwill as part of our loss on sale of business. Refer to "Note 17: Sale of Business" for additional information on the transaction.

We test goodwill for impairment each year as of October 1, or more frequently should a significant impairment indicator occur. As part of the impairment test, we may elect to perform an assessment of qualitative factors. If this qualitative assessment indicates that it is more likely than not that the fair value of a reporting unit, including goodwill, is less than its carrying amount, or if we elect to bypass the qualitative assessment, we would then proceed with the impairment test. The impairment test involves comparing the fair values of the reporting units to their carrying amounts. If the carrying amount of a reporting unit exceeds its fair value, we first evaluate the long-lived assets within the reporting unit for impairment and then recognize a goodwill impairment loss in an amount equal to any excess.

Determining the fair value of a reporting unit is judgmental in nature and involves the use of significant estimates and assumptions. We forecast discounted future cash flows at the reporting unit level using risk-adjusted discount rates and estimated future revenues and operating costs, which take into consideration factors such as existing backlog, expected future orders, supplier contracts, and expectations of competitive, business and economic environments. We also identify similar publicly traded companies and develop a correlation, referred to as a multiple, to apply to the operating results of the reporting units. These combined fair values are then reconciled to the aggregate market value of our common stock on the date of valuation, while considering a reasonable control premium.

Changes in market demand, fluctuations in the markets in which we operate, the volatility and decline in the worldwide equity markets, and a decline in our market capitalization could unfavorably impact the remaining carrying value of our goodwill, which could have a significant effect on our current and future results of operations and financial position. Due to our updated long-term forecast for the Device Solutions reporting unit, we completed an interim quantitative goodwill impairment test during the third quarter of 2020. As a result of the valuation of this reporting unit, we determined there was no impairment to be recognized.

Note 6: Debt

The components of our borrowings were as follows:

In thousands	September 30, 2020	December 31, 2019
Credit facility		
USD denominated term loan	$ 550,156	$ 550,156
Multicurrency revolving line of credit	400,000	—
Senior notes	400,000	400,000
Total debt	1,350,156	950,156
Less: current portion of debt	21,406	—
Less: unamortized prepaid debt fees - term loan	3,017	3,661
Less: unamortized prepaid debt fees - senior notes	12,274	14,013
Long-term debt, net	$ 1,313,459	$ 932,482

Credit Facility

On October 18, 2019, we amended our credit facility that was initially entered on January 5, 2018 (together with the amendment, the "2018 credit facility"). The 2018 credit facility provides for committed credit facilities in the amount of $1.2 billion U.S. dollars. The 2018 credit facility consists of a $650 million U.S. dollar term loan (the term loan) and a multicurrency revolving line of credit (the revolver) with a principal amount of up to $500 million. The revolver also contains a

$300 million standby letter of credit sub-facility and a $50 million swingline sub-facility. The October 18, 2019 amendment extended the maturity date to October 18, 2024 and re-amortized the term loan based on the new balance as of the amendment date. The amendment also modified the required interest payments and made it based on total net leverage instead of total leverage. Through the third quarter of 2020, amounts not borrowed under the revolver were subject to a commitment fee, which was paid in arrears on the last day of each fiscal quarter, ranging from 0.15% to 0.25% and drawn amounts were subject to a margin ranging from 1.00% to 1.75%.

On October 19, 2020, we completed a second amendment to our 2018 credit facility. This amendment adjusts the maximum total net leverage ratio thresholds for the period beginning with the fourth quarter of 2020 through the fourth quarter of 2021 to allow for increased operational flexibility. The maximum leverage ratio is increased to 4.75:1 for the fourth quarter of 2020 and the first quarter of 2021 and 4.50:1 for the second quarter through the fourth quarter of 2021. An additional level of pricing was added to the existing pricing grid and is effective throughout the remaining term of the 2018 credit facility. Beginning with the fourth quarter of 2020, the commitment fee ranges from 0.15% to 0.30% and drawn amounts are subject to a margin ranging from 1.00% to 2.00%. Debt fees of approximately $1.4 million were incurred for the amendment, as well as other legal and advisory fees. Both the term loan and the revolver can be repaid without penalty. Amounts repaid on the term loan may not be reborrowed, and amounts borrowed under the revolver may be repaid and reborrowed until the revolver's maturity, at which time all outstanding loans together with all accrued and unpaid interest must be repaid.

The 2018 credit facility permits us and certain of our foreign subsidiaries to borrow in U.S. dollars, euros, British pounds, or, with lender approval, other currencies readily convertible into U.S. dollars. All obligations under the 2018 credit facility are guaranteed by Itron, Inc. and material U.S. domestic subsidiaries and are secured by a pledge of substantially all of the assets of Itron, Inc. and material U.S. domestic subsidiaries. This includes a pledge of 100% of the capital stock of material U.S. domestic subsidiaries and up to 66% of the voting stock (100% of the non-voting stock) of first-tier foreign subsidiaries. In addition, the obligations of any foreign subsidiary who is a foreign borrower, as defined by the 2018 credit facility, are guaranteed by the foreign subsidiary and by its direct and indirect foreign parents. The 2018 credit facility includes debt covenants, which contain certain financial thresholds and place certain restrictions on the incurrence of debt, investments, and the issuance of dividends. We were in compliance with the debt covenants under the 2018 credit facility at September 30, 2020.

Under the 2018 credit facility, we elect applicable market interest rates for both the term loan and any outstanding revolving loans. We also pay an applicable margin, which is based on our total net leverage ratio as defined in the credit agreement. The applicable rates per annum may be based on either: (1) the LIBOR rate or EURIBOR rate (subject to a floor of 0%), plus an applicable margin, or (2) the Alternate Base Rate, plus an applicable margin. The Alternate Base Rate election is equal to the greatest of three rates: (i) the prime rate, (ii) the Federal Reserve effective rate plus 0.50%, or (iii) one-month LIBOR plus 1.00%. At September 30, 2020, the interest rate for both the term loan and revolver was 1.65%, which includes the LIBOR rate plus a margin of 1.50%.

In March 2020, we drew $400 million in U.S. dollars under the revolving line of credit within the 2018 credit facility to increase our cash position and preserve future financial flexibility. At September 30, 2020, $400 million was outstanding under the revolver, and $66.8 million was utilized by outstanding standby letters of credit, resulting in $33.2 million available for additional borrowings or standby letters of credit. At September 30, 2020, no amounts were outstanding under the swingline sub-facility. Subsequent to September 30, 2020, we repaid $100 million on the revolving line of credit.

Senior Notes

In December 2017 and January 2018, we issued $300 million and $100 million of aggregate principal amount of 5.00% senior notes maturing January 15, 2026 (Senior Notes). The proceeds were used to refinance existing indebtedness related to the acquisition of SSNI, pay related fees and expenses, and for general corporate purposes. Interest on the Senior Notes is payable semi-annually in arrears on January 15 and July 15. The Senior Notes are fully and unconditionally guaranteed, jointly and severally, on a senior unsecured basis by each of our subsidiaries that guarantee the senior credit facilities.

Prior to maturity, we may redeem some or all of the Senior Notes, together with accrued and unpaid interest, if any, plus a "make-whole" premium. On or after January 15, 2021, we may redeem some or all of the Senior Notes at any time at declining redemption prices equal to 102.50% beginning on January 15, 2021, 101.25% beginning on January 15, 2022 and 100.00% beginning on January 15, 2023 and thereafter to the applicable redemption date. In addition, before January 15, 2021, and subject to certain conditions, we may redeem up to 35% of the aggregate principal amount of Senior Notes with the net proceeds of certain equity offerings at 105.00% thereof to the date of redemption; provided that (i) at least 65% of the aggregate principal amount of Senior Notes remains outstanding after such redemption and (ii) the redemption occurs within 60 days of the closing of any such equity offering.

Debt Maturities

The amount of required minimum principal payments on our long-term debt in aggregate over the next five years is as follows:

Year Ending December 31,	Minimum Payments
In thousands	
2020 (amount remaining at September 30, 2020)	$ —
2021	32,422
2022	44,063
2023	44,063
2024	829,608
Thereafter	400,000
Total minimum payments on debt	$ 1,350,156

Note 7: Derivative Financial Instruments

As part of our risk management strategy, we use derivative instruments to hedge certain foreign currency and interest rate exposures. Refer to "Note 13: Shareholders' Equity" and "Note 14: Fair Values of Financial Instruments" for additional disclosures on our derivative instruments.

The fair values of our derivative instruments are determined using the income approach and significant other observable inputs (and are classified as "Level 2" in the fair value hierarchy). We have used observable market inputs based on the type of derivative and the nature of the underlying instrument. The key inputs include interest rate yield curves (swap rates and futures) and foreign exchange spot and forward rates, all of which are available in an active market. We have utilized the mid-market pricing convention for these inputs. We include, as a discount to the derivative asset, the effect of our counterparty credit risk based on current published credit default swap rates when the net fair value of our derivative instruments is in a net asset position. We consider our own nonperformance risk when the net fair value of our derivative instruments is in a net liability position by discounting our derivative liabilities to reflect the potential credit risk to our counterparty through applying a current market indicative credit spread to all cash flows.

The fair values of our derivative instruments were as follows:

		Fair Value	
Derivative Assets	**Balance Sheet Location**	**September 30, 2020**	**December 31, 2019**
Derivatives designated as hedging instruments under ASC 815-20		*In thousands*	
Interest rate swap contract	Other current assets	$ —	$ 174
Interest rate cap contracts	Other current assets	—	1
Cross currency swap contract	Other current assets	1,726	1,156
Cross currency swap contract	Other long-term assets	—	2,870
Derivatives not designated as hedging instruments under ASC 815-20			
Foreign exchange forward contracts	Other current assets	291	96
Total asset derivatives		$ 2,017	$ 4,297
Derivative Liabilities			
Derivatives designated as hedging instruments under ASC 815-20			
Interest rate swap contracts	Other current liabilities	$ 1,003	$ —
Interest rate swap contracts	Other long-term obligations	1,174	—
Derivatives not designated as hedging instruments under ASC 815-20			
Foreign exchange forward contracts	Other current liabilities	365	162
Total liability derivatives		$ 2,542	$ 162

The changes in accumulated other comprehensive income (loss) (AOCI), net of tax, for our derivative and nonderivative hedging instruments designated as hedging instruments, net of tax, were as follows:

In thousands	2020	2019
Net unrealized loss on hedging instruments at January 1,	$ (15,103)	$ (13,179)
Unrealized gain (loss) on hedging instruments	(4,727)	4,995
Realized (gains) losses reclassified into net income (loss)	2,570	(5,799)
Net unrealized loss on hedging instruments at September 30,	$ (17,260)	$ (13,983)

Reclassification of amounts related to hedging instruments are included in interest expense in the Consolidated Statements of Operations for the periods ended September 30, 2020 and 2019. Included in the net unrealized gain (loss) on hedging instruments at September 30, 2020 and 2019 is a loss of $14.4 million, net of tax, related to our nonderivative net investment hedge, which terminated in 2011. This loss on our net investment hedge will remain in AOCI until earnings are impacted by a sale or liquidation of the associated foreign operation.

A summary of the effect of netting arrangements on our financial position related to the offsetting of our recognized derivative assets and liabilities under master netting arrangements or similar agreements is as follows:

Offsetting of Derivative Assets		Gross Amounts Not Offset in the Consolidated Balance Sheets		
In thousands	Gross Amounts of Recognized Assets Presented in the Consolidated Balance Sheets	Derivative Financial Instruments	Cash Collateral Received	Net Amount
September 30, 2020	$ 2,017	$ (291)	$ —	$ 1,726
December 31, 2019	4,297	(56)	—	4,241

Offsetting of Derivative Liabilities		Gross Amounts Not Offset in the Consolidated Balance Sheets		
In thousands	Gross Amounts of Recognized Liabilities Presented in the Consolidated Balance Sheets	Derivative Financial Instruments	Cash Collateral Pledged	Net Amount
September 30, 2020	$ 2,542	$ (291)	$ —	$ 2,251
December 31, 2019	162	(56)	—	106

Our derivative assets and liabilities subject to netting arrangements consist of foreign exchange forwards and options and interest rate contracts with four counterparties at September 30, 2020 and five counterparties at December 31, 2019. No derivative asset or liability balance with any of our counterparties was individually significant at September 30, 2020 or December 31, 2019. Our derivative contracts with each of these counterparties exist under agreements that provide for the net settlement of all contracts through a single payment in a single currency in the event of default. We have no pledges of cash collateral against our obligations, and we have not received pledges of cash collateral from our counterparties under the associated derivative contracts.

Cash Flow Hedges

As a result of our floating rate debt, we are exposed to variability in our cash flows from changes in the applicable interest rate index. We enter into interest rate caps and swaps to reduce the variability of cash flows from increases in the LIBOR based borrowing rates on our floating rate credit facility. These instruments do not protect us from changes to the applicable margin under our credit facility. At September 30, 2020, our LIBOR-based debt balance was $950.2 million.

In October 2015, we entered into one interest rate swap, which was effective August 31, 2016 and expired on June 23, 2020, to convert $214 million of our LIBOR-based debt from a floating LIBOR interest rate to a fixed interest rate of 1.42% (excluding the applicable margin on the debt). The notional balance amortized to maturity at the same rate as required minimum payments on our term loan. The cash flow hedge was expected to be highly effective in achieving offsetting cash flows attributable to the hedged risk through the term of the hedge. Consequently, effective changes in the fair value of the interest rate swap were recorded as a component of other comprehensive income (loss) (OCI) and recognized in earnings when the hedged item affected earnings. The amounts paid or received on the hedge were recognized as adjustment to interest expense.

In March 2020, we entered into an interest rate swap, which is effective from June 30, 2020 to June 30, 2023, and converts $240 million of our LIBOR-based debt from a floating LIBOR interest rate to a fixed interest rate of 0.617% (excluding the applicable margin). The notional balance will amortize to maturity at the same rate of originally required amortizations on our term loan. Changes in the fair value of the interest rate swap are recognized as a component of OCI and recognized in earnings when the hedged item affects earnings. The amounts paid or received on the hedge are recognized as adjustment to interest expense along with the earnings effect of the hedged item. The amount of net losses expected to be reclassified into earnings in the next 12 months is $1.0 million.

In November 2015, we entered into three interest rate cap contracts with a total notional amount of $100 million at a cost of $1.7 million. The interest rate cap contracts expired on June 23, 2020 and were entered into in order to limit our interest rate exposure on $100 million of our variable LIBOR based debt up to 2.00%. The interest rate cap contracts did not include the effect of the applicable margin. Changes in the fair value of these instruments were recognized as a component of OCI and recognized in earnings when the hedged item affected earnings. The amounts received on the hedge were recognized as an adjustment to interest expense along with the earnings effect of the hedged item.

In April 2018, we entered into one cross-currency swap, which converts $56.0 million of floating LIBOR-based U.S. dollar denominated debt into 1.38% fixed rate euro denominated debt. This cross-currency swap matures on April 30, 2021 and mitigates the risk associated with fluctuations in currency rates impacting cash flows related to U.S. dollar denominated debt in a euro functional currency entity. Changes in the fair value of the cross-currency swap are recognized as a component of OCI and are recognized in earnings when the hedged item affects earnings. The amounts paid or received on the hedge are recognized as an adjustment to interest expense along with the earnings effect of the hedged item. The amount of net gains expected to be reclassified into earnings in the next 12 months is $1.7 million.

As a result of our forecasted inventory purchases in a non-functional currency, we are exposed to foreign exchange risk. We hedge portions of these purchases. During February 2020, we entered into foreign exchange option contracts for a total notional amount of $96 million at a cost of $1.2 million. The contracts matured ratably through the year with final maturity in October 2020. Changes in the fair value of the option contracts were recognized as a component of OCI and were recognized in product cost of revenues when the hedged item affected earnings.

The before-tax effects of our accounting for derivative instruments designated as hedges on AOCI were as follows:

Derivatives in ASC 815-20 Cash Flow Hedging Relationships	**Amount of Gain (Loss) Recognized in OCI on Derivative**		**Gain (Loss) Reclassified from AOCI into Income**		
			Location	**Amount**	
In thousands	**2020**	**2019**		**2020**	**2019**
Three Months Ended September 30,					
Interest rate swap contracts	$ (302)	$ 13	Interest expense	$ (274)	$ 359
Interest rate cap contracts	—	356	Interest expense	—	252
Foreign exchange options	(252)	1,011	Product cost of revenues	(450)	289
Cross currency swap contract	(2,326)	2,703	Interest expense	88	387
Cross currency swap contract	—	—	Other income/(expense), net	(2,242)	2,168
Nine Months Ended September 30,					
Interest rate swap contract	$ (2,818)	$ (987)	Interest expense	$ (467)	$ 1,278
Interest rate cap contracts	782	646	Interest expense	392	849
Foreign exchange options	(1,221)	1,229	Product cost of revenues	(612)	451
Cross currency swap contract	(1,969)	4,126	Interest expense	537	1,297
Cross currency swap contract	—	—	Other income/(expense), net	(2,438)	2,453

Derivatives Not Designated as Hedging Relationships

We are also exposed to foreign exchange risk when we enter into non-functional currency transactions, both intercompany and third party. At each period-end, non-functional currency monetary assets and liabilities are revalued with the change recognized within other income and expense. We enter into monthly foreign exchange forward contracts, which are not designated for hedge accounting, with the intent to reduce earnings volatility associated with currency exposures. As of September 30, 2020, a total of 43 contracts were offsetting our exposures from the euro, Canadian dollar, Pound Sterling, Brazilian Real, Chinese yuan and various other currencies, with notional amounts ranging from $102,000 to $26.4 million.

The effect of our derivative instruments not designated as hedges on the Consolidated Statements of Operations was as follows:

Derivatives Not Designated as Hedging Instrument under ASC 815-20	Location	Gain (Loss) Recognized on Derivatives in Other Income (Expense)	
In thousands		2020	2019
Three Months Ended September 30,			
Foreign exchange forward contracts	Other income (expense), net	$ (1,646)	$ (329)
Nine Months Ended September 30,			
Foreign exchange forward contracts	Other income (expense), net	$ (1,056)	$ (1,241)

We will continue to monitor and assess our interest rate and foreign exchange risk and may institute additional derivative instruments to manage such risk in the future.

Note 8: Defined Benefit Pension Plans

We sponsor both funded and unfunded defined benefit pension plans offering death and disability, retirement, and special termination benefits for certain of our international employees, primarily in Germany, France, Indonesia, India, and Italy. The defined benefit obligation is calculated annually by using the projected unit credit method. The measurement date for the pension plans was December 31, 2019.

Amounts recognized on the Consolidated Balance Sheets consist of:

In thousands	September 30, 2020	December 31, 2019
Assets		
Plan assets in other long-term assets	$ —	$ 44
Liabilities		
Current portion of pension benefit obligation in wages and benefits payable	3,937	2,885
Long-term portion of pension benefit obligation	103,273	98,712
Pension benefit obligation, net	$ 107,210	$ 101,553

Our asset investment strategy focuses on maintaining a portfolio using primarily insurance funds, which are accounted for as investments and measured at fair value, in order to achieve our long-term investment objectives on a risk adjusted basis. Our general funding policy for these qualified pension plans is to contribute amounts sufficient to satisfy regulatory funding standards of the respective countries for each plan.

Net periodic pension benefit cost for our plans include the following components:

	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands	2020	2019	2020	2019
Service cost	$ 1,007	$ 868	$ 3,000	$ 2,839
Interest cost	434	564	1,364	1,719
Expected return on plan assets	(85)	(151)	(365)	(460)
Amortization of prior service costs	17	16	49	49
Amortization of actuarial net loss	482	332	1,390	1,019
Settlement	286	250	286	250
Net periodic benefit cost	$ 2,141	$ 1,879	$ 5,724	$ 5,416

The components of net periodic benefit cost, other than the service cost component, are included in total other income (expense) on the Consolidated Statements of Operations.

Note 9: Stock-Based Compensation

We grant stock-based compensation awards under the Second Amended and Restated 2010 Stock Incentive Plan (Stock Incentive Plan), including stock options, restricted stock units, phantom stock, and unrestricted stock units. In the Stock Incentive Plan, we have 12,623,538 shares of common stock reserved and authorized for issuance subject to stock splits, dividends, and other similar events, and at September 30, 2020, 5,594,481 shares were available for grant. We issue new shares of common stock upon the exercise of stock options or when vesting conditions on restricted stock units are fully satisfied. These shares are subject to a fungible share provision such that the authorized share reserve is reduced by (i) one share for every one share subject to a stock option or share appreciation right granted under the Plan and (ii) 1.7 shares for every one share of common stock that was subject to an award other than an option or share appreciation right.

We also periodically award phantom stock units, which are settled in cash upon vesting and accounted for as liability-based awards with no impact to the shares available for grant.

In addition, we maintain the Employee Stock Purchase Plan (ESPP), for which 190,736 shares of common stock were available for future issuance at September 30, 2020.

All other forms of stock grants, including unrestricted stock, ESPP, and phantom stock units were not significant for the three and nine months ended September 30, 2020 and 2019.

Stock-Based Compensation Expense

Total stock-based compensation expense and the related tax benefit were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands	2020	2019	2020	2019
Stock options	$ 452	$ 389	$ 1,445	$ 1,413
Restricted stock units	4,399	6,734	18,575	19,178
Unrestricted stock awards	206	158	618	473
Phantom stock units	582	822	2,075	2,265
Total stock-based compensation	$ 5,639	$ 8,103	$ 22,713	$ 23,329
Related tax benefit	$ 1,070	$ 1,443	$ 4,257	$ 4,161

Stock Options

A summary of our stock option activity is as follows:

	Shares	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value	Weighted Average Grant Date Fair Value
	(in thousands)		(years)	(in thousands)	
Outstanding, January 1, 2019	895	$ 47.93	6.2	$ 4,806	
Granted	76	76.55			$ 26.20
Exercised	(117)	40.10		2,745	
Forfeited	(8)	67.38			
Expired	(11)	66.24			
Outstanding, September 30, 2019	835	$ 51.22	5.5	$ 19,190	
Outstanding, January 1, 2020	458	$ 56.38	7.0	$ 12,641	
Granted	80	84.38			$ 26.21
Exercised	(49)	50.90		1,189	
Forfeited	(5)	83.80			
Outstanding, September 30, 2020	484	$ 61.30	7.0	$ 3,816	
Exercisable, September 30, 2020	319	$ 52.68	6.0	$ 3,764	

At September 30, 2020, total unrecognized stock-based compensation expense related to nonvested stock options was $3.0 million, which is expected to be recognized over a weighted average period of approximately 2.0 years.

The weighted average assumptions used to estimate the fair value of stock options granted and the resulting weighted average fair value are as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Expected volatility	41.5 %	31.7 %	32.1 %	31.7 %
Risk-free interest rate	0.3 %	1.7 %	1.3 %	1.7 %
Expected term (years)	5.3	6.1	5.3	6.1

Restricted Stock Units

The following table summarizes restricted stock unit activity:

In thousands, except fair value	Number of Restricted Stock Units	Weighted Average Grant Date Fair Value	Aggregate Intrinsic Value
Outstanding, January 1, 2019	817		
Granted	334	$ 62.04	
Released [1]	(435)		$ 26,852
Forfeited	(53)		
Outstanding, September 30, 2019	663		
Outstanding, January 1, 2020	684	$ 64.38	
Granted	209	83.34	
Released [1]	(338)	65.01	$ 21,947
Forfeited	(23)	69.12	
Outstanding, September 30, 2020	532	71.45	
Vested but not released, September 30, 2020	9		$ 549

[1] Shares released is presented gross of shares netted for employee payroll tax obligations.

At September 30, 2020, total unrecognized compensation expense on restricted stock units was $31.8 million, which is expected to be recognized over a weighted average period of approximately 1.8 years.

The weighted average assumptions used to estimate the fair value of performance-based restricted stock units granted with a service and market condition and the resulting weighted average fair value are as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Expected volatility	52.6 %	33.4 %	38.2 %	31.4 %
Risk-free interest rate	0.2 %	1.8 %	1.5 %	2.5 %
Expected term (years)	2.3	2.5	1.8	1.6
Weighted average fair value	$ 61.45	$ 72.18	$ 93.05	$ 61.25

Note 10: Income Taxes

We determine the interim tax benefit (provision) by applying an estimate of the annual effective tax rate to the year-to-date pretax book income (loss) and adjusting for discrete items during the reporting period, if any. Tax jurisdictions with losses for which tax benefits cannot be realized are excluded.

Our tax rate for the three and nine months ended September 30, 2020 of 32% and 0%, respectively, differed from the federal statutory rate of 21% primarily due to a significant loss recognized in the second quarter for the divestiture of the majority of our Latin American business activities. Refer to "Note 17: Sale of Business" for additional information on the transaction. This loss was recognized for tax as a discrete item in the second quarter and resulted in no tax benefit. A discrete tax benefit was recorded in the third quarter for $10.1 million related to the release of a valuation allowance on U.S. foreign tax credit deferred tax assets. This release was triggered by the carryforward of tax attributes due to the filing of amended tax returns in the third quarter. Other rate drivers include losses in jurisdictions for which no benefit is recognized because of valuation allowances on deferred tax assets, the forecasted mix of earnings in domestic and international jurisdictions, a benefit related to excess stock-based compensation, and uncertain tax positions.

Our tax rate for the three and nine months ended September 30, 2019 of 25% and 35%, respectively, differed from the federal statutory rate of 21% primarily due to losses in jurisdictions for which no benefit is recognized because of valuation allowances on deferred tax assets as well as the forecasted mix of earnings in domestic and international jurisdictions, a benefit related to excess stock-based compensation, and uncertain tax positions.

We classify interest expense and penalties related to unrecognized tax liabilities and interest income on tax overpayments as components of income tax expense. The net interest and penalties expense amounts recognized were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands	2020	2019	2020	2019
Net interest and penalties expense	$ (198)	$ 324	$ 422	$ 583

Accrued interest and penalties recognized were as follows:

In thousands	September 30, 2020	December 31, 2019
Accrued interest	$ 3,324	$ 2,849
Accrued penalties	1,579	1,681

Unrecognized tax benefits related to uncertain tax positions and the amount of unrecognized tax benefits that, if recognized, would affect our effective tax rate were as follows:

In thousands	September 30, 2020	December 31, 2019
Unrecognized tax benefits related to uncertain tax positions	$ 125,743	$ 121,715
The amount of unrecognized tax benefits that, if recognized, would affect our effective tax rate	124,362	120,410

At September 30, 2020, we are under examination by certain tax authorities. We believe we have appropriately accrued for the expected outcome of all tax matters and do not currently anticipate that the ultimate resolution of these examinations will have a material adverse effect on our financial condition, future results of operations, or cash flows.

Based upon the timing and outcome of examinations, litigation, the impact of legislative, regulatory, and judicial developments, and the impact of these items on the statute of limitations, it is reasonably possible that the related unrecognized tax benefits could change from those recognized within the next twelve months. However, at this time, an estimate of the range of reasonably possible adjustments to the balance of unrecognized tax benefits cannot be made.

We file income tax returns in various jurisdictions. The material jurisdictions where we are subject to examination include, among others, the United States, France, Germany, Italy, and the United Kingdom.

On March 27, 2020, the U.S. Federal government passed the Coronavirus Aid, Relief, and Economic Security (CARES) Act to provide economic relief from COVID-19. The CARES Act contains significant business tax provisions, which the Company has evaluated and determined will not have a material impact on the Company's financial statements or related disclosures.

The CARES Act also provides employer payroll tax credits for wages paid to employees who are unable to work during the COVID-19 outbreak and options to defer payroll tax payments. The Company has elected to defer remittances of payroll and other taxes into the future as provided for under the Act, and may assess in subsequent quarters the impact and availability of payroll tax credits from the U.S. and similar programs provided for by foreign governments, as applicable.

Note 11: Commitments and Contingencies

Guarantees and Indemnifications

We are often required to obtain standby letters of credit (LOCs) or bonds in support of our obligations for customer contracts. These standby LOCs or bonds typically provide a guarantee to the customer for our future performance, which usually covers the installation phase of a contract and may, on occasion, cover the operations and maintenance phase of outsourcing contracts.

Our available lines of credit, outstanding standby LOCs, and bonds were as follows:

In thousands	September 30, 2020	December 31, 2019
Credit facility		
Multicurrency revolving line of credit	$ 500,000	$ 500,000
Long-term borrowings	(400,000)	—
Standby LOCs issued and outstanding	(66,775)	(41,072)
Net available for additional borrowings under the multi-currency revolving line of credit	$ 33,225	$ 458,928
Net available for additional standby LOCs under sub-facility	$ 33,225	$ 258,928
Unsecured multicurrency revolving lines of credit with various financial institutions		
Multicurrency revolving lines of credit	$ 103,357	$ 107,206
Standby LOCs issued and outstanding	(24,021)	(25,100)
Short-term borrowings	(559)	(173)
Net available for additional borrowings and LOCs	$ 78,777	$ 81,933
Unsecured surety bonds in force	$ 162,324	$ 136,004

In the event any such standby LOC or bond is called, we would be obligated to reimburse the issuer of the standby LOC or bond; however, as of November 2, 2020, we do not believe that any outstanding LOC or bond will be called.

We generally provide an indemnification related to the infringement of any patent, copyright, trademark, or other intellectual property right on software or equipment within our sales contracts, which indemnifies the customer from and pays the resulting costs, damages, and attorney's fees awarded against a customer with respect to such a claim provided that (a) the customer promptly notifies us in writing of the claim and (b) we have the sole control of the defense and all related settlement negotiations. We may also provide an indemnification to our customers for third-party claims resulting from damages caused by the negligence or willful misconduct of our employees/agents in connection with the performance of certain contracts. The terms of our indemnifications generally do not limit the maximum potential payments. It is not possible to predict the maximum potential amount of future payments under these or similar agreements.

Legal Matters

We are subject to various legal proceedings and claims of which the outcomes are subject to significant uncertainty. Our policy is to assess the likelihood of any adverse judgments or outcomes related to legal matters, as well as ranges of probable losses. A determination of the amount of the liability required, if any, for these contingencies is made after an analysis of each known issue. A liability would be recognized and charged to operating expense when we determine that a loss is probable and the amount can be reasonably estimated. Additionally, we disclose contingencies for which a material loss is reasonably possible, but not probable.

Warranty

A summary of the warranty accrual account activity is as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands	2020	2019	2020	2019
Beginning balance	$ 44,757	$ 57,112	$ 53,242	$ 60,443
New product warranties	785	1,388	2,855	3,645
Other adjustments and expirations, net	1,643	4,603	5,436	12,533
Claims activity	(5,044)	(8,453)	(19,349)	(21,970)
Effect of change in exchange rates	946	(768)	903	(769)
Ending balance	43,087	53,882	43,087	53,882
Less: current portion of warranty	32,118	38,018	32,118	38,018
Long-term warranty	$ 10,969	$ 15,864	$ 10,969	$ 15,864

Total warranty expense is classified within cost of revenues and consists of new product warranties issued, costs related to insurance and supplier recoveries, other changes and adjustments to warranties, and customer claims. Warranty expense was as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands	2020	2019	2020	2019
Total warranty expense	$ 2,428	$ 5,991	$ 8,321	$ 13,957

Note 12: Restructuring

2020 Projects

On September 17, 2020, our Board of Directors approved a restructuring plan (the 2020 Projects). The 2020 Projects include activities that continue our efforts to optimize our global supply chain and manufacturing operations, sales and marketing organizations, and other overhead. These projects are scheduled to be substantially complete by the end of 2022. We estimate pre-tax restructuring charges of $55 million to $65 million, of which approximately $35 million to $45 million will result in cash expenditures, and the remainder relates to non-cash charges. Of the total expected costs, $43.9 million was recognized in the third quarter of 2020. The largest component of expected remaining costs to be recognized is related to a non-cash cumulative translation adjustment charge. Many of the affected employees are represented by unions or works councils, which require consultation, and potential restructuring projects may be subject to regulatory approval, both of which could impact the timing of charges, total expected charges, cost recognized, and planned savings in certain jurisdictions.

The total expected restructuring costs, the restructuring costs recognized, and the remaining expected restructuring costs related to the 2020 Projects were as follows:

In thousands	Total Expected Costs at September 30, 2020	Costs Recognized in Prior Periods	Cost Recognized During the Nine Months Ended September 30, 2020	Expected Remaining Costs to be Recognized at September 30, 2020
Employee severance costs	$ 36,625	$ —	$ 36,625	$ —
Asset impairments & net loss (gain) on sale or disposal	7,240	—	7,240	—
Other restructuring costs	16,508	—	—	16,508
Total	$ 60,373	$ —	$ 43,865	$ 16,508

2018 Projects

On February 22, 2018, our Board of Directors approved a restructuring plan (the 2018 Projects) to continue our efforts to optimize our global supply chain and manufacturing operations, research and development, and sales and marketing organizations. We expect to substantially complete expense recognition on the plan by the end of 2020. Many of the affected employees are represented by unions or works councils, which require consultation, and potential restructuring projects may be subject to regulatory approval, both of which could impact the timing of charges, total expected charges, cost recognized, and planned savings in certain jurisdictions. All prior restructuring plans are substantially complete and are not presented below.

During the three months ended June 30, 2020, we reversed expenses for employee severance costs and asset impairments we will no longer incur as a result of selling our operations in Latin America.

The total expected restructuring costs, the restructuring costs recognized, and the remaining expected restructuring costs related to the 2018 Projects were as follows:

In thousands	Total Expected Costs at September 30, 2020	Costs Recognized in Prior Periods	Cost Recognized During the Nine Months Ended September 30, 2020	Expected Remaining Costs to be Recognized at September 30, 2020
Employee severance costs	$ 67,663	$ 72,133	$ (4,470)	$ —
Asset impairments & net loss (gain) on sale or disposal	3,120	3,842	(722)	—
Other restructuring costs	21,163	11,420	2,858	6,885
Total	$ 91,946	$ 87,395	$ (2,334)	$ 6,885

The following table summarizes the activity within the restructuring related balance sheet accounts for the 2020 Projects and 2018 Projects during the nine months ended September 30, 2020:

In thousands	Accrued Employee Severance	Asset Impairments & Net Loss (Gain) on Sale or Disposal	Other Accrued Costs	Total
Beginning balance, January 1, 2020	$ 53,741	$ —	$ 2,366	$ 56,107
Costs charged to expense	32,155	6,518	2,858	41,531
Cash (payments) receipts	(10,180)	1,880	(2,629)	(10,929)
Net assets disposed and impaired	—	(8,398)	—	(8,398)
Effect of change in exchange rates	1,358	—	12	1,370
Ending balance, September 30, 2020	$ 77,074	$ —	$ 2,607	$ 79,681

Asset impairments are determined at the asset group level. Revenues and net operating income from the activities we have exited or will exit under the restructuring projects are not material to our operating segments or consolidated results.

Other restructuring costs include expenses for employee relocation, professional fees associated with employee severance, and costs to exit the facilities once the operations in those facilities have ceased. Costs associated with restructuring activities are generally presented in the Consolidated Statements of Operations as restructuring, except for certain costs associated with inventory write-downs, which are classified within cost of revenues, and accelerated depreciation expense, which is recognized according to the use of the asset. Restructuring expense is part of the Corporate unallocated segment and is not part of the operating segments.

The current portion of restructuring liabilities was $24.6 million and $18.9 million as of September 30, 2020 and December 31, 2019. The current portion of restructuring liabilities is classified within other current liabilities on the Consolidated Balance Sheets. The long-term portion of restructuring liabilities balances was $55.1 million and $37.2 million as of September 30, 2020 and December 31, 2019. The long-term portion of restructuring liabilities is classified within other long-term obligations on the Consolidated Balance Sheets and includes severance accruals and facility exit costs.

Note 13: Shareholders' Equity

Preferred Stock

We have authorized the issuance of 10 million shares of preferred stock with no par value. In the event of a liquidation, dissolution, or winding up of the affairs of the corporation, whether voluntary or involuntary, the holders of any outstanding preferred stock will be entitled to be paid a preferential amount per share to be determined by the Board of Directors prior to any payment to holders of common stock. There was no preferred stock issued or outstanding at September 30, 2020 or December 31, 2019.

Stock Repurchase Authorization

On March 14, 2019, Itron's Board of Directors authorized the Company to repurchase up to $50 million of our common stock over a 12-month period (the 2019 Stock Repurchase Program). Following the announcement of the program and through

December 31, 2019, we repurchased 529,396 shares at an average share price of $47.22 (including commissions) for a total of $25 million. The program expired on March 13, 2020 and no additional shares were repurchased during 2020.

Accumulated Other Comprehensive Income (Loss)

The changes in the components of AOCI, net of tax, were as follows:

In thousands	Foreign Currency Translation Adjustments	Net Unrealized Gain (Loss) on Derivative Instruments	Net Unrealized Gain (Loss) on Nonderivative Instruments	Pension Benefit Obligation Adjustments	Accumulated Other Comprehensive Income (Loss)
Balances at January 1, 2019	$ (157,489)	$ 1,201	$ (14,380)	$ (25,637)	$ (196,305)
OCI before reclassifications	(13,544)	4,995	—	1,251	(7,298)
Amounts reclassified from AOCI	2,443	(5,799)	—	(95)	(3,451)
Total other comprehensive income (loss)	(11,101)	(804)	—	1,156	(10,749)
Balances at September 30, 2019	$ (168,590)	$ 397	$ (14,380)	$ (24,481)	$ (207,054)
Balances at January 1, 2020	$ (157,999)	$ (723)	$ (14,380)	$ (31,570)	$ (204,672)
OCI before reclassifications	(147)	(4,727)	—	(1,151)	(6,025)
Amounts reclassified from AOCI	52,074	2,570	—	2,040	56,684
Total other comprehensive income (loss)	51,927	(2,157)	—	889	50,659
Balances at September 30, 2020	$ (106,072)	$ (2,880)	$ (14,380)	$ (30,681)	$ (154,013)

The before-tax, income tax (provision) benefit, and net-of-tax amounts related to each component of OCI were as follows:

In thousands	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Before-tax amount				
Foreign currency translation adjustment	$ 15,521	$ (16,501)	$ (387)	$ (13,403)
Foreign currency translation adjustment reclassified to net income on sale of business	(14)	2,443	52,074	2,443
Net unrealized gain (loss) on derivative instruments, designated as cash flow hedges	(2,887)	4,088	(5,228)	4,910
Net hedging (gain) loss reclassified to net income	2,879	(3,453)	2,588	(6,327)
Net unrealized gain (loss) on defined benefit plans	(893)	598	(812)	1,318
Net defined benefit plan (gain) loss reclassified to net income	499	(90)	1,439	(100)
Total other comprehensive income (loss), before tax	$ 15,105	$ (12,915)	$ 49,674	$ (11,159)
Tax (provision) benefit				
Foreign currency translation adjustment	$ (1,533)	$ 156	$ 240	$ (141)
Foreign currency translation adjustment reclassified to net income on sale of business	—	—	—	—
Net unrealized gain (loss) on derivative instruments, designated as cash flow hedges	74	(91)	501	85
Net hedging (gain) loss reclassified to net income	(67)	151	(18)	528
Net unrealized gain (loss) on defined benefit plans	(341)	(10)	(339)	(67)
Net defined benefit plan (gain) loss reclassified to net income	576	4	601	5
Total other comprehensive income (loss) tax benefit	$ (1,291)	$ 210	$ 985	$ 410
Net-of-tax amount				
Foreign currency translation adjustment	$ 13,988	$ (16,345)	$ (147)	$ (13,544)
Foreign currency translation adjustment reclassified to net income on sale of business	(14)	2,443	52,074	2,443
Net unrealized gain (loss) on derivative instruments, designated as cash flow hedges	(2,813)	3,997	(4,727)	4,995
Net hedging (gain) loss reclassified to net income	2,812	(3,302)	2,570	(5,799)
Net unrealized gain (loss) on defined benefit plans	(1,234)	588	(1,151)	1,251
Net defined benefit plan (gain) loss reclassified to net income	1,075	(86)	2,040	(95)
Total other comprehensive income (loss), net of tax	$ 13,814	$ (12,705)	$ 50,659	$ (10,749)

Note 14: Fair Values of Financial Instruments

The fair values at September 30, 2020 and December 31, 2019 do not reflect subsequent changes in the economy, interest rates, tax rates, and other variables that may affect the determination of fair value.

In thousands	September 30, 2020 Carrying Amount	September 30, 2020 Fair Value	December 31, 2019 Carrying Amount	December 31, 2019 Fair Value
Credit facility				
USD denominated term loan	$ 547,139	$ 533,223	$ 546,495	$ 550,135
Multicurrency revolving line of credit	400,000	386,086	—	—
Senior notes	387,726	410,000	385,987	416,500

The following methods and assumptions were used in estimating fair values:

Cash, cash equivalents, and restricted cash: Due to the liquid nature of these instruments, the carrying amount approximates fair value (Level 1).

Credit Facility - term loan and multicurrency revolving line of credit: The term loan and revolver are not traded publicly. The fair values, which are determined based upon a hypothetical market participant, are calculated using a discounted cash flow model with Level 2 inputs, including estimates of incremental borrowing rates for debt with similar terms, maturities, and credit profiles. Refer to "Note 6: Debt" for a further discussion of our debt.

Senior Notes: The Senior Notes are not registered securities nor listed on any securities exchange but may be actively traded by qualified institutional buyers. The fair value is estimated using Level 1 inputs, as it is based on quoted prices for these instruments in active markets.

Derivatives: See "Note 7: Derivative Financial Instruments" for a description of our methods and assumptions in determining the fair value of our derivatives, which were determined using Level 2 inputs. Each derivative asset and liability has a carrying value equal to fair value.

Note 15: Segment Information

We operate under the Itron brand worldwide and manage and report under three operating segments: Device Solutions, Networked Solutions, and Outcomes.

We have three GAAP measures of segment performance: revenues, gross profit (gross margin), and operating income (operating margin). Intersegment revenues are minimal. Certain operating expenses are allocated to the operating segments based upon internally established allocation methodologies. Corporate operating expenses, interest income, interest expense, other income (expense), and the income tax provision (benefit) are neither allocated to the segments, nor are they included in the measure of segment performance. In addition, we allocate only certain production assets and intangible assets to our operating segments. We do not manage the performance of the segments on a balance sheet basis.

Segment Products

Device Solutions – This segment primarily includes hardware products used for measurement, control, or sensing that do not have communications capability embedded for use with our broader Itron systems, i.e., hardware-based products not part of a complete "end-to-end" solution. Examples from the Device Solutions portfolio include: standard endpoints that are shipped without Itron communications, such as our standard gas meters, electricity IEC meters, and water meters, in addition to our heat and allocation products; communicating meters that are not a part of an Itron solution such as Smart Spec meters; and the implementation and installation of non-communicating devices, such as gas regulators.

Networked Solutions – This segment primarily includes a combination of communicating devices (smart meters, modules, endpoints, and sensors), network infrastructure, and associated application software designed and sold as a complete solution for acquiring and transporting robust application-specific data. Networked Solutions combines the majority of the assets from the recently acquired SSNI organization with our legacy Itron networking products and software and the implementation and installation of communicating devices into one operating segment. Examples from the Networked Solutions portfolio include: communicating measurement, control, or sensing endpoints such as our Itron® and OpenWay® Riva meters, Itron traditional ERT® technology, Intelis smart gas or water meters, 500G gas communication modules, 500W water communication modules; GenX networking products, network modules and interface cards; and specific network control and management software applications. The IIoT solutions supported by this segment include automated meter reading (AMR), advanced metering infrastructure (AMI), smart grid and distribution automation (DA), and smart street lighting and smart city solutions.

Outcomes – This segment primarily includes our value-added, enhanced software and services in which we manage, organize, analyze, and interpret data to improve decision making, maximize operational profitability, drive resource efficiency, and deliver results for consumers, utilities, and smart cities. Outcomes places an emphasis on delivering to Itron customers high-value, turn-key, digital experiences by leveraging the footprint of our Device Solutions and Networked Solutions segments. The revenues from these offerings are primarily recurring in nature and would include any direct management of Device Solutions, Networked Solutions, and other products on behalf of our end customers. Examples from the Outcomes portfolio include: our meter data management and analytics offerings; our managed service solutions including network-as-a-service and platform-as-a-service, forecasting software and services; and any consulting-based engagement. Within the Outcomes segment, we also identify new business models, including performance-based contracting, to drive broader portfolio offerings across utilities and cities.

Revenues, gross profit, and operating income associated with our operating segments were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands	2020	2019	2020	2019
Product revenues				
Device Solutions	$ 174,039	$ 211,096	$ 501,157	$ 644,254
Networked Solutions	282,677	330,487	898,465	978,259
Outcomes	13,942	11,314	38,158	41,281
Total Company	$ 470,658	$ 552,897	$ 1,437,780	$ 1,663,794
Service revenues				
Device Solutions	$ 2,089	$ 2,253	$ 6,415	$ 8,573
Networked Solutions	23,982	25,734	73,519	70,305
Outcomes	43,455	43,590	130,479	131,415
Total Company	$ 69,526	$ 71,577	$ 210,413	$ 210,293
Total revenues				
Device Solutions	$ 176,128	$ 213,349	$ 507,572	$ 652,827
Networked Solutions	306,659	356,221	971,984	1,048,564
Outcomes	57,397	54,904	168,637	172,696
Total Company	$ 540,184	$ 624,474	$ 1,648,193	$ 1,874,087
Gross profit				
Device Solutions	$ 20,528	$ 40,945	$ 64,843	$ 122,451
Networked Solutions	102,295	135,406	332,368	388,717
Outcomes	20,428	20,053	56,123	63,713
Total Company	$ 143,251	$ 196,404	$ 453,334	$ 574,881
Operating income (loss)				
Device Solutions	$ 11,017	$ 27,905	$ 28,095	$ 81,717
Networked Solutions	71,404	105,637	237,466	298,994
Outcomes	12,044	10,843	29,468	35,620
Corporate unallocated	(118,445)	(104,946)	(338,026)	(312,511)
Total Company	(23,980)	39,439	(42,997)	103,820
Total other income (expense)	(13,063)	(15,110)	(35,020)	(44,983)
Income (loss) before income taxes	$ (37,043)	$ 24,329	$ (78,017)	$ 58,837

Our corporate unallocated operating loss for the three and nine months ended September 30, 2020 includes a $57.3 million loss from the sale of our Latin American business. Refer to "Note 17: Sale of Business" for additional information on the transaction.

For the three months ended September 30, 2020, no customer represented more than 10% of total company revenue. During the three months ended September 30, 2019, one customer represented 10% of total company revenues. For the nine months ended September 30, 2020 and 2019, one customer represented 11% of total company revenues.

We currently buy a majority of our integrated circuit board assemblies from three suppliers. Management believes that other suppliers could provide similar products, but a change in suppliers, disputes with our suppliers, or unexpected constraints on the suppliers' production capacity could adversely affect operating results.

Revenues by region were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands	2020	2019	2020	2019
United States and Canada	$ 354,841	$ 405,973	$ 1,110,028	$ 1,221,448
Europe, Middle East, and Africa (EMEA)	156,810	157,159	431,593	495,715
Latin America and Asia Pacific[1]	28,533	61,342	106,572	156,924
Total Company	$ 540,184	$ 624,474	$ 1,648,193	$ 1,874,087

[1] On June 25, 2020, Itron closed on the sale of its Latin American operations. We will continue to sell into the region through an exclusive distributor.

Depreciation expense is allocated to the operating segments based upon each segment's use of the assets. All amortization expense is recognized within Corporate unallocated. Depreciation and amortization of intangible assets expense associated with our operating segments was as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands	2020	2019	2020	2019
Device Solutions	$ 5,926	$ 6,373	$ 18,423	$ 19,155
Networked Solutions	4,377	3,077	12,447	9,530
Outcomes	1,327	1,408	4,132	3,995
Corporate unallocated	12,446	17,765	37,304	53,011
Total Company	$ 24,076	$ 28,623	$ 72,306	$ 85,691

Note 16: Revenues

A summary of significant net changes in the contract assets and the contract liabilities balances during the period is as follows:

In thousands	Contract liabilities, less contract assets
Beginning balance, January 1, 2020	$ 88,215
Revenues recognized from beginning contract liability	(82,438)
Increases due to amounts collected or due	252,212
Revenues recognized from current period increases	(145,016)
Other	(5,054)
Ending balance, September 30, 2020	$ 107,919

On January 1, 2020, total contract assets were $50.7 million and total contract liabilities were $138.9 million. On September 30, 2020, total contract assets were $50.4 million and total contract liabilities were $158.3 million. The contract assets primarily relate to contracts that include a retention clause and allocations related to contracts with multiple performance obligations. The contract liabilities primarily relate to deferred revenue, such as extended warranty and maintenance cost.

Transaction price allocated to the remaining performance obligations

Total transaction price allocated to remaining performance obligations represents committed but undelivered products and services for contracts and purchase orders at period end. Twelve-month remaining performance obligations represent the portion of total transaction price allocated to remaining performance obligations that we estimate will be recognized as revenue over the next 12 months. Total transaction price allocated to remaining performance obligations is not a complete measure of our future revenues as we also receive orders where the customer may have legal termination rights but are not likely to terminate.

Total transaction price allocated to remaining performance obligations related to contracts is approximately $1.0 billion for the next twelve months and approximately $1.2 billion for periods longer than 12 months. The total remaining performance obligations consist of product and service components. The service component relates primarily to maintenance agreements for which customers pay a full year's maintenance in advance, and service revenues are generally recognized over the service period. Total transaction price allocated to remaining performance obligations also includes our extended warranty contracts, for which revenue is recognized over the warranty period, and hardware, which is recognized as units are delivered. The estimate of when remaining performance obligations will be recognized requires significant judgment.

Cost to obtain a contract and cost to fulfill a contract with a customer
Cost to obtain a contract and costs to fulfill a contract were capitalized and amortized using a systematic rational approach to align with the transfer of control of underlying contracts with customers. While amounts were capitalized, they are not material.

Disaggregation of revenue
Refer to "Note 15: Segment Information" and the Consolidated Statements of Operations for disclosure regarding the disaggregation of revenue into categories, which depict how revenue and cash flows are affected by economic factors. Specifically, our operating segments and geographical regions as disclosed, and categories for products, which include hardware and software and services, are presented.

Note 17: Sale of Business

Latin America Divestiture
On June 25, 2020, we closed on the sale of five subsidiaries comprising our manufacturing and sales operations in Latin America to buyers led by Instalación Profesional y Tecnologías del Centro S.A. de C.V., a Mexican company doing business as Accell in Brazil (Accell), through the execution of various definitive stock purchase agreements. The sale of these Latin America-based operations is part of our continued strategy to improve profitability and focus on growing our Networked Solutions and Outcomes businesses in Latin America and throughout the world. We retained the intellectual property rights to our products sold in Latin America. As part of the transaction, we entered into an intellectual property license agreement whereby Accell pays a royalty on certain products manufactured by Accell using licensed Company intellectual property. In addition, Accell serves as the exclusive distributor for our Device Solutions, Networked Solutions, and Outcomes products and services offerings in Latin America.

Based on the sales price and the net assets of the five subsidiaries sold, we recognized a total loss of $57.3 million in the second and third quarters of 2020. The loss was primarily due to the recognition of $52.1 million in foreign currency translation losses accumulated since the acquisition of these subsidiaries in 2006 and 2007, and allocated goodwill of $3.0 million. Accell assumed all recognized liabilities, as well as all future liabilities, of the subsidiaries. We have provided no indemnification for any future losses that may be incurred. Following the close of the transaction, the terms of the agreement allow for adjustments to the $21.9 million working capital amount.

Of the total sales price, $2.5 million was received at closing, and the majority of the remaining portion is due by December 31, 2020. Included in the net assets sold was $6.1 million in cash. This resulted in net outflow of cash at closing of $3.6 million. During the quarter ended September 30, 2020, we received $2.9 million of payments for the purchase price evidenced by a promissory note.

The loss on sale of business was calculated as follows:

In thousands		Loss on sale of business
Sales price	$	35,008
Net assets sold (including working capital)		(36,198)
Currency translation adjustment loss		(52,074)
Goodwill allocated		(3,000)
Legal fees		(1,031)
Total loss on sale of business	$	(57,295)

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

The following discussion and analysis should be read in conjunction with the unaudited consolidated financial statements and notes included in this report and with the consolidated financial statements and the notes thereto for the fiscal year ended December 31, 2019 filed with the Securities and Exchange Commission (SEC) in our Annual Report on Form 10-K on February 27, 2020 (2019 Annual Report).

Documents we provide to the SEC are available free of charge under the Investors section of our website at *www.itron.com* as soon as practicable after they are filed with or furnished to the SEC. In addition, these documents are available at the SEC's website (http://*www.sec.gov*).

Certain Forward-Looking Statements

This report contains, and our officers and representatives may from time to time make, "forward-looking statements" within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements are neither historical factors nor assurances of future performance. These statements are based on our expectations about, among others, revenues, operations, financial performance, earnings, liquidity, earnings per share, cash flows and restructuring activities including headcount reductions and other cost savings initiatives. This document reflects our current strategy, plans and expectations and is based on information currently available as of the date of this Quarterly Report on Form 10-Q. When we use words such as "expect," "intend," "anticipate," "believe," "plan," "goal," "seek," "project," "estimate," "future," "strategy," "objective," "may," "likely," "should," "will," "will continue," and similar expressions, including related to future periods, they are intended to identify forward-looking statements. Forward-looking statements rely on a number of assumptions and estimates. Although we believe the estimates and assumptions upon which these forward-looking statements are based are reasonable, any of these estimates or assumptions could prove to be inaccurate and the forward-looking statements based on these estimates and assumptions could be incorrect. Our operations involve risks and uncertainties, many of which are outside our control, and any one of which, or a combination of which, could materially affect our results of operations and whether the forward-looking statements ultimately prove to be correct. Actual results and trends in the future may differ materially from those suggested or implied by the forward-looking statements depending on a variety of factors. Therefore, you should not rely on any of these forward-looking statements. Some of the factors that we believe could affect our results include our ability to execute on our restructuring plan, our ability to achieve estimated cost savings, the rate and timing of customer demand for our products, rescheduling of current customer orders, changes in estimated liabilities for product warranties, adverse impacts of litigation, changes in laws and regulations, our dependence on new product development and intellectual property, future acquisitions, changes in estimates for stock-based and bonus compensation, increasing volatility in foreign exchange rates, international business risks, uncertainties caused by adverse economic conditions, including, without limitation those resulting from extraordinary events or circumstances such as the COVID-19 pandemic and other factors that are more fully described in Item 1A: "Risk Factors" included in our 2019 Annual Report, Part II - Item 1A of this document, and other reports on file with the SEC. We do not undertake any obligation to publicly update or revise any forward-looking statement, whether written or oral.

The impact caused by the ongoing COVID-19 pandemic includes uncertainty as to the duration, spread, severity, and any recurrence of the COVID-19 pandemic, the duration and scope of related government orders and restrictions, impact on overall demand, impact on our customers' businesses and workforce levels, disruptions of our business and operations, including the impact on our employees, limitations on, or closures of, our facilities, or the business and operations of our customers or suppliers. Our estimates and statements regarding the impact of COVID-19 are made in good faith to provide insight to our current and future operating and financial environment and any of these may materially change due to factors outside our control. For more information on risks associated with the COVID-19 pandemic, please see our updated risk in Part II, Item 1A, "Risk Factors" of this document.

Overview

We are a technology and service company, which is a leader in the Industrial Internet of Things (IIoT). We offer solutions that enable utilities and municipalities to safely, securely, and reliably operate their critical infrastructure. Our solutions include the deployment of smart networks, software, services, devices, sensors, and data analytics that allow our customers to manage assets, secure revenue, lower operational costs, improve customer service, improve safety, and enable efficient management of valuable resources. Our comprehensive solutions and data analytics address the unique challenges facing the energy, water, and municipality sectors, including increasing demand on resources, non-technical loss, leak detection, environmental and regulatory compliance, and improved operational reliability.

We operate under the Itron brand worldwide and manage and report under three operating segments: Device Solutions, Networked Solutions, and Outcomes. The product and operating definitions of the three segments are as follows:

Device Solutions – This segment primarily includes hardware products used for measurement, control, or sensing that do not have communications capability embedded for use with our broader Itron systems, i.e., hardware-based products not part of a complete "end-to-end" solution. Examples from the Device Solutions portfolio include: standard endpoints that are shipped without Itron communications, such as our standard gas meters, electricity IEC meters, and water meters, in addition to our heat and allocation products; communicating meters that are not a part of an Itron solution such as Smart Spec meters; and the implementation and installation of non-communicating devices, such as gas regulators.

Networked Solutions – This segment primarily includes a combination of communicating devices (smart meters, modules, endpoints, and sensors), network infrastructure, and associated application software designed and sold as a complete solution for acquiring and transporting robust application-specific data. Networked Solutions combines the majority of the assets from the recently acquired SSNI organization with our legacy Itron networking products and software and the implementation and installation of communicating devices into one operating segment. Examples from the Networked Solutions portfolio include:

communicating measurement, control, or sensing endpoints such as our Itron® and OpenWay® Riva meters, Itron traditional ERT® technology, Intelis smart gas or water meters, 500G gas communication modules, 500W water communication modules; GenX networking products, network modules and interface cards; and specific network control and management software applications. The IIoT solutions supported by this segment include automated meter reading (AMR), advanced metering infrastructure (AMI), smart grid and distribution automation (DA), and smart street lighting and smart city solutions.

Outcomes – This segment primarily includes our value-added, enhanced software and services in which we manage, organize, analyze, and interpret data to improve decision making, maximize operational profitability, drive resource efficiency, and deliver results for consumers, utilities, and smart cities. Outcomes places an emphasis on delivering to Itron customers high-value, turn-key, digital experiences by leveraging the footprint of our Device Solutions and Networked Solutions segments. The revenues from these offerings are primarily recurring in nature and would include any direct management of Device Solutions, Networked Solutions, and other products on behalf of our end customers. Examples from the Outcomes portfolio include: our meter data management and analytics offerings; our managed service solutions including network-as-a-service and platform-as-a-service, forecasting software and services; and any consulting-based engagement. Within the Outcomes segment, we also identify new business models, including performance-based contracting, to drive broader portfolio offerings across utilities and cities.

We have three measures of segment performance: revenues, gross profit (margin), and operating income (margin). Intersegment revenues are minimal. Certain operating expenses are allocated to the operating segments based upon internally established allocation methodologies. Interest income, interest expense, other income (expense), the income tax provision (benefit), and certain corporate operating expenses are neither allocated to the segments nor included in the measures of segment performance.

Non-GAAP Measures

To supplement our consolidated financial statements, which are prepared in accordance with accounting principles generally accepted in the United States (GAAP), we use certain adjusted or non-GAAP financial measures, including non-GAAP operating expense, non-GAAP operating income, non-GAAP net income, non-GAAP diluted earnings per share (EPS), adjusted EBITDA, adjusted EBITDA margin, constant currency, and free cash flow. We provide these non-GAAP financial measures because we believe they provide greater transparency and represent supplemental information used by management in its financial and operational decision making. We exclude certain costs in our non-GAAP financial measures as we believe the net result is a measure of our core business. We believe these measures facilitate operating performance comparisons from period to period by eliminating potential differences caused by the existence and timing of certain expense items that would not otherwise be apparent on a GAAP basis. Non-GAAP performance measures should be considered in addition to, and not as a substitute for, results prepared in accordance with GAAP. We strongly encourage investors and shareholders to review our financial statements and publicly-filed reports in their entirety and not to rely on any single financial measure. Our non-GAAP financial measures may be different from those reported by other companies.

In our discussions of the operating results below, we sometimes refer to the impact of foreign currency exchange rate fluctuations, which are references to the differences between the foreign currency exchange rates we use to convert operating results from local currencies into U.S. dollars for reporting purposes. We also use the term "constant currency", which represents results adjusted to exclude foreign currency exchange rate impacts. We calculate the constant currency change as the difference between the current period results translated using the current period currency exchange rates and the comparable prior period's results restated using current period currency exchange rates. We believe the reconciliations of changes in constant currency provide useful supplementary information to investors in light of fluctuations in foreign currency exchange rates.

Refer to the *Non-GAAP Measures* section below on pages 43-46 for information about these non-GAAP measures and the detailed reconciliation of items that impacted free cash flow, non-GAAP operating expense, non-GAAP operating income, non-GAAP net income, adjusted EBITDA, and non-GAAP diluted EPS in the presented periods.

Total Company Highlights

Highlights and significant developments for the three months ended September 30, 2020 compared with the three months ended September 30, 2019

- Revenues were $540.2 million compared with $624.5 million in 2019, a decrease of $84.3 million, or 13%
- Gross margin was 26.5%, compared with 31.5% in the same period last year
- Operating expenses increased $10.3 million, or 7%, compared with 2019, including $43.9 million of restructuring expense related to the 2020 Projects
- Net loss attributable to Itron, Inc. was $25.4 million compared with net income of $16.8 million in 2019
- GAAP diluted EPS decreased by $1.05 to a diluted loss per share of $0.63 in 2020
- Non-GAAP net income attributable to Itron, Inc. was $24.6 million compared with $41.4 million in 2019
- Non-GAAP diluted EPS was $0.61, a decrease of $0.43 compared with 2019
- Adjusted EBITDA was $39.7 million compared with $74.5 million in 2019
- Total backlog was $2.8 billion and twelve-month backlog was $1.1 billion at September 30, 2020

Highlights and significant developments for the nine months ended September 30, 2020 compared with the nine months ended September 30, 2019

- Revenues were $1.65 billion compared with $1.87 billion in 2019, a decrease of $225.9 million, or 12%
- Gross margin was 27.5% compared with 30.7% in 2019
- Operating expenses increased $25.3 million, or 5%, compared with 2019, including $43.9 million of restructuring expense related to the 2020 Projects and a $57.3 million loss on sale of business
- Net loss attributable to Itron, Inc. was $79.5 million, compared with net income of $34.4 million in 2019
- GAAP diluted EPS decreased by $2.84 to a diluted loss per share of $1.98 as compared with 2019
- Non-GAAP net income attributable to Itron, Inc. was $48.9 million compared with $103.9 million in 2019
- Non-GAAP diluted EPS was $1.21, a decrease of $1.39 compared with 2019
- Adjusted EBITDA was $122.9 million compared with $213.2 million in 2019

Outlook for 2020 due to COVID-19

The COVID-19 pandemic has had global economic impacts including disrupting global supply chains and creating market volatility. The extent of the recent pandemic and its ongoing impact on our operations is volatile but is being monitored closely by management. While certain of our European factories were closed during portions of the first half of 2020 due to government actions and local conditions, all were open throughout the third quarter. Any further closures that may be imposed on us could impact our results for the remainder of 2020. We expect that certain of our customers' projects and deployments may shift into 2021. Incremental costs we have incurred related to COVID-19, such as personal protective equipment, increased cleaning and sanitizing of our facilities, and other such items, have not been material to date. At this time, we have not identified any significant decrease in long-term customer demand for our products and services. For more information on risks associated with the COVID-19 pandemic, please see our updated risk in Part II, Item 1A, "Risk Factors".

The COVID-19 pandemic remains a rapidly evolving situation. Changes in the mix of earnings or losses from our different geographical operations, as well as any future enactment of tax legislation and other factors, may result in more volatile quarterly and annual effective tax rates. The detrimental impacts to financial results may be partially offset by financial assistance from the U.S. and foreign governments, including employer payroll tax credits for wages paid to employees who are unable to work during the COVID-19 outbreak. Other benefits, including options to defer payroll tax payments and additional deductions, has resulted in reduced future cash outlays in the near term.

2020 Restructuring Plan

On September 17, 2020, our Board of Directors approved a restructuring plan (the "2020 Projects"). The 2020 Projects include activities that continue the Company's efforts to optimize its global supply chain and manufacturing operations, sales and marketing organizations, and other overhead. These projects are scheduled to be substantially complete by the end of 2022. We estimate pre-tax restructuring charges of $55 million to $65 million, of which approximately $35 million to $45 million will result in cash expenditures, and the remainder relates to non-cash charges. Of the total expected costs, $43.9 million was recognized in the third quarter. Once the 2020 Projects are substantially completed, the Company estimates $20 to $25 million of annualized savings.

Sale of Business

On June 25, 2020, we closed on the sale of five subsidiaries comprising our manufacturing and sales operations in Latin America to buyers led by Instalación Profesional y Tecnologías del Centro S.A. de C.V., a Mexican company doing business as Accell in Brazil (Accell), through the execution of various definitive stock purchase agreements. The sale of these Latin America-based operations is part of our continued strategy to improve profitability and focus on growing our Networked Solutions and Outcomes businesses in Latin America and throughout the world. We retained the intellectual property rights to our products sold in Latin America. As part of the transaction, we entered into an intellectual property license agreement whereby Accell will pay a royalty on certain products manufactured by Accell using licensed Company intellectual property. In addition, Accell will serve as an exclusive distributor for our Device Solutions, Networked Solutions, and Outcomes products and services offerings in Latin America. We recognized a loss on sale of business of $57.3 million during the nine months ended September 30, 2020, primarily due to foreign currency translation losses and allocated goodwill. Refer to Item 1: "Financial Statements (Unaudited), Note 17: Sale of Business" for more information.

Credit Facility

In March 2020, we drew $400 million U.S. dollars under the revolving line of credit within the 2018 credit facility. In light of the current uncertain environment, we deemed it prudent to increase our cash position and preserve future financial flexibility. The Total Net Leverage Ratio, as defined in the amended 2018 credit facility agreement, was unchanged by this drawing.

Total Company GAAP and Non-GAAP Highlights and Unit Shipments:

	Three Months Ended September 30,			Nine Months Ended September 30,		
In thousands, except margin and per share data	**2020**	**2019**	**% Change**	**2020**	**2019**	**% Change**
GAAP						
Revenues						
Product revenues	$ 470,658	$ 552,897	(15)%	$ 1,437,780	$ 1,663,794	(14)%
Service revenues	69,526	71,577	(3)%	210,413	210,293	—%
Total revenues	540,184	624,474	(13)%	1,648,193	1,874,087	(12)%
Gross profit	$ 143,251	$ 196,404	(27)%	$ 453,334	$ 574,881	(21)%
Operating expenses	167,231	156,965	7%	496,331	471,061	5%
Operating income (loss)	(23,980)	39,439	NM	(42,997)	103,820	NM
Other income (expense)	(13,063)	(15,110)	(14)%	(35,020)	(44,983)	(22)%
Income tax provision	11,985	(6,152)	NM	(366)	(20,692)	(98)%
Net income (loss) attributable to Itron, Inc.	(25,357)	16,847	NM	(79,475)	34,386	NM
Non-GAAP[(1)]						
Non-GAAP operating expenses	$ 113,554	$ 130,387	(13)%	$ 364,788	$ 388,985	(6)%
Non-GAAP operating income	29,697	66,017	(55)%	88,546	185,896	(52)%
Non-GAAP net income attributable to Itron, Inc.	24,634	41,396	(40)%	48,929	103,886	(53)%
Adjusted EBITDA	39,684	74,456	(47)%	122,858	213,180	(42)%
GAAP Margins and Earnings Per Share						
Gross margin						
Product gross margin	23.9 %	29.5 %		25.4 %	29.3 %	
Service gross margin	44.4 %	46.5 %		41.7 %	41.8 %	
Total gross margin	26.5 %	31.5 %		27.5 %	30.7 %	
Operating margin	(4.4)%	6.3 %		(2.6)%	5.5 %	
Net income (loss) per common share - Basic	$ (0.63)	$ 0.43		$ (1.98)	$ 0.87	
Net income (loss) per common share - Diluted	$ (0.63)	$ 0.42		$ (1.98)	$ 0.86	
Non-GAAP Earnings Per Share[(1)]						
Non-GAAP diluted EPS	$ 0.61	$ 1.04		$ 1.21	$ 2.60	

(1) These measures exclude certain expenses that we do not believe are indicative of our core operating results. See pages 43-46 for information about these non-GAAP measures and reconciliations to the most comparable GAAP measures.

Endpoints Summary
Our revenue is driven significantly by sales of endpoints. We classify our endpoints into two categories:

- *Standard Endpoints* – an Itron product delivered primarily via our Device Solutions segment. The majority of our standard endpoint devices are used for delivery and metrology in the electricity, water, and gas distribution industries, and have no built-in remote reading communication technology. However, some standard endpoint devices are shipped with non-Itron communications capabilities and are not a part of an Itron solution, such as the Smart Spec meters, and are classified as a standard endpoint.

- *Networked Endpoints* – an Itron product with the capability of one-way communication or two-way communication of data including remote device configuration and upgrade (consisting primarily of our OpenWay® or Gen X technology). This primarily includes Itron devices used in electricity, water, and gas distribution industries. Networked endpoints also include smart communication modules and network interface cards (NICs). NICs are communicating modules that can be sold separately from the device directly to our customers or to third party manufacturers for use in endpoints such as electric, water, and gas meters; streetlights and smart city devices; sensors or another standard device that the end customer would like to connect to our OpenWay or Gen X Networked Solutions. These endpoints are primarily delivered via our Networked Solutions segment.

A summary of our endpoints shipped is as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
Units in thousands	2020	2019	2020	2019
Itron Endpoints				
Standard endpoints	3,890	5,420	12,410	16,460
Networked endpoints	3,860	3,940	11,950	12,180
Total endpoints	7,750	9,360	24,360	28,640

Results of Operations

Revenues and Gross Margin

The actual results of and effects of changes in foreign currency exchange rates on revenues and gross profit were as follows:

	Three Months Ended September 30,		Effect of Changes in Foreign Currency Exchange Rates	Constant Currency Change	Total Change
In thousands	2020	2019			
Total Company					
Revenues	$ 540,184	$ 624,474	$ 5,539	$ (89,829)	$ (84,290)
Gross profit	143,251	196,404	1,261	(54,414)	(53,153)

	Nine Months Ended September 30,		Effect of Changes in Foreign Currency Exchange Rates	Constant Currency Change	Total Change
In thousands	2020	2019			
Total Company					
Revenues	$ 1,648,193	$ 1,874,087	$ (13,641)	(212,253)	$ (225,894)
Gross profit	453,334	574,881	(3,228)	(118,319)	(121,547)

Revenues - Three months ended September 30, 2020 vs. Three months ended September 30, 2019
Total revenues decreased $84.3 million, or 13%, in the current 2020 quarter, compared with the same period in 2019. We have been negatively impacted by COVID-19, which played a significant role in lower year-over-year results. Product revenues decreased by $82.2 million, and service revenues decreased slightly. Device Solutions decreased by $37.2 million; Networked Solution decreased by $49.6 million; and Outcomes increased by $2.5 million when compared with the same period last year. Changes in exchange rates favorably impacted total revenues in the 2020 period by $5.5 million, of which $5.1 million favorably impacted Device Solutions.

Revenues - Nine months ended September 30, 2020 vs. Nine months ended September 30, 2019
Total revenues decreased $225.9 million, or 12%, for the first nine months of 2020, compared with the same period in 2019. We have been negatively impacted by COVID-19, which played a significant role in lower year-over-year results. Product revenues decreased by $226.0 million, and service revenues increased slightly. Device Solutions decreased by $145.3 million; Networked Solutions decreased by $76.6 million; and Outcomes decreased by $4.1 million when compared with the same period last year. Changes in exchange rates unfavorably impacted total revenues by $13.6 million, of which $11.6 million unfavorably impacted Device Solutions.

Gross Margin - Three months ended September 30, 2020 vs. Three months ended September 30, 2019
Gross margin in the 2020 period was 26.5%, compared with 31.5% in 2019. We were negatively impacted by unfavorable product mix, inventory reserves, and manufacturing inefficiencies caused by COVID-19. Product sales gross margin decreased to 23.9% for the quarter in 2020, compared with 29.5% in 2019. Gross margin on service revenues decreased to 44.4% in 2020, compared with 46.5% in 2019.

Gross Margin - Nine months ended September 30, 2020 vs. Nine months ended September 30, 2019
Gross margin for the current year was 27.5%, compared with 30.7% in 2019. Unfavorable product mix and manufacturing inefficiencies caused by COVID-19 negatively impacted our results. Product sales gross margin decreased to 25.4% in the 2020 period, compared with 29.3% in 2019 and gross margin on service revenues decreased to 41.7%, compared with 41.8% in 2019.

Refer to Operating Segment Results section below for further detail on total company revenues and gross margin.

Operating Expenses

The actual results of and effects of changes in foreign currency exchange rates on operating expenses were as follows:

In thousands	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Effect of Changes in Foreign Currency Exchange Rates	Constant Currency Change	Total Change
Total Company					
Sales, general and administrative	$ 64,982	$ 83,666	$ 1,011	$ (19,695)	$ (18,684)
Research and development	46,224	50,612	239	(4,627)	(4,388)
Amortization of intangible assets	11,183	16,095	80	(4,992)	(4,912)
Restructuring	44,462	6,592	171	37,699	37,870
Loss on sale of business	380	—	—	380	380
Total Operating expenses	$ 167,231	$ 156,965	$ 1,501	$ 8,765	$ 10,266

In thousands	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	Effect of Changes in Foreign Currency Exchange Rates	Constant Currency Change	Total Change
Total Company					
Sales, general and administrative	$ 215,018	$ 264,640	$ (1,266)	$ (48,356)	$ (49,622)
Research and development	148,999	150,551	(104)	(1,448)	(1,552)
Amortization of intangible assets	33,488	48,185	(71)	(14,626)	(14,697)
Restructuring	41,531	7,685	(10)	33,856	33,846
Loss on sale of business	57,295	—	—	57,295	57,295
Total Operating expenses	$ 496,331	$ 471,061	$ (1,451)	$ 26,721	$ 25,270

Operating expenses increased $10.3 million for the third quarter of 2020 as compared with the same period in 2019. This was primarily the result of $43.9 million in restructuring expenses recognized for the 2020 Projects during the third quarter of 2020. An additional $0.4 million recognized for the loss on sale of business from the Latin America divestiture, which closed in June 2020. The increase was partially offset by decreases of $18.7 million in sales, general and administrative expenses due to lower variable compensation and reduced travel expenses, and $4.9 million in amortization of intangible assets compared with the

2019 period. Acquisition and integration costs, which are classified within sales, general and administrative expenses, decreased by $6.2 million compared with the same period in 2019.

Operating expenses increased $25.3 million for the nine months ended September 30, 2020 as compared with the same period in 2019. This was primarily the result of $43.9 million in restructuring expense recognized for the 2020 Projects during the third quarter of 2020 and a $57.3 million loss on sale of business resulting from the Latin America divestiture during the second quarter of 2020. The increase was partially offset by decreases of $49.6 million in sales, general and administrative expenses due to lower variable compensation and reduced travel expenses, and $14.7 million in amortization of intangible assets. Acquisition and integration costs, which are classified within sales, general and administrative expenses, decreased by $25.3 million compared with the same period in 2019.

Other Income (Expense)

The following table shows the components of other income (expense):

	Three Months Ended September 30,			Nine Months Ended September 30,		
In thousands	**2020**	**2019**	**% Change**	**2020**	**2019**	**% Change**
Interest income	$ 354	$ 517	(32)%	$ 2,165	$ 1,379	57%
Interest expense	(9,794)	(11,584)	(15)%	(30,742)	(36,213)	(15)%
Amortization of prepaid debt fees	(1,016)	(1,284)	(21)%	(3,029)	(3,686)	(18)%
Other income (expense), net	(2,607)	(2,759)	(6)%	(3,414)	(6,463)	(47)%
Total other income (expense)	$ (13,063)	$ (15,110)	(14)%	$ (35,020)	$ (44,983)	(22)%

Total other income (expense) for the three and nine months ended September 30, 2020 was a net expense of $13.1 million and $35.0 million, compared with net expense of $15.1 million and $45.0 million in the same periods in 2019.

The lower total expense for the three months ended September 30, 2020, as compared with the same period in 2019, was driven primarily by $2.9 million in lower interest expense for the credit facility due to a lower interest rate in 2020.

The decrease in other income (expense) for the nine months ended September 30, 2020, as compared with the same period in 2019, was primarily driven by $7.1 million in lower interest expense for the credit facility due to a lower interest rate in 2020, and lower foreign currency exchange losses resulting from transactions denominated in a currency other than the reporting entity's functional currency.

Income Tax Provision

For the three and nine months ended September 30, 2020, our income tax expense (benefit) was $(12.0) million and $0.4 million compared with income tax expense of $6.2 million and $20.7 million for the same periods in 2019. Our tax rate for the three and nine months ended September 30, 2020 of 32% and 0%, respectively, differed from the federal statutory rate of 21% primarily due to a significant loss recognized in the second quarter for the divestiture of the majority of our Latin American business activities. Refer to "Note 17: Sale of Business" for additional information on the transaction. This loss was recognized for tax as a discrete item and resulted in no tax benefit. A discrete tax benefit was recorded in the third quarter for $10.1 million related to the release of a valuation allowance on U.S. foreign tax credit deferred tax assets. This release was triggered by the carryforward of tax attributes due to the filing of amended tax returns in the third quarter. Other rate drivers include losses in jurisdictions for which no benefit is recognized because of valuation allowances on deferred tax assets, the forecasted mix of earnings in domestic and international jurisdictions, a benefit related to excess stock-based compensation, and uncertain tax positions. Our tax rate for the three and nine months ended September 30, 2019 of 25% and 35%, respectively, differed from the federal statutory rate of 21% primarily due to losses in jurisdictions for which no benefit is recognized because of valuation allowances on deferred tax assets as well as the forecasted mix of earnings in domestic and international jurisdictions, a benefit related to excess stock-based compensation, and uncertain tax positions.

For additional discussion related to income taxes, see Item 1: "Financial Statements (Unaudited), Note 10: Income Taxes".

Operating Segment Results

For a description of our operating segments, refer to Item 1: "Financial Statements (Unaudited), Note 15: Segment Information". The following tables and discussion highlight significant changes in trends or components of each operating segment:

In thousands	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	% Change	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	% Change
Segment Revenues						
Device Solutions	$ 176,128	$ 213,349	(17)%	$ 507,572	$ 652,827	(22)%
Networked Solutions	306,659	356,221	(14)%	971,984	1,048,564	(7)%
Outcomes	57,397	54,904	5%	168,637	172,696	(2)%
Total revenues	$ 540,184	$ 624,474	(13)%	$ 1,648,193	$ 1,874,087	(12)%

In thousands	Three Months Ended September 30, 2020 *Gross Profit*	2020 *Gross Margin*	2019 *Gross Profit*	2019 *Gross Margin*	Nine Months Ended September 30, 2020 *Gross Profit*	2020 *Gross Margin*	2019 *Gross Profit*	2019 *Gross Margin*
Segment Gross Profit and Margin								
Device Solutions	$ 20,528	11.7%	$ 40,945	19.2%	$ 64,843	12.8%	$ 122,451	18.8%
Networked Solutions	102,295	33.4%	135,406	38.0%	332,368	34.2%	388,717	37.1%
Outcomes	20,428	35.6%	20,053	36.5%	56,123	33.3%	63,713	36.9%
Total gross profit and margin	$ 143,251	26.5%	$ 196,404	31.5%	$ 453,334	27.5%	$ 574,881	30.7%

In thousands	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	% Change	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	% Change
Segment Operating Expenses						
Device Solutions	$ 9,511	$ 13,040	(27)%	$ 36,748	$ 40,734	(10)%
Networked Solutions	30,891	29,769	4%	94,902	89,723	6%
Outcomes	8,384	9,210	(9)%	26,655	28,093	(5)%
Corporate unallocated	118,445	104,946	13%	338,026	312,511	8%
Total operating expenses	$ 167,231	$ 156,965	7%	$ 496,331	$ 471,061	5%

In thousands	Three Months Ended September 30, 2020 *Operating Income (Loss)*	2020 *Operating Margin*	2019 *Operating Income (Loss)*	2019 *Operating Margin*	Nine Months Ended September 30, 2020 *Operating Income (Loss)*	2020 *Operating Margin*	2019 *Operating Income (Loss)*	2019 *Operating Margin*
Segment Operating Income (Loss) and Operating Margin								
Device Solutions	$ 11,017	6.3%	$ 27,905	13.1%	$ 28,095	5.5%	$ 81,717	12.5%
Networked Solutions	71,404	23.3%	105,637	29.7%	237,466	24.4%	298,994	28.5%
Outcomes	12,044	21.0%	10,843	19.7%	29,468	17.5%	35,620	20.6%
Corporate unallocated	(118,445)	(21.9)%	(104,946)	(16.8)%	(338,026)	(20.5)%	(312,511)	(16.7)%
Total operating income (loss) and operating margin	$ (23,980)	(4.4)%	$ 39,439	6.3%	$ (42,997)	(2.6)%	$ 103,820	5.5%

Device Solutions

The effects of changes in foreign currency exchange rates and the constant currency changes in certain Device Solutions segment financial results were as follows:

In thousands	Three Months Ended September 30, 2020	2019	Effect of Changes in Foreign Currency Exchange Rates	Constant Currency Change	Total Change
Device Solutions Segment					
Revenues	$ 176,128	$ 213,349	$ 5,123	$ (42,344)	$ (37,221)
Gross profit	20,528	40,945	1,064	(21,481)	(20,417)
Operating expenses	9,511	13,040	147	(3,676)	(3,529)

In thousands	Nine Months Ended September 30, 2020	2019	Effect of Changes in Foreign Currency Exchange Rates	Constant Currency Change	Total Change
Device Solutions Segment					
Revenues	$ 507,572	$ 652,827	$ (11,588)	$ (133,667)	$ (145,255)
Gross profit	64,843	122,451	(2,402)	(55,206)	(57,608)
Operating expenses	36,748	40,734	(59)	(3,927)	(3,986)

Revenues - Three months ended September 30, 2020 vs. Three months ended September 30, 2019
Revenues decreased $37.2 million, or 17%. Changes in foreign currency exchange rates favorably impacted revenues by $5.1 million. Revenue was negatively impacted by $18.0 million in the Latin America region in part due to the sale of the business in June 2020, as well as lower shipments in all regions due to reduced demand primarily from COVID-19 delays.

Revenues - Nine months ended September 30, 2020 vs. Nine months ended September 30, 2019
Revenues decreased $145.3 million, or 22%. Changes in foreign currency exchange rates unfavorably impacted revenues by $11.6 million. We had reduced shipments driven by COVID-19 delays, and revenue decreased $22.0 million in the Latin America region in part due to the sale of the business in June 2020.

Gross Margin - Three months ended September 30, 2020 vs. Three months ended September 30, 2019
For the three months ended September 30, 2020, gross margin was 11.7%, compared with 19.2% for the same period in 2019. The 750 basis point reduction over the prior year was primarily due to unfavorable product mix, inventory reserves, and COVID-19 induced operational inefficiencies.

Gross Margin - Nine months ended September 30, 2020 vs. Nine months ended September 30, 2019
For the nine months ended September 30, 2020, gross margin was 12.8%, compared with 18.8% for the same period in 2019. The 600 basis point reduction over the prior year was primarily due to $37.5 million of unfavorable product mix, inventory reserves, and COVID-19 induced operating inefficiencies, partially offset by lower warranty expense of $2.0 million.

Operating Expenses - Three months ended September 30, 2020 vs. Three months ended September 30, 2019
Operating expenses decreased $3.5 million, or 27%, compared with 2019. The decrease was primarily related to $2.8 million decrease in research and development costs, and a decrease in sales and marketing expenses of $0.9 million.

Operating Expenses - Nine months ended September 30, 2020 vs. Nine months ended September 30, 2019
Operating expenses decreased $4.0 million, or 10%, for the first nine months of 2020, compared with the same period in 2019. The decrease was primarily a result of a $3.0 million decrease in research and development cost, and a $0.9 million decrease in sales and marketing expenses.

Networked Solutions

The effects of changes in foreign currency exchange rates and the constant currency changes in certain Networked Solutions segment financial results were as follows:

In thousands	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Effect of Changes in Foreign Currency Exchange Rates	Constant Currency Change	Total Change
Networked Solutions Segment					
Revenues	$ 306,659	$ 356,221	$ (48)	$ (49,514)	$ (49,562)
Gross profit	102,295	135,406	(39)	(33,072)	(33,111)
Operating expenses	30,891	29,769	37	1,085	1,122

In thousands	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	Effect of Changes in Foreign Currency Exchange Rates	Constant Currency Change	Total Change
Networked Solutions Segment					
Revenues	$ 971,984	$ 1,048,564	$ (1,539)	$ (75,041)	$ (76,580)
Gross profit	332,368	388,717	(576)	(55,773)	(56,349)
Operating expenses	94,902	89,723	(1)	5,180	5,179

Revenues - Three months ended September 30, 2020 vs. Three months ended September 30, 2019
Revenues decreased $49.6 million, or 14%, in 2020 compared with 2019. The change was primarily due to delayed deployments driven by COVID-19 delays, with lower product revenue of $47.8 million and lower maintenance service revenue of $1.8 million.

Revenues - Nine months ended September 30, 2020 vs. Nine months ended September 30, 2019
Revenues decreased $76.6 million, or 7%, for the first nine months of 2020 compared with the same period in 2019. The change was primarily due to delayed deployments driven by COVID-19 delays, with lower product revenue of $79.8 million partially offset by higher maintenance service revenue of $3.2 million.

Gross Margin - Three months ended September 30, 2020 vs. Three months ended September 30, 2019
Gross margin was 33.4% for the period ending September 30, 2020, compared with 38.0% in 2019. The 460 basis point decrease was primarily related to unfavorable product mix and COVID-19 related inefficiencies.

Gross Margin - Nine months ended September 30, 2020 vs. Nine months ended September 30, 2019
Gross margin was 34.2% for the 2020 period, compared with 37.1% in 2019. The 290 basis point decrease was primarily related to unfavorable product mix and COVID-19 induced operational inefficiencies.

Operating Expenses - Three months ended September 30, 2020 vs. Three months ended September 30, 2019
Operating expenses increased $1.1 million, or 4%, for the quarter in 2020, compared with the same period in 2019. The increase was primarily related to higher research and development expenses of $2.6 million, partially offset by a decrease of $1.5 million in sales and marketing expenses.

Operating Expenses - Nine months ended September 30, 2020 vs. Nine months ended September 30, 2019
Operating expenses increased $5.2 million, or 6%, for the first nine months of 2020, compared with the same period in 2019. The increase was primarily related to higher research and development expenses of $7.4 million, partially offset by a decrease of $2.3 million in sales and marketing expenses.

Outcomes

The effects of changes in foreign currency exchange rates and the constant currency changes in certain Outcomes segment financial results were as follows:

In thousands	Three Months Ended September 30, 2020	2019	Effect of Changes in Foreign Currency Exchange Rates	Constant Currency Change	Total Change
Outcomes Segment					
Revenues	$ 57,397	$ 54,904	$ 466	$ 2,027	$ 2,493
Gross profit	20,428	20,053	234	141	375
Operating expenses	8,384	9,210	25	(851)	(826)

In thousands	Nine Months Ended September 30, 2020	2019	Effect of Changes in Foreign Currency Exchange Rates	Constant Currency Change	Total Change
Outcomes Segment					
Revenues	$ 168,637	$ 172,696	$ (513)	$ (3,546)	$ (4,059)
Gross profit	56,123	63,713	(252)	(7,338)	(7,590)
Operating expenses	26,655	28,093	(8)	(1,430)	(1,438)

Revenues - Three months ended September 30, 2020 vs. Three months ended September 30, 2019
For the 2020 period, revenues increased $2.5 million, or 5%, compared with the 2019 period. This increase was driven by an increase in software license sales and professional services.

Revenues - Nine months ended September 30, 2020 vs. Nine months ended September 30, 2019
Revenues decreased $4.1 million, or 2%, for the first nine months of 2020, compared with 2019. This decline was driven by a decrease in hardware and software license sales and professional services.

Gross Margin - Three months ended September 30, 2020 vs. Three months ended September 30, 2019
Gross margin decreased to 35.6% for the third quarter of 2020, compared with 36.5% for the same period last year. The 90 basis point decrease was driven by unfavorable product mix and infrastructure investments.

Gross Margin - Nine months ended September 30, 2020 vs. Nine months ended September 30, 2019
Gross margin decreased to 33.3% for the period ending in 2020, compared with 36.9% for last year. The 360 basis point decrease was driven by unfavorable product mix and infrastructure investments.

Operating Expenses - Three months ended September 30, 2020 vs. Three months ended September 30, 2019
Operating expenses for the 2020 period decreased $0.8 million, compared with the same period last year, with lower product marketing expenses of $0.2 million and lower research and development expenses of $0.6 million.

Operating Expenses - Nine months ended September 30, 2020 vs. Nine months ended September 30, 2019
Operating expenses for the first nine months of 2020 decreased $1.4 million, or 5%, compared with the same period last year. This was primarily related to lower product marketing expenses of $0.7 million and lower research and development expenses of $0.7 million.

Corporate Unallocated

Corporate Unallocated Expenses - Three months ended September 30, 2020 vs. Three months ended September 30, 2019
Operating expenses not directly associated with an operating segment are classified as "Corporate unallocated". These expenses increased $13.5 million, or 13%, for the three months ended September 30, 2020 compared with the same period in 2019. This was primarily the result of a $43.9 million restructuring expenses recognized for the 2020 Projects during the third quarter of 2020. The increase was offset by $18.7 million in reduced sales, general and administrative expenses due to lower employee medical costs and reduced travel expenses and a $4.9 million reduction in amortization of intangible assets. Acquisition and

integration costs, which are classified within sales, general and administrative expenses, decreased by $6.2 million compared with the same period in 2019.

Corporate Unallocated Expenses - Nine months ended September 30, 2020 vs. Nine months ended September 30, 2019
For the first nine months of 2020, corporate unallocated expenses increased $25.5 million, or 8%, compared with the 2019 period. This was primarily the result of a $57.3 million loss on sale of business due to the Latin America divestiture and a $43.9 million restructuring expense recognized for the Itron 2020 Projects during the nine months ended in 2020. The increase was offset by $49.6 million in reduced sales, general and administrative expenses due to lower employee medical costs and reduced travel expenses, and $14.7 million in lower amortization of intangible assets. Acquisition and integration costs, which are classified within sales, general and administrative expenses, decreased by $25.3 million compared with the same period in 2019.

Bookings and Backlog of Orders

Bookings for a reported period represent customer contracts and purchase orders received during the period for hardware, software, and services that have met certain conditions, such as regulatory and/or contractual approval. Total backlog represents committed but undelivered products and services for contracts and purchase orders at period-end. Twelve-month backlog represents the portion of total backlog that we estimate will be recognized as revenue over the next 12 months. Backlog is not a complete measure of our future revenues as we also receive significant book-and-ship orders, as well as frame contracts. Bookings and backlog may fluctuate significantly due to the timing of large project awards. In addition, annual or multi-year contracts are subject to rescheduling and cancellation by customers due to the long-term nature of the contracts. Beginning total backlog, plus bookings, minus revenues, will not equal ending total backlog due to miscellaneous contract adjustments, foreign currency fluctuations, and other factors. Total bookings and backlog include certain contracts with termination for convenience clause, which will not agree to the total transaction price allocated to the remaining performance obligations disclosed in Item 1: "Financial Statements (Unaudited), Note 16: Revenues".

Quarter Ended	Quarterly Bookings	Ending Total Backlog	Ending 12-Month Backlog
In millions			
September 30, 2020	$ 432	$ 2,795	$ 1,107
June 30, 2020	390	2,895	1,291
March 31, 2020	418	3,020	1,319
December 31, 2019	767	3,207	1,499
September 30, 2019	609	3,063	1,361

Financial Condition

Cash Flow Information

	Nine Months Ended September 30,	
In thousands	2020	2019
Cash provided by operating activities	$ 70,571	$ 128,100
Cash used in investing activities	(33,472)	(34,593)
Cash provided by (used in) financing activities	402,590	(73,592)
Effect of exchange rates on cash, cash equivalents, and restricted cash	(3,426)	(543)
Increase in cash, cash equivalents, and restricted cash	$ 436,263	$ 19,372

Cash, cash equivalents, and restricted cash was $586.2 million at September 30, 2020, compared with $149.9 million at December 31, 2019. The $436.3 million increase in cash, cash equivalents, and restricted cash in the 2020 period was primarily the result of a $400 million draw from our credit facility in March 2020, along with cash flows from operating activities, partially offset by acquisitions of property, plant, and equipment.

Operating activities
Cash provided by operating activities during the nine months in 2020 was $70.6 million compared with $128.1 million during the same period in 2019. The decrease was primarily due to net loss, as a result of restructuring and loss on sale of business, partially offset by decreased cash used for working capital.

Investing activities
Cash used in investing activities during 2020 was $1.1 million lower than in 2019. This slight decrease in use of cash was primarily related to the net cash outflow for the sale of our Latin America operation, and a decrease of $8.3 million in investment of property, plant, and equipment.

Financing activities
Net cash provided by financing activities during the nine months in 2020 was $402.6 million, compared with net cash used of $73.6 million for the same period in 2019. In March 2020, we drew on our revolver in the amount of $400 million to increase our cash position and preserve future financial flexibility. In 2019, we repurchased $25 million in shares of our common stock and had net repayments of debt of $50.3 million.

Effect of exchange rates on cash and cash equivalents
The effect of exchange rates on the cash balances of currencies held in foreign denominations at September 30, 2020 was a decrease of $3.4 million, compared with a decrease of $0.5 million for the same period in 2019. Our foreign currency exposure relates to non-U.S. dollar denominated balances in our international subsidiary operations.

Free cash flow (Non-GAAP)
To supplement our Consolidated Statements of Cash Flows presented on a GAAP basis, we use the non-GAAP measure of free cash flow to analyze cash flows generated from our operations. The presentation of non-GAAP free cash flow is not meant to be considered in isolation or as an alternative to net income as an indicator of our performance, or as an alternative to cash flows from operating activities as a measure of liquidity. We calculate free cash flows, using amounts from our Consolidated Statements of Cash Flows, as follows:

	Nine Months Ended September 30,	
In thousands	**2020**	**2019**
Cash provided by operating activities	$ 70,571	$ 128,100
Acquisitions of property, plant, and equipment	(36,297)	(44,570)
Free cash flow	$ 34,274	$ 83,530

Free cash flow fluctuated primarily as a result of changes in cash provided by operating activities. See the cash flow discussion of operating activities above.

Off-balance sheet arrangements

We have no off-balance sheet financing agreements or guarantees as defined by Item 303 of Regulation S-K at September 30, 2020 and December 31, 2019 that we believe could reasonably likely have a current or future effect on our financial condition, results of operations, or cash flows.

Liquidity and Capital Resources

Our principal sources of liquidity are cash flows from operations, borrowings, and the sale of our common stock. Cash flows may fluctuate and are sensitive to many factors including changes in working capital and the timing and magnitude of capital expenditures and payments of debt. Working capital, which represents current assets less current liabilities, continues to be in a net favorable position.

Borrowings
On October 18, 2019 we amended our credit facility that was initially entered on January 5, 2018 (together with the amendment, the "2018 credit facility"). The 2018 credit facility provides for committed credit facilities in the amount of $1.2 billion U.S. dollars. The 2018 credit facility consists of a $650 million U.S. dollar term loan (the term loan) and a multicurrency revolving line of credit (the revolver) with a principal amount of up to $500 million. The revolver also contains a $300 million standby letter of credit sub-facility and a $50 million swingline sub-facility. The October 18, 2019, amendment extended the maturity date to October 18, 2024 and re-amortized the term loan based on the new balance as of the amendment date.

We drew $400 million in U.S. dollars under the revolving line of credit within the 2018 credit facility in March 2020. In light of the current uncertain environment, we deemed it prudent to increase our cash position and preserve future financial flexibility.

The Total Net Leverage Ratio, as defined in the amended 2018 credit facility agreement, continues to be unchanged by this drawing. Subsequent to September 30, 2020, we repaid $100 million on the revolving line of credit.

On October 19, 2020, we completed a second amendment to our 2018 credit facility. This amendment adjusts the maximum total net leverage ratio thresholds for the period beginning with the fourth quarter of 2020 through the fourth quarter of 2021 to allow for increased operational flexibility. The maximum leverage ratio is increased to 4.75:1 for the fourth quarter of 2020 and the first quarter of 2021 and 4.5:1 for the second quarter through the fourth quarter of 2021. An additional level of pricing was added to the existing pricing grid and is effective throughout the remaining term of the 2018 credit facility. Beginning with the fourth quarter of 2020, the commitment fee ranges from 0.15% to 0.30% and drawn amounts are subject to a margin ranging from 1.00% to 2.00%. Going forward, we do not expect any significant increase in interest expense as the result of this amendment.

Amounts repaid on the term loan may not be reborrowed, and amounts borrowed under the revolver may be repaid and reborrowed until the revolver's maturity, at which time all outstanding loans together with all accrued and unpaid interest must be repaid.

In December 2017 and January 2018, we issued a combined $400 million in aggregate principal amount of 5.00% senior notes maturing January 15, 2026 (Senior Notes). The proceeds were used to refinance existing indebtedness related to the acquisition of SSNI, pay related fees and expenses, and for general corporate purposes. Interest on the Senior Notes is payable semi-annually in arrears on January 15 and July 15, commencing on July 15, 2018. The $10 million interest payment due on July 15, 2020 was paid as of June 30, 2020. The Senior Notes are fully and unconditionally guaranteed, jointly and severally, on a senior unsecured basis by each of our subsidiaries that guarantee the 2018 credit facility.

Prior to maturity, we may redeem some or all of the Senior Notes, together with accrued and unpaid interest, if any, plus a "make-whole" premium. On or after January 15, 2021, we may redeem some or all of the Senior Notes at any time at declining redemption prices equal to 102.50% beginning on January 15, 2021, 101.25% beginning on January 15, 2022 and 100.00% beginning on January 15, 2023 and thereafter to the applicable redemption date. In addition, before January 15, 2021, and subject to certain conditions, we may redeem up to 35% of the aggregate principal amount of Senior Notes with the net proceeds of certain equity offerings at 105.00% of the principal amount thereof to the date of redemption; provided that (i) at least 65% of the aggregate principal amount of Senior Notes remains outstanding after such redemption and (ii) the redemption occurs within 60 days of the closing of any such equity offering.

For further description of our borrowings, refer to Item 1: "Financial Statements (Unaudited), Note 6: Debt".

For a description of our letters of credit and performance bonds, and the amounts available for additional borrowings or letters of credit under our lines of credit, including the revolver that is part of our credit facility, refer to Item 1: "Financial Statements (Unaudited), Note 11: Commitments and Contingencies".

Silver Spring Networks, Inc. Acquisition

As part of the acquisition of SSNI, we announced an integration plan to obtain approximately $50 million of annualized savings by the end of 2020. For the nine months ended September 30, 2020, we paid out $11.9 million and we have approximately $4 million to $8 million of estimated cash payments remaining on the integration plan, the majority of which is expected to be paid out in the next 12 months.

Restructuring

On September 17, 2020, our Board of Directors approved a restructuring plan (the "2020 Projects"). The 2020 Projects include activities that continue our efforts to optimize its global supply chain and manufacturing operations, sales and marketing organizations, and other overhead. These projects are scheduled to be substantially complete by the end of 2022. We estimate pre-tax restructuring charges of $55 million to $65 million. Of the total estimated charge, approximately $35 million to $45 million will result in cash expenditures, and the remainder relates to non-cash charges.

For the nine months ended September 30, 2020, we paid out a net $10.9 million related to the 2018 restructuring projects. As of September 30, 2020, $79.7 million was accrued for restructuring projects, of which $24.6 million is expected to be paid over the next 12 months.

For further details regarding our restructuring activities, refer to Item 1: "Financial Statements (Unaudited), Note 12: Restructuring".

Other Liquidity Considerations
We have tax credits and net operating loss carryforwards in various jurisdictions that are available to reduce cash taxes. However, utilization of tax credits and net operating losses are limited in certain jurisdictions. Based on current projections, we expect to pay, net of refunds, approximately $1 million in state taxes and approximately $7 million in local and foreign taxes during 2020. We expect to receive approximately $7 million in U.S. federal tax refunds. For a discussion of our tax provision and unrecognized tax benefits, see Item 1: "Financial Statements (Unaudited), Note 10: Income Taxes".

As of September 30, 2020, we are under examination by certain tax authorities. We believe we have appropriately accrued for the expected outcome of all tax matters and do not currently anticipate that the ultimate resolution of these examinations will have a material adverse effect on our financial condition, future results of operations, or liquidity.

As of September 30, 2020, there was $37.2 million of cash and short-term investments held by certain foreign subsidiaries in which we are permanently reinvested for tax purposes. As a result of recent changes in U.S. tax legislation, any repatriation in the future would not result in U.S. federal income tax. Accordingly, there is no provision for U.S. deferred taxes on this cash. If this cash were repatriated to fund U.S. operations, additional withholding tax costs may be incurred. Tax is only one of the many factors that we consider in the management of global cash. Accordingly, the amount of taxes that we would need to accrue and pay to repatriate foreign cash could vary significantly.

In several of our consolidated international subsidiaries, we have joint venture partners, who are minority shareholders. Although these entities are not wholly-owned by Itron, Inc., we consolidate them because we have a greater than 50% ownership interest and/or because we exercise control over the operations. The noncontrolling interest balance in our Consolidated Balance Sheets represents the proportional share of the equity of the joint venture entities, which is attributable to the minority shareholders. At September 30, 2020, $7.9 million of our consolidated cash balance is held in our joint venture entities. As a result, the minority shareholders of these entities have rights to their proportional share of this cash balance, and there may be limitations on our ability to repatriate cash to the United States from these entities.

General Liquidity Overview
Notwithstanding the expected short to mid-term impacts of the COVID-19 pandemic, we expect to grow through a combination of internal new research and development, licensing technology from and to others, distribution agreements, partnering arrangements, and acquisitions of technology or other companies. We expect these activities to be funded with existing cash, cash flow from operations, borrowings, or the sale of our common stock or other securities. We believe existing sources of liquidity will be sufficient to fund our existing operations and obligations for the next 12 months and into the foreseeable future, but offer no assurances. Our liquidity could be affected by the stability of the electricity, gas, and water industries, competitive pressures, our dependence on certain key vendors and components, changes in estimated liabilities for product warranties and/or litigation, duration of the COVID-19 pandemic, future business combinations, capital market fluctuations, international risks, and other factors described under "Risk Factors" within Item 1A of Part I of our 2019 Annual Report, as well as "Quantitative and Qualitative Disclosures About Market Risk" within Item 3 of Part I included in this Quarterly Report on Form 10-Q.

Contingencies

Refer to Item 1: "Financial Statements (Unaudited), Note 11: Commitments and Contingencies".

Critical Accounting Estimates and Policies

Our consolidated financial statements and accompanying notes are prepared in accordance with U.S. GAAP. Preparing consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses. These estimates and assumptions are based on historical experience and on various other assumptions management believes to be reasonable. Actual results could differ from the amounts reported and disclosed herein. Our critical accounting policies that require the use of estimates and assumptions were discussed in detail in the 2019 Annual Report and have not changed materially.

Refer to Item 1: "Financial Statements (Unaudited), Note 1: Summary of Significant Accounting Policies" included in this Quarterly Report on Form 10-Q for further disclosures regarding new accounting pronouncements.

Non-GAAP Measures

The accompanying schedule contains non-GAAP financial measures. To supplement our consolidated financial statements, which are prepared in accordance with GAAP, we use certain non-GAAP financial measures, including non-GAAP operating expense, non-GAAP operating income, non-GAAP net income, non-GAAP diluted EPS, adjusted EBITDA, free cash flow, and constant currency. The presentation of this financial information is not intended to be considered in isolation or as a substitute for, or superior to, the financial information prepared and presented in accordance with GAAP, and other companies may define such measures differently. For more information on these non-GAAP financial measures, please see the table captioned "Reconciliations of Non-GAAP Financial Measures to the Most Directly Comparable GAAP Financial Measures".

We use these non-GAAP financial measures for financial and operational decision making and/or as a means for determining executive compensation. Management believes that these non-GAAP financial measures provide meaningful supplemental information regarding our performance and ability to service debt by excluding certain expenses that may not be indicative of our recurring core operating results. These non-GAAP financial measures facilitate management's internal comparisons to our historical performance, as well as comparisons to our competitors' operating results. Our executive compensation plans exclude non-cash charges related to amortization of intangibles and certain discrete cash and non-cash charges, such as acquisition and integration related expenses, or restructuring charges. We believe that both management and investors benefit from referring to these non-GAAP financial measures in assessing our performance and when planning, forecasting and analyzing future periods. We believe these non-GAAP financial measures are useful to investors because they provide greater transparency with respect to key metrics used by management in its financial and operational decision making and because they are used by our institutional investors and the analyst community to analyze the health of our business.

Non-GAAP operating expenses and *non-GAAP operating income* – We define non-GAAP operating expenses as operating expenses excluding certain expenses related to the amortization of intangible assets, restructuring, loss on sale of business, corporate transition cost, and acquisition and integration. We define non-GAAP operating income as operating income excluding the expenses related to the amortization of intangible assets, restructuring, loss on sale of business, corporate transition cost, and acquisition and integration. Acquisition and integration related expenses include costs, which are incurred to affect and integrate business combinations, such as professional fees, certain employee retention and salaries related to integration, severances, contract terminations, travel costs related to knowledge transfer, system conversion costs, and asset impairment charges. We consider these non-GAAP financial measures to be useful metrics for management and investors because they exclude the effect of expenses that are related to acquisitions and restructuring projects. By excluding these expenses, we believe that it is easier for management and investors to compare our financial results over multiple periods and analyze trends in our operations. For example, in certain periods, expenses related to amortization of intangible assets may decrease, which would improve GAAP operating margins, yet the improvement in GAAP operating margins due to this lower expense is not necessarily reflective of an improvement in our core business. There are some limitations related to the use of non-GAAP operating expenses and non-GAAP operating income versus operating expenses and operating income calculated in accordance with GAAP. We compensate for these limitations by providing specific information about the GAAP amounts excluded from non-GAAP operating expense and non-GAAP operating income and evaluating non-GAAP operating expense and non-GAAP operating income together with GAAP operating expense and operating income.

Non-GAAP net income and *non-GAAP diluted EPS* – We define non-GAAP net income as net income attributable to Itron, Inc. excluding the expenses associated with amortization of intangible assets, amortization of debt placement fees, restructuring, loss on sale of business, corporate transition cost, acquisition and integration, and the tax effect of excluding these expenses. We define non-GAAP diluted EPS as non-GAAP net income divided by the weighted average shares, on a diluted basis, outstanding during each period. We consider these financial measures to be useful metrics for management and investors for the same reasons that we use non-GAAP operating income. The same limitations described above regarding our use of non-GAAP operating income apply to our use of non-GAAP net income and non-GAAP diluted EPS. We compensate for these limitations by providing specific information regarding the GAAP amounts excluded from these non-GAAP measures and evaluating non-GAAP net income and non-GAAP diluted EPS together with GAAP net income attributable to Itron, Inc. and GAAP diluted EPS.

For interim periods, beginning the first quarter of 2019, the budgeted annual effective tax rate (AETR) is used, adjusted for any discrete items, as defined in ASC 740 - Income Taxes. The budgeted AETR is determined at the beginning of the fiscal year. The AETR is revised throughout the year based on changes to our full-year forecast. If the revised AETR increases or decreases by 200 basis points or more from the budgeted AETR due to changes in the full-year forecast during the year, the revised AETR is used in place of the budgeted AETR beginning with the quarter the 200 basis point threshold is exceeded and going forward for all subsequent interim quarters in the year. We continue to assess the AETR based on latest forecast throughout the year and use the most recent AETR anytime it increases or decreases by 200 basis points or more from the prior interim period.

Adjusted EBITDA – We define adjusted EBITDA as net income (a) minus interest income, (b) plus interest expense, depreciation and amortization of intangible assets, restructuring, loss on sale of business, corporate transition cost, acquisition and integration related expense, and (c) excluding income tax provision or benefit. Management uses adjusted EBITDA as a performance measure for executive compensation. A limitation to using adjusted EBITDA is that it does not represent the total increase or decrease in the cash balance for the period and the measure includes some non-cash items and excludes other non-cash items. Additionally, the items that we exclude in our calculation of adjusted EBITDA may differ from the items that our peer companies exclude when they report their results. We compensate for these limitations by providing a reconciliation of this measure to GAAP net income (loss).

Free cash flow – We define free cash flow as net cash provided by operating activities less cash used for acquisitions of property, plant and equipment. We believe free cash flow provides investors with a relevant measure of liquidity and a useful basis for assessing our ability to fund our operations and repay our debt. The same limitations described above regarding our use of adjusted EBITDA apply to our use of free cash flow. We compensate for these limitations by providing specific information regarding the GAAP amounts and reconciling to free cash flow.

Constant currency – We refer to the impact of foreign currency exchange rate fluctuations in our discussions of financial results, which references the differences between the foreign currency exchange rates used to translate operating results from the entity's functional currency into U.S. dollars for financial reporting purposes. We also use the term "constant currency", which represents financial results adjusted to exclude changes in foreign currency exchange rates as compared with the rates in the comparable prior year period. We calculate the constant currency change as the difference between the current period results and the comparable prior period's results restated using current period foreign currency exchange rates.

Reconciliations of Non-GAAP Financial Measures to the Most Directly Comparable GAAP Financial Measures

The tables below reconcile the non-GAAP financial measures of operating expenses, operating income, net income, diluted EPS, adjusted EBITDA, and free cash flow with the most directly comparable GAAP financial measures.

TOTAL COMPANY RECONCILIATIONS	Three Months Ended September 30,		Nine Months Ended September 30,	
In thousands, except per share data	2020	2019	2020	2019
NON-GAAP OPERATING EXPENSES				
GAAP operating expenses	$ 167,231	$ 156,965	$ 496,331	$ 471,061
Amortization of intangible assets	(11,183)	(16,095)	(33,488)	(48,185)
Restructuring	(44,462)	(6,592)	(41,531)	(7,685)
Loss on sale of business	(380)	—	(57,295)	—
Corporate transition cost	—	(57)	33	(1,613)
Acquisition and integration related expense	2,348	(3,834)	738	(24,593)
Non-GAAP operating expenses	$ 113,554	$ 130,387	$ 364,788	$ 388,985
NON-GAAP OPERATING INCOME				
GAAP operating income (loss)	$ (23,980)	$ 39,439	$ (42,997)	$ 103,820
Amortization of intangible assets	11,183	16,095	33,488	48,185
Restructuring	44,462	6,592	41,531	7,685
Loss on sale of business	380	—	57,295	—
Corporate transition cost	—	57	(33)	1,613
Acquisition and integration related expense	(2,348)	3,834	(738)	24,593
Non-GAAP operating income	$ 29,697	$ 66,017	$ 88,546	$ 185,896
NON-GAAP NET INCOME & DILUTED EPS				
GAAP net income (loss) attributable to Itron, Inc.	$ (25,357)	$ 16,847	$ (79,475)	$ 34,386
Amortization of intangible assets	11,183	16,095	33,488	48,185
Amortization of debt placement fees	972	1,240	2,898	3,555
Restructuring	44,462	6,592	41,531	7,685
Loss on sale of business	380	—	57,295	—
Corporate transition cost	—	57	(33)	1,613
Acquisition and integration related expense	(2,348)	3,834	(738)	24,593
Income tax effect of non-GAAP adjustments	(4,658)	(3,269)	(6,037)	(16,131)
Non-GAAP net income attributable to Itron, Inc.	$ 24,634	$ 41,396	$ 48,929	$ 103,886
Non-GAAP diluted EPS	$ 0.61	$ 1.04	$ 1.21	$ 2.60
Non-GAAP weighted average common shares outstanding - Diluted	40,559	39,903	40,507	39,884
ADJUSTED EBITDA				
GAAP net income (loss) attributable to Itron, Inc.	$ (25,357)	$ 16,847	$ (79,475)	$ 34,386
Interest income	(354)	(517)	(2,165)	(1,379)
Interest expense	10,810	12,868	33,771	39,899
Income tax provision	(11,985)	6,152	366	20,692
Depreciation and amortization	24,076	28,623	72,306	85,691
Restructuring	44,462	6,592	41,531	7,685
Loss on sale of business	380	—	57,295	—
Corporate transition cost	—	57	(33)	1,613
Acquisition and integration related expense	(2,348)	3,834	(738)	24,593
Adjusted EBITDA	$ 39,684	$ 74,456	$ 122,858	$ 213,180
FREE CASH FLOW				
Net cash provided by operating activities	$ 44,785	$ 50,037	$ 70,571	$ 128,100
Acquisitions of property, plant, and equipment	(7,248)	(18,059)	(36,297)	(44,570)
Free Cash Flow	$ 37,537	$ 31,978	$ 34,274	$ 83,530

Item 3: Quantitative and Qualitative Disclosures about Market Risk

In the normal course of business, we are exposed to interest rate and foreign currency exchange rate risks that could impact our financial position and results of operations. As part of our risk management strategy, we may use derivative financial instruments to hedge certain foreign currency and interest rate exposures. Our objective is to offset gains and losses resulting from these exposures with losses and gains on the derivative contracts used to hedge them, therefore reducing the impact of volatility on earnings or protecting the fair values of assets and liabilities. We use derivative contracts only to manage existing underlying exposures. Accordingly, we do not use derivative contracts for trading or speculative purposes.

Interest Rate Risk

We are exposed to interest rate risk through our variable rate debt instruments. In March 2020, we entered into an interest rate swap, which is effective from June 30, 2020 to June 30, 2023, and converts $240 million of our LIBOR-based debt from a floating LIBOR interest rate to a fixed interest rate of 0.617% (excluding the applicable margin). The notional balance will amortize to maturity at the same rate of originally required amortizations on our term loan. At September 30, 2020, our LIBOR-based debt balance was $950.2 million.

In April 2018, we entered into a cross-currency swap, which converts $56.0 million of floating rate LIBOR-based U.S. dollar denominated debt into 1.38% fixed rate euro denominated debt. This cross-currency swap matures on April 30, 2021 and mitigates the risk associated with fluctuations in interest and currency rates impacting cash flows related to a U.S. dollar denominated debt in a euro functional currency entity.

The table below provides information about our financial instruments that are sensitive to changes in interest rates and the scheduled minimum repayment of principal and the weighted average interest rates at September 30, 2020. Weighted average variable rates in the table are based on implied forward rates in the Reuters U.S. dollar yield curve as of September 30, 2020 and our estimated leverage ratio, which determines our additional interest rate margin at September 30, 2020.

Dollars in thousands	2020	2021	2022	2023	2024	Total	Fair Value
Variable Rate Debt							
Principal: U.S. dollar term loan	$ —	$ 32,422	$ 44,063	$ 44,063	$ 429,608	$ 550,156	$ 533,223
Weighted average interest rate	1.65 %	1.64 %	1.65 %	1.72 %	1.87 %		
Principal: Multicurrency revolving line of credit	$ —	$ —	$ —	$ —	$ 400,000	$ 400,000	$ 386,086
Weighted average interest rate	1.65 %	1.64 %	1.65 %	1.72 %	1.87 %		
Interest rate swap							
Weighted average interest rate (pay) Fixed	0.62 %	0.62 %	0.62 %	0.62 %			
Weighted average interest rate (receive) Floating LIBOR	0.15 %	0.14 %	0.15 %	0.19 %			
Cross currency swap							
Weighted average interest rate (pay) Fixed - EURIBOR	1.38 %	1.38 %					
Weighted average interest rate (receive) Floating - LIBOR	0.15 %	0.17 %					

Based on a sensitivity analysis as of September 30, 2020, we estimate that, if market interest rates average one percentage point higher in 2020 than in the table above, our financial results in 2020 would not be materially impacted.

We continually monitor and assess our interest rate risk and may institute additional interest rate swaps or other derivative instruments to manage such risk in the future.

Foreign Currency Exchange Rate Risk

We conduct business in a number of countries. Revenues denominated in functional currencies other than the U.S. dollar were 37% and 36% of total revenues for the three and nine months ended September 30, 2020 compared with 38% and 37% for the same respective periods in 2019. These transactions expose our account balances to movements in foreign currency exchange rates that could have a material effect on our financial results. Our primary foreign currency exposure relates to non-U.S. dollar denominated transactions in our international subsidiary operations, the most significant of which is the euro.

We are also exposed to foreign exchange risk when we enter into non-functional currency transactions, both intercompany and third party. At each period-end, non-functional currency monetary assets and liabilities are revalued with the change recognized to other income and expense. We enter into monthly foreign exchange forward contracts, which are not designated for hedge accounting, with the intent to reduce earnings volatility associated with currency exposures. As of September 30, 2020, a total of 43 contracts were offsetting our exposures from the euro, Canadian dollar, Pound Sterling, Brazilian Real, Chinese yuan and various other currencies, with notional amounts ranging from $102,000 to $26.4 million. Based on a sensitivity analysis as of September 30, 2020, we estimate that, if foreign currency exchange rates average ten percentage points higher in 2020 for these financial instruments, our financial results in 2020 would not be materially impacted.

In future periods, we may use additional derivative contracts to protect against foreign currency exchange rate risks.

Item 4: Controls and Procedures

Evaluation of disclosure controls and procedures

An evaluation was performed under the supervision and with the participation of our Company's management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e)) under the Securities Exchange Act of 1934 as amended. Based on that evaluation, the Company's management, including the Chief Executive Officer and Chief Financial Officer, concluded that as of September 30, 2020, the Company's disclosure controls and procedures were effective to ensure the information required to be disclosed by an issuer in the reports that it files or submits under the Securities Exchange Act of 1934 is accumulated and communicated to our management, including our principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives.

Changes in internal controls over financial reporting

There have been no changes in our internal control over financial reporting during the three months ended September 30, 2020 that materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

PART II: OTHER INFORMATION

Item 1: Legal Proceedings

Refer to Item 1: "Financial Statements (Unaudited), Note 11: Commitments and Contingencies".

Item 1A: Risk Factors

For a complete list of Risk Factors, refer to Item 1A: "Risk Factors" of Part I of our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, which was filed with the Securities and Exchange Commission on February 27, 2020.

We have been and will continue to be affected by the ongoing COVID-19 pandemic, and such effects could have an adverse effect on our business operations, results of operations, cash flows, and financial condition.

We have experienced disruptions to our business from the ongoing COVID-19 pandemic, and the full impact of the COVID-19 pandemic on all aspects of our business and geographic markets is highly uncertain and cannot be predicted with confidence. This includes how it may impact our customers, employees, vendors, strategic partners, managed services, and manufacturing operations. The COVID-19 pandemic has created significant volatility, uncertainty, and economic disruption, which has and may continue to materially and adversely affect our business operations, cash flows, and financial condition.

The impact of the virus on third parties on which we rely, such as our suppliers, contract manufacturers, distributors, and strategic partners, cannot be fully known or controlled by us. As a result, we may experience difficulties sourcing components and other critical inventory. The impact of the COVID-19 pandemic on our customers and demand for our products is also uncertain. Due to resulting financial constraints, illness within their organizations, quarantine and travel restrictions placed upon our customers' employees, as well as individual actions our customers may take in response to the spread of COVID-19, our customers may have difficulty in making timely payments to us or may have an inability or unwillingness to purchase our products and services. Also, certain of our projects require regulatory approvals, and our customers may experience delays in regulatory approvals. Any of these effects may materially and adversely affect us.

Our management has taken measures, both voluntary and as a result of government directives and guidance, to mitigate the effects of the COVID-19 pandemic on us and others. These measures include, among others, restrictions on our employees' access to our physical work locations and the purchase of personal protective equipment. Additionally, we may implement the temporary closure or reduction in operations of certain of our manufacturing facilities, which would be disruptive to our operations. We have also implemented measures to allow certain employees to work remotely, which may place a burden on our IT systems and may expose us to increased vulnerability to cyber-attack and other cyber-disruption. Many of these measures may result in incremental costs to us, and such costs may not be recoverable or adequately covered by our insurance. Further, any focus by our management on mitigating COVID-19 effects has required, and will continue to require, a large investment of time and resources, which may delay other value-add initiatives.

As a company with global operations, we are subject to numerous government jurisdictions at all levels that are addressing COVID-19 differently. The guidance and directives provided by these governmental authorities is difficult to predict, may be unclear in their application, and are unknown in duration. This includes uncertainty in governmental authorities' assessments of our business as "essential". If governmental authorities were to reverse their designation of our business as "essential", it could have a material effect on our results of operations and cash flows.

The full extent to which the COVID-19 pandemic impacts us depends on numerous evolving factors and future developments that we are not able to predict at this time, including: medical advancements to treat or stop the virus; governmental, business, and other actions (which could include limitations on our operations to provide products or services); the duration of the outbreak and the related limitations on our ability to conduct business; or the length of time and velocity at which we will return to more normalized operations. In addition, we cannot predict the impact that COVID-19 will have on our customers, vendors, strategic partners, and other business partners and each of their financial conditions; however, any material effect on these parties could materially and adversely impact us. The impact of COVID-19 may also include possible impairment or other charges and may exacerbate other risks discussed in Item 1A: Risk Factors in our Annual Report on Form 10-K, any of which could have a material effect on us. This situation is changing rapidly and additional impacts may arise that we are not aware of currently.

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

(a) Not applicable.

(b) Not applicable.

(c) Issuer Repurchase of Equity Securities

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share (2)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
				In thousands
July 1, 2020 through July 31, 2020	—	$ —	—	$ —
August 1, 2020 through August 31, 2020	4,370	67.06	—	—
September 1, 2020 through September 30, 2020	—	—	—	—
Total	4,370		—	

(1) Shares repurchased represent shares transferred to us by certain employees who vested in restricted stock units and used shares to pay all, or a portion of, the related taxes.

(2) Includes commissions.

Item 5: Other Information

(a) No information was required to be disclosed in a report on Form 8-K during the third quarter of 2020 that was not reported.

(b) Not applicable.

Item 6: Exhibits

Exhibit Number	Description of Exhibits
4.1	Amendment No. 2 dated October 19, 2020, to the Second Amended and Restated Credit Agreement dated January 5, 2018 (incorporated by reference from the Form 8-K filed on January 12, 2018, by the Company) among Itron, Inc., certain foreign borrowers, guarantors, lenders and issuing parties thereto, and Wells Fargo Bank, National Association, as administrative agent.
31.1	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	The following financial information from Itron, Inc.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2020 formatted in Inline XBRL (Extensible Business Reporting Language) includes: (i) the Consolidated Statements of Operations, (ii) the Consolidated Statements of Comprehensive Income (Loss), (iii) the Consolidated Balance Sheets, (iv) the Consolidated Statements of Equity, (v) the Consolidated Statements of Cash Flows, and (vi) Notes to the Consolidated Financial Statements.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

SIGNATURE

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.

ITRON, INC.

November 2, 2020	By:	/s/ JOAN S. HOOPER
Date		**Joan S. Hooper** **Senior Vice President and Chief Financial Officer**

AMENDMENT NO. 2 dated as of October 19, 2020 (this "Amendment"), to the SECOND AMENDED AND RESTATED CREDIT AGREEMENT dated as of January 5, 2018 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement"; capitalized terms used and not defined herein shall have the meanings assigned to such terms in the Credit Agreement), among ITRON, INC., a Washington corporation (the "Company"), the FOREIGN BORROWERS and GUARANTORS party thereto, the LENDERS and ISSUING LENDERS party thereto and WELLS FARGO BANK, NATIONAL ASSOCIATION ("Wells Fargo"), as Administrative Agent (in such capacity, the "Administrative Agent").

WHEREAS, pursuant to the Credit Agreement, the Lenders and the Issuing Lenders have agreed to extend credit to the Borrower on the terms and subject to the conditions set forth therein; and

WHEREAS, the Company has requested that certain provisions of the Credit Agreement be amended as set forth herein; and

WHEREAS, the undersigned Lenders are willing to amend such provisions of the Credit Agreement, in each case on the terms and subject to the conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual agreements herein contained and other good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, and subject to the conditions set forth herein, the parties hereto hereby agree as follows:

SECTION 1. Rules of Interpretation. The rules of interpretation set forth in Section 1.2 of the Credit Agreement are hereby incorporated by reference herein, mutatis mutandis.

SECTION 2. Amendments to the Credit Agreement.

(a) Section 1.1 of the Credit Agreement is hereby amended by adding the following definitions in the appropriate alphabetical order:

"Affected Financial Institution" shall mean (a) any EEA Financial Institution or (b) any UK Financial Institution.

"Resolution Authority" shall mean an EEA Resolution Authority or, with respect to any UK Financial Institution, a UK Resolution Authority.

"Second Amendment Effective Date" shall mean October 19, 2020.

"UK Financial Institution" shall mean any BRRD Undertaking (as such term is defined under the PRA Rulebook (as amended form time to time) promulgated by the United Kingdom Prudential Regulation Authority) or any Person falling within IFPRU 11.6 of the FCA Handbook (as amended from time to time) promulgated by the United Kingdom Financial Conduct Authority, which includes certain credit institutions and investment firms, and certain affiliates of such credit institutions or investment firms.

"UK Resolution Authority" shall mean the Bank of England or any other public administrative authority having responsibility for the resolution of any UK Financial Institution.

(b) Section 1.1 of the Credit Agreement is hereby amended by (i) replacing the text "Level IV" in the last paragraph of the definition of the term "Applicable Margin" with the text "Level V" and (ii) replacing the pricing grid in the definition of the term "Applicable Margin" with the following pricing grid:

Level	**Total Net Leverage Ratio**	**Eurocurrency Margin & LOC Fee**	**Base Rate Margin**	**Commitment Fee**
I	Less than or equal to 2.00 to 1.00	1.00%	0.00%	0.150%
II	Greater than 2.00 to 1.00 but less than or equal to 2.50 to 1.00	1.25%	0.25%	0.175%
III	Greater than 2.50 to 1.00 but less than or equal to 3.50 to 1.00	1.50%	0.50%	0.200%
IV	Greater than 3.50 to 1.00 but less than or equal to 4.00 to 1.00	1.75%	0.75%	0.250%
V	Greater than 4.00 to 1.00	2.00%	1.00%	0.300%

(c) Section 1.1 of the Credit Agreement is hereby amended by restating the definition of "Bail-In Action" to read in its entirety as follows:

"Bail-In Action" shall mean the exercise of any Write-Down and Conversion Powers by the applicable Resolution Authority in respect of any liability of any Affected Financial Institution.

(d) Section 1.1 of the Credit Agreement is hereby amended by restating the definition of "Bail-In Legislation" to read in its entirety as follows:

> "Bail-In Legislation" shall mean (a) with respect to any EEA Member Country which has implemented, or which at any time implements, Article 55 BRRD, the relevant implementing law or regulation as described in the EU Bail-In Legislation Schedule from time to time; and (b) with respect to the United Kingdom, Part I of the United Kingdom Banking Act 2009 (as amended from time to time) and any other law, regulation or rule applicable in the United Kingdom relating to the resolution of unsound or failing banks, investment firms or other financial institutions or their affiliates (other than through liquidation, administration or other insolvency proceedings).

(e) Section 1.1 of the Credit Agreement is hereby amended by restating the definition of "Write-Down and Conversion Powers" to read in its entirety as follows:

> "Write-Down and Conversion Powers" shall mean (a) with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule and (b) with respect to the United Kingdom, any powers of the applicable Resolution Authority under the Bail-In Legislation to cancel, reduce, modify or change the form of a liability of any UK Financial Institution or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that Person or any other Person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that Bail-In Legislation that are related to or ancillary to any of those powers

(f) Section 6.13 of the Credit Agreement is hereby amended by replacing the table in paragraph (a) of such Section with the following table:

Date of Fiscal Quarter End	Total Net Leverage Ratio
March 31, 2018 through June 30, 2019	4.75 to 1.00
September 30, 2019 through June 30, 2020	4.50 to 1.00
September 30, 2020	4.25 to 1.00
December 31, 2020 through March 31, 2021	4.75 to 1.00
June 30, 2021 through December 31, 2021	4.50 to 1.00
March 31, 2022 through the Maturity Date	4.00 to 1.00

(g) Section 10.27 of the Credit Agreement is hereby amended by adding the following text immediately before the proviso in such Section: “or the European Union’s blocking statute (Council Regulation (EC) 2271/96)”.

(h) Section 10.28 of the Credit Agreement is hereby amended as follows: (i) replacing the text “any EEA Financial Institution” in the lead-in paragraph of such Section with the text “any Affected Financial Institution”, (ii) replacing the text “an EEA Resolution Authority” in the lead-in paragraph of such Section with the text “the applicable Resolution Authority”, (iii) replacing the text “an EEA Resolution Authority in clause (a) of such Section with the text “the applicable Resolution Authority”, (iv) replacing the text “an EEA Financial Institution” in clause (a) of such Section with the text “an Affected Financial Institution”, (v) replacing the text “such EEA Financial Institution” in clause (b)(ii) of such Section with the text “such Affected Financial Institution”, (vi) replacing the text “or” at the end of clause (b)(ii) of such Section with the text “and” and (vii) replacing the text “any EEA Resolution Authority” in clause (b)(iii) of such Section with the text “the applicable Resolution Authority”.

SECTION 3. Representations and Warranties. Each of the Credit Parties represents and warrants to the Administrative Agent and to each of the Lenders and Issuing Lenders that:

(a) The execution, delivery and performance by the Credit Parties of this Amendment, and the consummation of the transactions contemplated hereby, (i) are within each of the Credit Party’s company powers, (ii) require no consent or approval of (including any exchange control approval) or action by or in respect of, or registration or filing with, any Governmental Authority, agency or official, except such as have been obtained or made and are in full force and effect, (iii) do not contravene, or constitute a default under, any provision of applicable law, regulation or order of any Governmental Authority or the organizational documents of any Credit Party or of any judgment, injunction, order or decree binding upon any Credit Party, (iv) do not result in the creation or imposition of any Lien on any asset of a Credit Party except Liens in favor of the Administrative Agent and/or the Collateral Agent (for the benefit of the Secured Parties) and (v) will not violate or result in a default under any indenture, loan agreement or other material agreement or instrument binding upon any Credit Party or its assets, or give rise to a right thereunder to require any payment to be made by a Credit Party.

(b) This Amendment has been duly authorized, executed and delivered by it and each of this Amendment and the Credit Agreement, as amended hereby, constitutes its legal, valid and binding obligation, enforceable against such Credit Party in accordance with its terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium or other laws affecting creditors’ rights generally and subject to general principles of equity, regardless of whether considered in a proceeding in equity or at law.

(c) The representations and warranties made by the Credit Parties in the Credit Agreement and the other Credit Documents shall (i) with respect to representations and warranties that contain a materiality qualification or are qualified by Material Adverse Effect, be true and correct and (ii) with respect to representations and warranties that do not contain a materiality qualification and are not qualified by Material Adverse Effect, be true and correct in all material respects, in each case as of the Amendment Effective Date as if made on and as of such date, except for any representation or warranty made as of an earlier date, which representation and warranty shall (x) with respect to representations and warranties that contain a materiality qualification or are qualified by Material Adverse Effect, be true and correct as of such earlier date and (y) with respect to representations and warranties that do not contain a materiality qualification and are not qualified by Material Adverse Effect, be true and correct in all material respects as of such earlier date.

(d) At the time of and immediately after giving effect to this Amendment, no Default or Event of Default shall have occurred and be continuing on and as of the Amendment Effective Date.

(e) As of the Amendment Effective Date, to the best knowledge of each Credit Party, the information included in the Beneficial Ownership Certification provided on or prior to the Amendment Effective Date to the Administrative Agent or any Lender as set forth herein is true and correct in all respects.

SECTION 4. Effectiveness. This Amendment shall become effective as of the date first above written (the "Amendment Effective Date") when (a) the Administrative Agent shall have received counterparts of this Amendment that, when taken together, bear the signatures of (i) the Company and each other Credit Party party hereto and (ii) Lenders comprising the Required Lenders immediately prior to the Amendment Effective Date, (b) each of the representations and warranties set forth in Section 4 hereof shall be true and correct, (c) the Administrative Agent shall have received such documents and certificates as the Administrative Agent or its counsel may reasonably request relating to the organization, existence and good standing of each Credit Party, the authorization of this Amendment and the transactions contemplated hereby and any other legal matters relating to the Credit Parties, the Credit Documents or the transactions contemplated hereby (including certified resolutions from the board of directors (or similar governing body) of each Credit Party authorizing the execution, delivery and performance of this Amendment), all in form and substance reasonably satisfactory to the Administrative Agent, (d) the Administrative Agent and the Lenders shall have received all documentation and other information required by bank regulatory authorities under applicable "know your customer" and anti-money laundering rules and regulations, including the USA PATRIOT Act and the Beneficial Ownership Regulation, in each case to the extent requested in writing to the Company not later than five Business Days prior to the proposed Amendment Effective Date, including, without limitation, a Beneficial Ownership Certification with respect to each Credit Party that qualifies as a "legal entity customer" under the Beneficial Ownership Regulation and (e) the Administrative Agent shall have received payment of all fees and expenses required to be paid or reimbursed by the Company under or in connection with this Amendment, including those fees and expenses set forth in Section 9 hereof.

SECTION 5. Reaffirmation. Each of the Company and each other Credit Party hereby (a) reaffirms its obligations under the Credit Agreement and each other Credit Document to which it is a party, in each case as amended by this Amendment, (b) reaffirms all Liens on the Collateral which have been granted by it in favor of the Administrative Agent and/or the Collateral Agent (for the benefit of the Secured Parties) pursuant to the Credit Documents and (c) acknowledges and agrees that the grants of security interests by and the guarantees of the Credit Parties contained in the Security Agreement and the other Security Documents are, and shall remain, in full force and effect immediately after giving effect to this Amendment.

SECTION 6. Credit Agreement. Except as expressly set forth herein, this Amendment (a) shall not by implication or otherwise limit, impair, constitute a waiver of or otherwise affect the rights and remedies of the Lenders, the Issuing Lenders, the Administrative Agent or any Credit Party under the Credit Agreement or any other Credit Document and (b) shall not alter, modify, amend or in any way affect any of the terms, conditions, obligations, covenants or agreements contained in the Credit Agreement or any other Credit Document, all of which are ratified and affirmed in all respects and shall continue in full force and effect. Nothing herein shall be deemed to entitle any Credit Party to any future consent to, or waiver, amendment, modification or other change of, any of the terms, conditions, obligations, covenants or agreements contained in the Credit Agreement or any other Credit Document in similar or different circumstances. After the Amendment Effective Date, each reference in the Credit Agreement to “this Agreement”, “hereunder”, “hereof” or words of like import referring to the Credit Agreement, and each reference in the other Credit Documents to “the Credit Agreement”, “thereunder”, “thereof” or words of like import referring to the Credit Agreement, shall mean and be a reference to the Credit Agreement as modified hereby. This Amendment shall constitute a “Credit Document” for all purposes of the Credit Agreement and the other Credit Documents.

SECTION 7. Applicable Law; Waiver of Jury Trial. (a) **THIS AMENDMENT AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING OUT OF OR RELATING TO THIS AMENDMENT AND THE TRANSACTIONS CONTEMPLATED HEREBY SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.**

(b) EACH PARTY HERETO HEREBY AGREES AS SET FORTH IN SECTIONS 10.13 AND 10.16 OF THE CREDIT AGREEMENT (AS IN EFFECT ON THE DATE HEREOF) AS IF SUCH SECTIONS WERE SET FORTH IN FULL HEREIN.

SECTION 8. Counterparts; Amendment. This Amendment may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. Delivery of an executed counterpart of a signature page of this Amendment by facsimile transmission or other electronic imaging shall be effective as delivery of an original executed counterpart of this Amendment. This Amendment may not be amended nor may any provision hereof be waived except pursuant to a writing signed by the Credit Parties, the Administrative Agent, the Issuing Lenders and the Lenders party hereto. The words “execution”, “signed”, “signature”, “delivery” and words of like import in or relating to this Amendment and/or any documents to be signed in connection with this Amendment and the transactions contemplated hereby shall be deemed to include Electronic Signatures (as defined below), deliveries or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature page, physical delivery thereof or the use of a paper-based recording system, as the case may be. As used herein, “Electronic Signatures” means any electronic symbol or process attached to, or associated with, any contract or other record and adopted by a person with the intent to sign, authenticate or accept such contract or record.

SECTION 9. Fees and Expenses.

(a) The Company hereby agrees to pay to the Administrative Agent on the Amendment Effective Date, for the account of each applicable party, all fees separately agreed to by the Company and Wells Fargo (or any of its Affiliates) in respect of this Amendment.

(b) The Company agrees to reimburse the Administrative Agent for its reasonable out-of-pocket expenses in connection with this Amendment to the extent required under Section 10.5(a) of the Credit Agreement.

SECTION 10. Headings. The Section headings used herein are for convenience of reference only, are not part of this Amendment and are not to affect the construction of, or to be taken into consideration in interpreting, this Amendment.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed by their respective authorized officers as of the day and year first written above.

ITRON, INC.

By

/s/ JOEL VACH

Name: Joel Vach

Title: VP Tax and Corporate Treasurer

ITRON NETWORKED SOLUTIONS, INC.

By

/s/ JOEL VACH

Name: Joel Vach

Title: Director

ITRON METERING SOLUTIONS LUXEMBOURG

By

/s/ CHRISTOPHER W. HARTMAN

Name: Christopher W. Hartman

Title: Manager

ITRON GLOBAL

By

/s/ CHRISTOPHER W. HARTMAN

Name: Christopher W. Hartman

Title: Manager

WELLS FARGO BANK, NATIONAL ASSOCIATION, as
Administrative Agent and a Lender

By

/s/ JESSY W. HUMMEL

Name: Jessy W. Hummel

Title: VP & Relationship Manager/Commercial Banker

[Amendment No. 2 to Second Amended and Restated Credit Agreement Signature Page]

LENDERS

SIGNATURE PAGE TO AMENDMENT NO. 2 TO THE SECOND AMENDED AND RESTATED CREDIT AGREEMENT DATED AS OF JANUARY 5, 2018, AMONG ITRON, INC., THE FOREIGN BORROWERS AND GUARANTORS PARTY THERETO, THE LENDERS AND ISSUING LENDERS PARTY THERETO AND WELLS FARGO BANK, NATIONAL ASSOCIATION, AS ADMINISTRATIVE AGENT

Name of Institution:

BANK OF THE WEST

By

/s/ LENI PRECIADO

Name: Leni Preciado

Title: Director & Market Manager

For institutions that require a second signature:

By

Name:

Title:

LENDERS

SIGNATURE PAGE TO AMENDMENT NO. 2 TO THE SECOND AMENDED AND RESTATED CREDIT AGREEMENT DATED AS OF JANUARY 5, 2018, AMONG ITRON, INC., THE FOREIGN BORROWERS AND GUARANTORS PARTY THERETO, THE LENDERS AND ISSUING LENDERS PARTY THERETO AND WELLS FARGO BANK, NATIONAL ASSOCIATION, AS ADMINISTRATIVE AGENT

Name of Institution:

BMO Harris Bank N.A.

By

/s/ ANDREW BERRYMAN

Name: Andrew Berryman

Title: Vice President

LENDERS

SIGNATURE PAGE TO AMENDMENT NO. 2 TO THE SECOND AMENDED AND RESTATED CREDIT AGREEMENT DATED AS OF JANUARY 5, 2018, AMONG ITRON, INC., THE FOREIGN BORROWERS AND GUARANTORS PARTY THERETO, THE LENDERS AND ISSUING LENDERS PARTY THERETO AND WELLS FARGO BANK, NATIONAL ASSOCIATION, AS ADMINISTRATIVE AGENT

Name of Institution:

BNP PARIBAS

By

/s/ GEORGE KO

Name: George Ko

Title: Director

For institutions that require a second signature:

By

/s/ DAVID BERGER

Name: David Berger

Title: Managing Director

LENDERS

SIGNATURE PAGE TO AMENDMENT NO. 2 TO THE SECOND AMENDED AND RESTATED CREDIT AGREEMENT DATED AS OF JANUARY 5, 2018, AMONG ITRON, INC., THE FOREIGN BORROWERS AND GUARANTORS PARTY THERETO, THE LENDERS AND ISSUING LENDERS PARTY THERETO AND WELLS FARGO BANK, NATIONAL ASSOCIATION, AS ADMINISTRATIVE AGENT

Name of Institution:

Citibank, N.A.

By

/s/ HANS LIN

Name: Hans Lin

Title: Director

For institutions that require a second signature:

By

Name:

Title:

LENDERS

SIGNATURE PAGE TO AMENDMENT NO. 2 TO THE SECOND AMENDED AND RESTATED CREDIT AGREEMENT DATED AS OF JANUARY 5, 2018, AMONG ITRON, INC., THE FOREIGN BORROWERS AND GUARANTORS PARTY THERETO, THE LENDERS AND ISSUING LENDERS PARTY THERETO AND WELLS FARGO BANK, NATIONAL ASSOCIATION, AS ADMINISTRATIVE AGENT

Name of Institution:

CITIZENS BANK, N.A.

By

/s/ A. PAUL DAWLEY

Name: A. Paul Dawley

Title: Senior Vice President

LENDERS

SIGNATURE PAGE TO AMENDMENT NO. 2 TO THE SECOND AMENDED AND RESTATED CREDIT AGREEMENT DATED AS OF JANUARY 5, 2018, AMONG ITRON, INC., THE FOREIGN BORROWERS AND GUARANTORS PARTY THERETO, THE LENDERS AND ISSUING LENDERS PARTY THERETO AND WELLS FARGO BANK, NATIONAL ASSOCIATION, AS ADMINISTRATIVE AGENT

Name of Institution:

Fifth Third Bank, National Association

By

/s/ YVONNE MONDRAGON

Name: Yvonne Mondragon

Title: Officer

LENDERS

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Name of Institution:

HSBC Bank USA, National Association

By

/s/ CHRIS BURNS

Name: Chris Burns

Title: Senior Vice President

LENDERS

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Name of Institution:

ING Bank

By

/s/ WOUTER JANSEN

Name: Wouter Jansen

Title: Director

For institutions that require a second signature:

By

/s/ MAXIMILIAN CUPRIAK

Name: Maximilian Cupriak

Title: Vice President

LENDERS

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Name of Institution:

ING Bank N.V., Dublin Branch

By

/s/ SEAN HASSETT

Name: Sean Hassett

Title: Director

For institutions that require a second signature:

By

/s/ PADRAIG MATTHEWS

Name: Padraig Matthews

Title: Director

LENDERS

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Name of Institution:

JP Morgan Chase, N.A.

By

/s/ LYNN BRAUN

Name: Lynn Braun

Title: Executive Director

LENDERS

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Name of Institution:

KEYBANK NATIONAL ASSOCIATION

By

/s/ TAD L. STAINBROOK

Name: Tad L. Stainbrook

Title: Vice President

LENDERS

SIGNATURE PAGE TO AMENDMENT NO. 2 TO THE SECOND AMENDED AND RESTATED CREDIT AGREEMENT DATED AS OF JANUARY 5, 2018, AMONG ITRON, INC., THE FOREIGN BORROWERS AND GUARANTORS PARTY THERETO, THE LENDERS AND ISSUING LENDERS PARTY THERETO AND WELLS FARGO BANK, NATIONAL ASSOCIATION, AS ADMINISTRATIVE AGENT

Name of Institution:

MUFG Union Bank, N.A.

By

/s/ MENG ZHANG

Name: Meng Zhang

Title: Vice President

LENDERS

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Name of Institution:

PNC BANK, NATIONAL ASSOCIATION

By

/s/ ANA GAYTAN

Name: Ana Gaytan

Title: Assistant Vice President

LENDERS

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Name of Institution:

Silicon Valley Bank

By

/s/ JACKSON MORROW

Name: Jackson Morrow

Title: Vice President

LENDERS

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Name of Institution:

TD BANK, N.A.

By

/s/ MATT WASZMER

Name: Matt Waszmer

Title: Senior Vice President

For institutions that require a second signature:

TD BANK USA, N.A.

By

/s/ MATT WASZMER

Name: Matt Waszmer

Title: Senior Vice President of TD Bank, N.A. as Servicing Agent for TD Bank USA, N.A.

LENDERS

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Name of Institution:

U.S. BANK NATIONAL ASSOCIATION

By

/s/ EDWARD B. HANSON

Name: Edward B. Hanson

Title: Senior Vice President

Exhibit 31.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 302 OF THE
SARBANES-OXLEY ACT OF 2002

I, Thomas L. Deitrich, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Itron, Inc.;

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.

ITRON, INC.

By: /s/ THOMAS L. DEITRICH

Thomas L. Deitrich
President and Chief Executive Officer

Date: November 2, 2020

Exhibit 31.2

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 302 OF THE
SARBANES-OXLEY ACT OF 2002**

I, Joan S. Hooper, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Itron, Inc.;

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.

ITRON, INC.

By: /s/ JOAN S. HOOPER

Joan S. Hooper
Senior Vice President and Chief Financial Officer

Date: November 2, 2020

Exhibit 32.1

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906 OF THE
SARBANES-OXLEY ACT OF 2002**

The certification set forth below is being submitted in connection with the Quarterly Report of Itron, Inc. (the Company) on Form 10-Q for the quarterly period ended September 30, 2020 (the Report) for the purpose of complying with Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 and Section 1350 of Chapter 63 of Title 18 of the United States Code.

Thomas L. Deitrich, the Chief Executive Officer and Joan S. Hooper, the Chief Financial Officer of the Company, each certifies that to the best of his or her knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; 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/ THOMAS L. DEITRICH	November 2, 2020
Thomas L. Deitrich **President and Chief Executive Officer**	**Date**
/s/ JOAN S. HOOPER	November 2, 2020
Joan S. Hooper **Senior Vice President and Chief Financial Officer**	**Date**