Ribbon Communications

Third Quarter 2022 Results

October 26, 2022

Note Regarding Forward-Looking Statements and Non-GAAP Financial Measures

This presentation contains “forward-looking statements” within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, which are subject to a number of risks and uncertainties. All statements other than statements of historical facts contained in this release, including without limitation statements regarding the Company’s projected financial results for the fourth quarter of 2022 and beyond; customer engagement and momentum; plans and objectives for future operations; and plans for future product development and manufacturing and the expected benefits therefrom, are forward-looking statements. Without limiting the foregoing, the words “believes”, “estimates”, “expects”, “expectations”, “intends”, “may”, “plans”, “projects” and other similar language, are intended to identify forward-looking statements..

Forward-looking statements are based on the Company’s current expectations and assumptions regarding its business, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. Actual results may differ materially from those contemplated in these forward-looking statements due to various risks, uncertainties and other important factors, including, among others, the effects of geopolitical instabilities and disputes, including between Russia and Ukraine and the impact of sanctions imposed as a result thereof; the potential impact of litigation; risks related to supply chain disruptions, including as a result of component availability; risks related to the continuing COVID-19 pandemic, including delays in customer deployments as a result of rises in cases; risks that the Company will not realize the anticipated benefits from the acquisition of ECI Telecom Group Ltd. (the “ECI Acquisition”); risks that the Company will not realize the estimated cost savings and/or anticipated benefits from its strategic restructuring; the impact of restructuring and cost-containment activities; unpredictable fluctuations in quarterly revenue and operating results; risks related to the terms of the Company’s credit agreement including compliance with the financial covenants; risks related to cybersecurity and data intrusion; failure to compete successfully against telecommunications equipment and networking companies; failure to grow the Company’s customer base or generate recurring business from existing customers; credit risks; the timing of customer purchasing decisions and the Company’s recognition of revenues; macroeconomic conditions, including inflation; market acceptance of the Company’s products and services; rapid technological and market change; the ability to protect Company intellectual property rights and obtain necessary licenses; the ability to maintain partner, reseller, distribution and vendor support and supply relationships; the potential for defects in the Company’s products; increases in tariffs, trade restrictions or taxes on the Company’s products; and currency fluctuations. Any forward-looking statements represent our views only as of the date on which such statement is made and should not be relied upon as representing our views as of any subsequent date. While we may elect to update forward-looking statements at some point, we specifically disclaim any obligation to do so, except as may be required by law.

This presentation also includes certain non-GAAP financial measures in addition to the U.S. GAAP financials. Our management believes that presenting certain non-GAAP financial measures provides meaningful information to investors in understanding our operating results and may enhance investors' ability to analyze financial and business trends including the ability to compare period to period more easily by excluding items that could have a disproportionately negative or positive impact on results in a given financial period. The non-GAAP measures have limitations as analytical tools, and you should not consider them in isolation or as a substitute for the most directly comparable financial measures prepared in accordance with U.S. GAAP. We urge you to review the reconciliation of our non-GAAP financial measures to the most directly comparable GAAP financial measures set forth in the Appendix to this presentation, and not to rely on any single financial measure to evaluate our business.

Please note that as part of the basis of presentation, totals may not sum due to rounding.

Third Quarter 2022 Business Overview

Bruce McClelland, President & CEO

Mick Lopez, Executive Vice President & CFO

Third Quarter 2022 Business Highlights | IP Optical

+20% **Growth** in Revenue QoQ

+90% **Bookings** growth QoQ

+50% **IP Routing** as a % of Product Bookings

900 +bp **Gross Margin** improvement

IP Routing win

5G Cell Site Router - (CSR)

based on Ribbon's Neptune IP/MPLS Router for **Airtel's** 5G roll-out

Tier 1 Carrier Opportunities

10%+ growth in Q4 expected

Third Quarter 2022 Business Highlights | Cloud & Edge

Enterprise Growth in Q3

UCaaS- Microsoft, Zoom, Google, RingCentral
Local government Centrex modernization

STIR/SHAKEN

International market leadership

U.S. Federal

Important agency win with foundation for future awards

2x$

Analytics

Revenues more than doubled

AT&T

AT&T 10%+ customer*

Network Transformation programs leveraging VoIP and IP routing portfolios

Maintenance

Strong multi-year renewal base

Network Modernization

Ongoing deployments

cbts

Operator Connect

Cincinnati Bell adopts Ribbon Connect

*As a percentage of total Ribbon revenues in the third quarter.

ribbon

Third Quarter 2022 Business Highlights | Enterprise

Government Education	University of Calgary	Significant voice network modernization with Ribbon unified communications solutions
		Network upgrades with Analytics, MNOC for several states
	United Nations	Continued expansion of Unified Communications application upgrade for global locations
Retail	Giant Eagle	Upgrade of network infrastructure to support MS Teams expansion
Oil & Gas	Marathon	Initial deployment for global MS Teams migration with further expansion in 2022/2023
Healthcare	ProMedica	Ribbon SBC, PSX, and analytics deployment
		First of three global data center expansions. SBCs for security of core Unified Communications application
Other	accenture	Continued global deployment for Ribbon SBCs for support of the largest MS Teams deployment for an Enterprise
	Dassault Systemes	One of several SBCaaS wins with Verizon supporting Unified Communications applications with SIP Trunking
Partner	poly	Hybrid Work Environment roadshows with Poly & Microsoft
	Google	Ribbon SBCs certified for Google Voice SIP Link for global availability

Third Quarter 2022 Financial Highlights

3Q22 Revenue

$207M up $1M QoQ
International 58% of Sales
Service Provider 70% of Sales

Balance Sheet

$56M Ending Cash
$52M Capital Raise
Average interest rate **5.40%**

Profitability Metrics

$23M Adjusted EBITDA
$0.02 Non-GAAP EPS

Cloud & Edge

Applications Growth

Software 61% of total Cloud and Edge product revenue

Enterprise 17% growth QoQ

Continued Profitability

65% Non-GAAP Gross Margin

Non-GAAP OpEx
$2.7M lower YoY

26% Adj. EBITDA Margin

IP Optical Networks

Revenue Growth

Up **20% QoQ** and **21% YoY**

North America **up 17% QoQ** and **140% YoY**

Europe **up 42% QoQ** and **30% YoY**

Market Momentum

Major Tier 1 carrier opportunities

98 Trials YTD, above FY21 levels

1.45x book to revenue ratio amid IP Routing momentum

Third Quarter 2022 GAAP Financial Summary

	3Q21	2Q22	3Q22
Revenue	$210M	$206M	$207M
Gross margin	53%	51%	50%
OPEX	$109M	$112M	$108M
Income (loss) from operations	$2M	($7M)	($3M)
Other income (expense), net[1]	($58M)	($10M)	($4M)
Net income (loss)	($59M)	($30M)	($18M)
Diluted EPS	($0.40)	($0.20)	($0.12)

[1] 3Q22 includes a $2M non-cash loss associated with the quarterly mark-to-market of the AVCT investment and an EPS impact of ($0.01), similar to adjustments in previous quarters

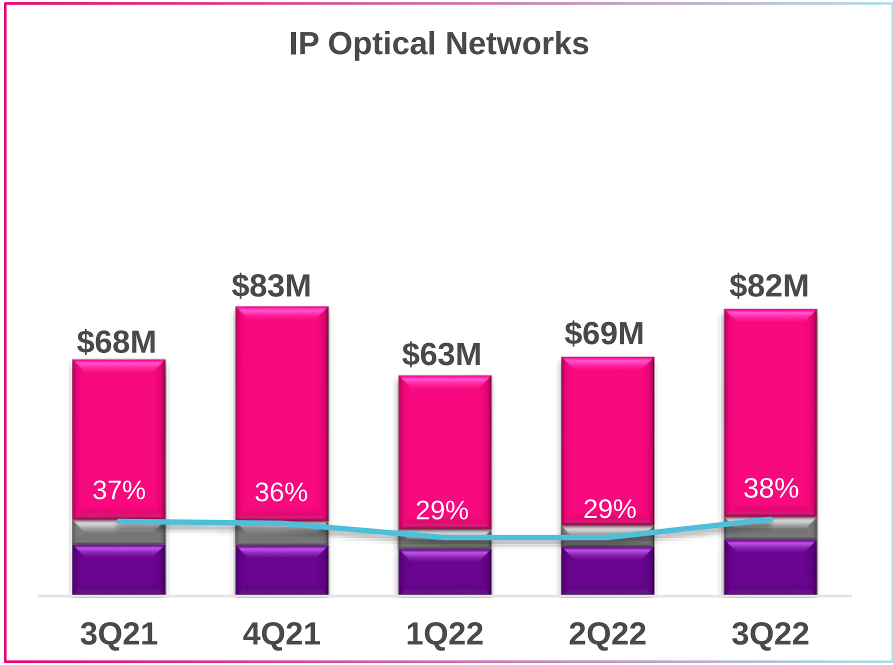
Third Quarter 2022 Non-GAAP Financial Summary

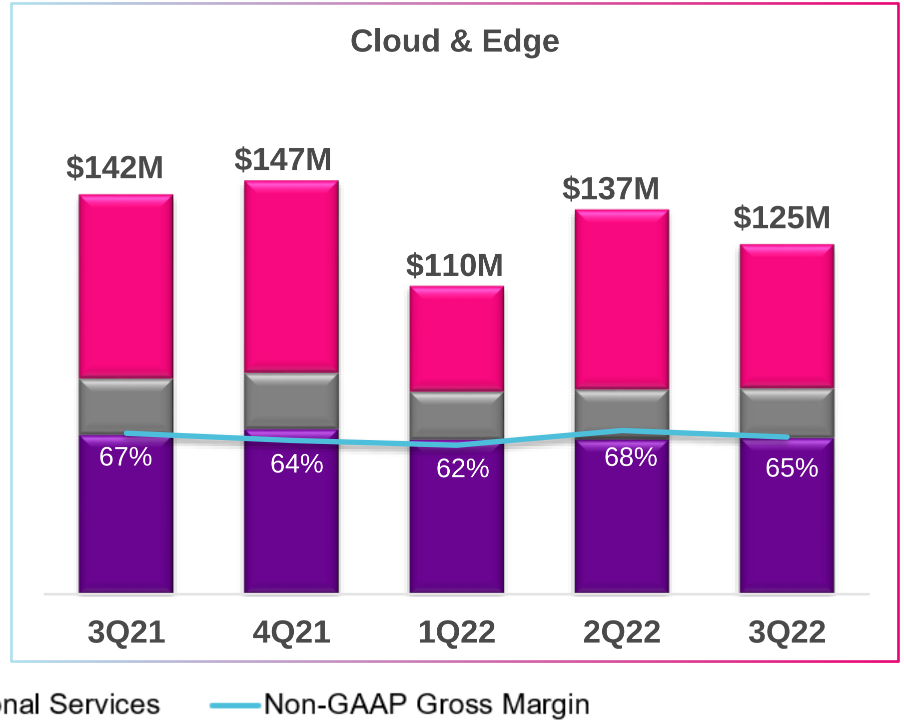
	3Q21	2Q22	3Q22
Revenue	$210M	$206M	$207M
Gross margin	57%	55%	54.5%
OPEX	$93M	$96M	$94M
Operating margin	13%	8%	9%
Adjusted EBITDA	$32M	$21M	$23M
Diluted EPS	$0.11	$0.06	$0.02

Third Quarter 2022 Non-GAAP Segment Summary

	Cloud & Edge	IP Optical Networks	Consolidated
Revenue	$125M	$82M	$207M
Gross margin	65%	38%	54.5%
Adjusted EBITDA	$33M	($10M)	$23M

Quarterly Performance: Revenue & Non-GAAP Gross Margins





Third Quarter 2022 Key Metrics

Pipeline

3Q22 Book to Revenue[1] Ratio of 1.28x

Cloud & Edge: 1.13x

IP Optical: 1.45x

Revenue Mix

35% Software Revenue[2]

35% Maintenance Revenue[3]

Top 10 Customers Revenue 46%[3]

Enterprise 30%[2]
Service Provider 70%[2]

Domestic 42%[3]
International 58%[3]

Balance Sheet

Cash Balance $56M

Debt[5] $335M

Current Annualized Weighted Interest Rate 5.40%

Covenant Ratio Metrics[4]
Leverage 5.0x vs 5.0x max.
FCCR 1.10x vs 1.10x min.

Fixed Rate Swap valued at $26M

Cash Flow

($18M) Cash from Operations

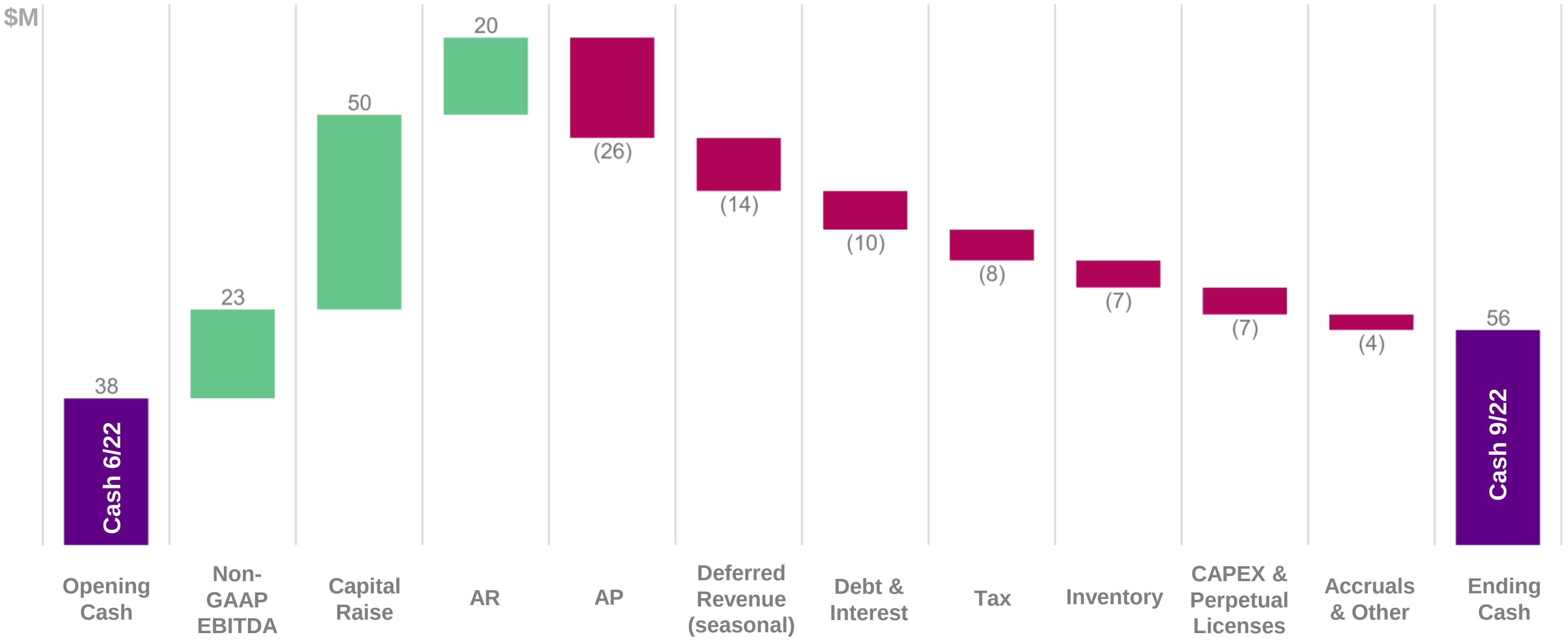
$5M principal debt paydown

$335M term loan outstanding after YTD debt payments of $40M

$7M Capex includes $3M of Kandy one-time technology license

Notes:
1. Product and Professional Services (excluding maintenance) Bookings divided by Product and Professional Services Revenue (excluding maintenance) for the three months ended September 30, 2022.
2. As a percentage of total product revenue.
3. As a percentage of total revenue.
4. Calculated in accordance with the Amended and Restated Credit Agreement.
5. Principal balance outstanding.

Cash Investments 2022 Third Quarter



Key Trends & Outlook

IP Wave: Continuous Innovation to Meet Customer Needs

IP Routing with Neptune

- Proven state of the art IP stack with common NOS
- Right fit with range of form factors and capabilities
- New high performance router family - Neptune XDR

Optical Networking with Apollo

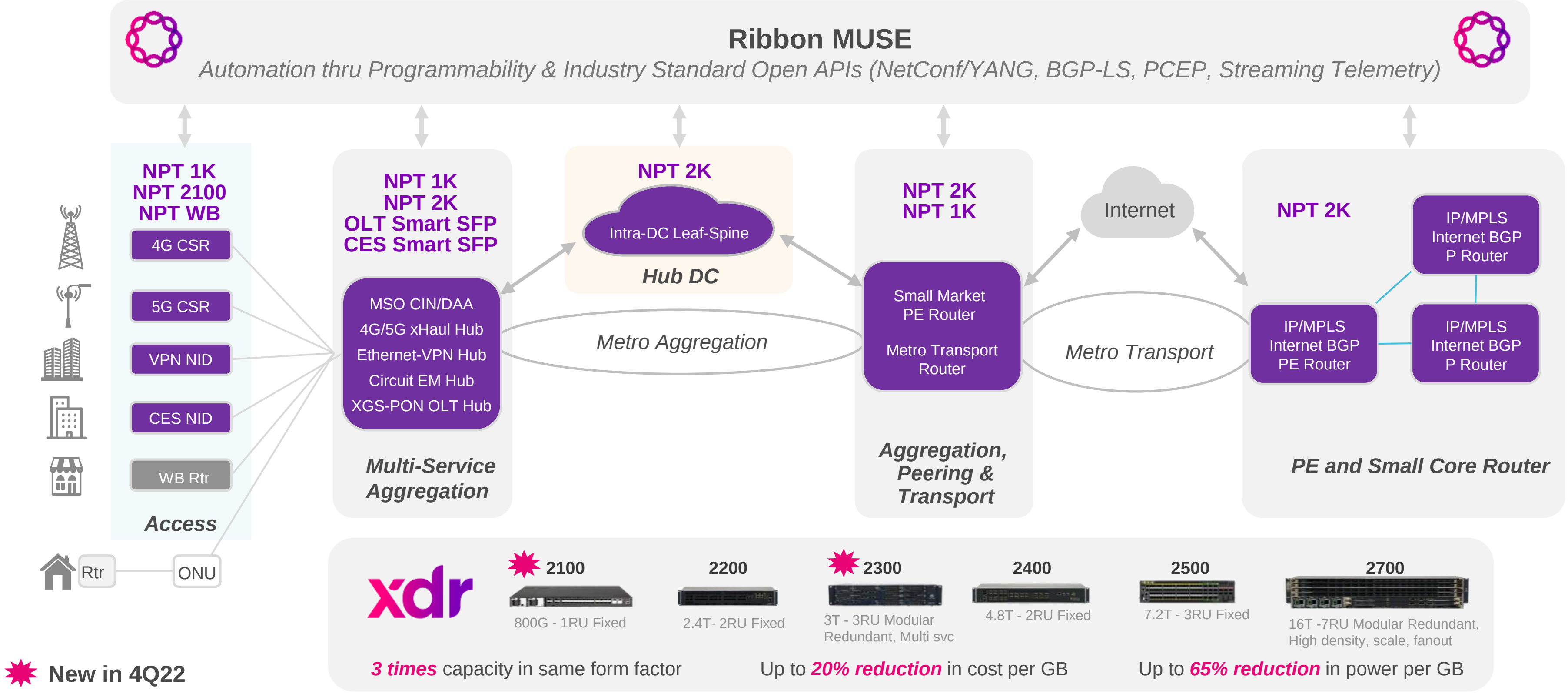
- Best in class metro transport with performance or power-cost optimized 400G/200G/100G and OTN
- Tailored solutions with smooth capacity growth
- Delivering new wavelengths fast with Ribbon Alien Wavelengths

Domain Orchestration with Muse

- Practical Automation
- Multi-vendor, multidomain, multilayer
- Low code CI/CD

Continuous Innovation for Next Generation Optimized, Automated Open IP Optical

Neptune IP Routing: WAN Access, Metro & Edge Router Applications



Fourth Quarter 2022 Business Outlook

	3Q22 (Actual)	4Q22 (Outlook)
Revenue	$207M	$220M to $240M
Non-GAAP Gross Margin	54.5%	53.5% to 54.5%
Non-GAAP Adjusted EBITDA	$23M	$30M to $36M
Non-GAAP Diluted EPS	$0.02	($0.01) to $0.01

Interest & Other Expense	($7M)	~($7M)
Non-GAAP Income Taxes	($8M)	~($25M)
Diluted Share Count*	163M	172M

*Full year 2022 diluted share count 162M.

Appendix

Ribbon Condensed Statements of Operations

USD Millions except percentages and EPS	1Q21	2Q21	3Q21	4Q21	FY21	1Q22	2Q22	3Q22
GAAP FINANCIAL MEASURES								
Product Revenue	98	113	112	130	453	82	113	111
Service Revenue	95	98	99	100	392	91	93	96
Total Revenue	**193**	**211**	**210**	**231**	**845**	**173**	**206**	**207**
Gross Profit	**100**	**119**	**111**	**115**	**445**	**78**	**105**	**104**
Gross Margin %	*52%*	*56%*	*53%*	*50%*	*53%*	*45%*	*51%*	*50%*
Research and development	47	47	49	52	195	53	51	49
Selling, general and administrative	53	48	48	55	204	50	49	48
Amortization of acquired intangible assets	6	7	8	7	28	7	8	8
Integration and restructuring-related expenses	7	4	4	5	19	7	4	2
Impairment of goodwill	-	-	-	116	116	-	-	-
Total Operating Expenses	**113**	**106**	**109**	**235**	**562**	**117**	**112**	**108**
Income/(Loss) from Operations	**(13)**	**13**	**2**	**(120)**	**(118)**	**(39)**	**(7)**	**(3)**
Operating Margin %	*-7%*	*6%*	*1%*	*-52%*	*-14%*	*-23%*	*-4%*	*-2%*
Net Income/(Loss)	**(45)**	**23**	**(59)**	**(96)**	**(177)**	**(70)**	**(30)**	**(18)**
Diluted EPS	**($0.31)**	**$0.15**	**($0.40)**	**($0.65)**	**($1.20)**	**($0.47)**	**($0.20)**	**($0.12)**
Shares used to compute GAAP diluted earnings (loss) per share	146	154	148	149	148	149	150	159
Cash Flow from Operating Activities	**(6)**	**14**	**-**	**11**	**19**	**15**	**(39)**	**(18)**
NON-GAAP FINANCIAL MEASURE								
Adjusted EBITDA	**20**	**43**	**32**	**26**	**120**	**(9)**	**21**	**23**

Ribbon Condensed Balance Sheets

USD Millions	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22
ASSETS							
Cash and cash equivalents[1]	109	115	104	106	95	38	56
Accounts receivable, net	209	220	236	283	221	258	238
Inventory	45	47	45	54	62	65	70
Property and equipment, net	49	49	49	48	48	49	46
Intangible assets, net and Goodwill	818	801	784	652	636	621	611
Investment (AVCT)	93	106	50	44	17	5	-
Other Assets	129	121	120	161	185	196	204
Total Assets	**1,453**	**1,459**	**1,387**	**1,348**	**1,264**	**1,231**	**1,225**
LIABILITIES AND EQUITY							
Liabilities	301	287	287	321	311	318	292
Deferred revenue	125	124	111	130	128	126	112
Debt[2]	384	379	375	370	350	335	331
Stockholders' Equity	643	669	614	527	474	451	489
Total Liabilities and Equity	**1,453**	**1,459**	**1,387**	**1,348**	**1,264**	**1,231**	**1,225**

Notes:
1. Includes cash, cash equivalents, and restricted cash.
2. Net of debt issuance costs and associated amortization.

Ribbon Condensed Statements of Cash Flows

USD Millions	1Q21	2Q21	3Q21	4Q21	FY21	1Q22	2Q22	3Q22
Cash from Operations	(6)	14	-	11	19	15	(39)	(18)
Purchases of property and equipment	(5)	(5)	(4)	(3)	(17)	(3)	(3)	(7)
Proceeds from sale of business	-	3	-	-	3	-	-	-
Borrowings, net	(4)	(5)	(5)	(5)	(19)	(21)	(16)	(5)
Equity placement	-	-	-	-	-	-	-	50
Other	(12)	(1)	(2)	(1)	(15)	(2)	1	(3)
Net Change	**(27)**	**6**	**(11)**	**3**	**(29)**	**(11)**	**(57)**	**18**
Cash[1] Beginning of Period	**136**	**109**	**115**	**104**	**136**	**106**	**95**	**38**
Cash[1] End of Period	**109**	**115**	**104**	**106**	**106**	**95**	**38**	**56**

Note:
1. Includes cash, cash equivalents, and restricted cash.

Ribbon Key Revenue Statistics

USD Millions except for percentages	1Q21	2Q21	3Q21	4Q21	FY21	1Q22	2Q22	3Q22
Revenue								
Product	98	113	112	130	453	82	113	111
Service	95	98	99	100	392	91	93	96
Total Revenue	**193**	**211**	**210**	**231**	**845**	**173**	**206**	**207**
% of Total Revenue:								
Revenue Mix								
Product	51%	54%	53%	57%	54%	47%	55%	54%
Services	49%	46%	47%	43%	46%	53%	45%	46%
Revenue by Geography								
Domestic	41%	48%	44%	45%	45%	44%	48%	42%
International	59%	52%	56%	55%	55%	56%	52%	58%
Revenue by Channel								
Direct	79%	76%	77%	66%	74%	71%	75%	69%
Indirect	21%	24%	23%	34%	26%	29%	25%	31%
Product Revenue By Market								
Enterprise	23%	22%	18%	34%	25%	27%	20%	30%
Service Providers	77%	78%	82%	66%	75%	73%	80%	70%
10% Total Revenue Customers	Verizon	Verizon	Verizon	Verizon	Verizon	Verizon	Verizon	Verizon AT&T

Basis of Presentation

Totals may not sum due to rounding.

IP Optical Networks relates to the Company’s IP Optical Networks operating segment.

Cloud & Edge relates to the Company’s Cloud & Edge operating segment.

Discussion of Non-GAAP Financial Measures

The Company's management uses several different financial measures, both GAAP and non-GAAP, in analyzing and assessing the overall performance of its business, making operating decisions, planning and forecasting future periods, and determining payments under compensation programs. The Company considers the use of non-GAAP financial measures helpful in assessing the core performance of its continuing operations and when planning and forecasting future periods. The Company's annual financial plan is prepared on a non-GAAP basis and is approved by its board of directors. In addition, budgeting and forecasting for revenue and expenses are conducted on a non-GAAP basis, and actual results on a non-GAAP basis are assessed against the annual financial plan. The Company defines continuing operations as the ongoing results of its business adjusted for certain expenses and credits, as described below. The Company believes that providing non-GAAP information to investors will allow investors to view the financial results in the way its management views them and helps investors to better understand the Company's core financial and operating performance and evaluate the efficacy of the methodology and information used by its management to evaluate and measure such performance.

While the Company's management uses non-GAAP financial measures as tools to enhance its understanding of certain aspects of the Company's financial performance, its management does not consider these measures to be a substitute for, or superior to, GAAP measures. In addition, the Company's presentations of these measures may not be comparable to similarly titled measures used by other companies. These non-GAAP financial measures should not be considered alternatives for, or in isolation from, the financial information prepared and presented in accordance with GAAP. Investors are cautioned that there are material limitations associated with the use of non-GAAP financial measures. In particular, many of the adjustments to the Company's financial measures reflect the exclusion of items that are recurring and will be reflected in its financial results for the foreseeable future.

Discussion of Non-GAAP Financial Measures (continued)

Stock-Based Compensation

The expense related to stock-based awards is generally not controllable in the short-term and can vary significantly based on the timing, size and nature of awards granted. The Company believes that presenting non-GAAP operating results that exclude stock-based compensation provides investors with visibility and insight into its management's method of analysis and its core operating performance.

Amortization of Acquired Technology (including software licenses); Amortization of Acquired Intangible Assets

Amortization amounts are inconsistent in frequency and amount and are significantly impacted by the timing and size of acquisitions. Amortization of acquired technology is reported separately within Cost of revenue and Amortization of acquired intangible assets is reported separately within Operating expenses. These items are reported collectively as Amortization of acquired intangible assets in the accompanying reconciliations of non-GAAP and GAAP financial measures. The Company believes that excluding non-cash amortization of these intangible assets facilitates the comparison of its financial results to its historical operating results and to other companies in its industry as if the acquired intangible assets had been developed internally rather than acquired.

Impairment of Goodwill

The Company performs its annual testing for impairment of goodwill in the fourth quarter each year. For the purpose of testing goodwill for impairment, all goodwill has been assigned to one of the Company's two operating segments. The Company performs a fair value analysis using both an income and market approach, which encompasses a discounted cash flow analysis and a guideline public company analysis using selected multiples. Based on the results of its recently completed impairment test, the Company determined that the carrying value of its IP Optical Networks segment exceeded its fair value, and accordingly, recorded a non-cash impairment charge of $116 million in the fourth quarter of 2021. There was no impairment of the Company's Cloud and Edge segment. The Company believes that such non-cash costs are not part of its core business or ongoing operations. Accordingly, the Company believes that excluding the goodwill impairment charge facilitates the comparison of the Company's financial results to its historical operating results and to other companies in its industry.

Discussion of Non-GAAP Financial Measures (continued)

Acquisition-, Disposal- and Integration-Related

The Company considers certain acquisition-, disposal- and integration-related costs to be unrelated to the organic continuing operations of its acquired businesses and the Company. Such costs are generally not relevant to assessing or estimating the long-term performance of the acquired assets. The Company excludes such acquisition-, disposal- and integration-related costs to allow more accurate comparisons of its financial results to its historical operations and the financial results of less acquisitive peer companies and allows management and investors to consider the ongoing operations of the business both with and without such expenses.

Restructuring and Related

The Company has recorded restructuring and related expense to streamline operations and reduce operating costs by closing and consolidating certain facilities and reducing its worldwide workforce. The Company believes that excluding restructuring and related expense facilitates the comparison of its financial results to its historical operating results and to other companies in its industry, as there are no future revenue streams or other benefits associated with these costs.

Interest Income on Debentures

The Company recorded paid-in-kind interest income on the AVCT Series A-1 convertible debentures (the "Debentures") it received as consideration in connection with the Kandy Sale through September 8, 2021, when the Debentures were converted to shares of AVCT common stock (the "Debenture Shares"), which increased their fair value. The Company excludes this interest income because it believes that such a gain is not part of its core business or ongoing operations.

Discussion of Non-GAAP Financial Measures (continued)

Gain on Sale of Business

On May 12, 2021, the Company sold its QualiTech business, which it had acquired as part of the ECI Acquisition, to Hermon Laboratories, Ltd. As consideration, the Company received $2.9 million of cash and recorded a gain on the sale of $2.8 million. The Company excludes this gain because it believes that such gain is not part of its core business or ongoing operations.

Decrease in Fair Value of Investments

The Company calculated the fair values of the Debentures and the warrants to purchase shares of AVCT common stock it received as consideration in connection with the Kandy Sale (the "Warrants") (prior to September 8, 2021) and the Debenture Shares and Warrants (effective September 8, 2021) and at each quarter-end until their disposal on August 29, 2022 when they were used as partial consideration in connection with the Company's acquisition of perpetual software licenses from AVCT. The Company recorded any adjustments to their fair values in Other (expense) income, net. The Company excluded these gains and losses from the change in fair value of this investment because it believes that such gains or losses were not part of its core business or ongoing operations.

Tax Effect of Non-GAAP Adjustments

The Non-GAAP income tax provision is presented based on an estimated tax rate applied against forecasted annual non-GAAP income. The Non-GAAP income tax provision assumes no available net operating losses or valuation allowances for the U.S. because of reporting significant cumulative non-GAAP income over the past several years. The Company is reporting its non-GAAP quarterly income taxes by computing an annual rate for the Company and applying that single rate (rather than multiple rates by jurisdiction) to its consolidated quarterly results. The Company expects that this methodology will provide a consistent rate throughout the year and allow investors to better understand the impact of income taxes on its results. Due to the methodology applied to its estimated annual tax rate, the Company's estimated tax rate on non-GAAP income will differ from its GAAP tax rate and from its actual tax liabilities.

Discussion of Non-GAAP Financial Measures (continued)

Adjusted EBITDA

The Company uses Adjusted EBITDA as a supplemental measure to review and assess its performance. The Company calculates Adjusted EBITDA by excluding from (Income) loss from operations: depreciation; amortization of acquired intangible assets; stock-based compensation; impairment of goodwill; acquisition-, disposal- and integration-related; and restructuring and related. In general, the Company excludes the expenses that it considers to be non-cash and/or not part of its ongoing operations. The Company may exclude other items in the future that have those characteristics. Adjusted EBITDA is a non-GAAP financial measure that is used by the investing community for comparative and valuation purposes. The Company discloses this metric to support and facilitate dialogue with research analysts and investors. Other companies may calculate Adjusted EBITDA differently than the Company does, limiting its usefulness as a comparative measure.

GAAP to Non-GAAP Reconciliation

$000's	1Q21			2Q21			3Q21			4Q21			FY21		
	Cloud and Edge	IP Optical Networks	Consolidated	Cloud and Edge	IP Optical Networks	Consolidated	Cloud and Edge	IP Optical Networks	Consolidated	Cloud and Edge	IP Optical Networks	Consolidated	Cloud and Edge	IP Optical Networks	Consolidated
Revenue	$ 125,422	$ 67,350	$ 192,772	$ 141,421	$ 69,789	$ 211,210	$ 142,437	$ 67,961	$ 210,398	$ 147,376	$ 83,201	$ 230,577	$ 556,656	$ 288,301	$ 844,957
GAAP Gross profit	$ 77,523	$ 22,963	$ 100,486	$ 88,836	$ 29,891	$ 118,727	$ 89,000	$ 21,654	$ 110,654	$ 88,105	$ 26,688	$ 114,793	$ 343,464	$ 101,196	$ 444,660
GAAP Gross margin (Gross profit/Revenue)	61.8%	34.1%	52.1%	62.8%	42.8%	56.2%	62.5%	31.9%	52.6%	59.8%	32.1%	49.8%	61.7%	35.1%	52.6%
Stock-based compensation	0.1%	0.1%	0.2%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.2%	0.3%	0.2%	0.2%	0.2%
Amortization of acquired technology	5.3%	5.1%	5.2%	4.7%	4.4%	4.6%	4.6%	4.5%	4.6%	3.9%	3.7%	3.8%	4.6%	4.4%	4.6%
Non-GAAP Gross margin	67.2%	39.3%	57.5%	67.8%	47.5%	61.1%	67.4%	36.7%	57.5%	64.0%	36.0%	53.9%	66.5%	39.7%	57.4%
GAAP Income (loss) from operations	$ 4,693	$ (17,297)	$ (12,604)	$ 24,931	$ (11,979)	$ 12,952	$ 26,361	$ (24,369)	$ 1,992	$ 20,371	$ (140,507)	$ (120,136)	$ 76,356	$ (194,152)	$ (117,796)
Depreciation	3,137	1,089	4,226	3,142	1,107	4,249	3,018	1,191	4,209	2,972	1,306	4,278	12,269	4,693	16,962
Amortization of acquired intangible assets	11,305	4,518	15,823	11,300	5,881	17,181	11,340	5,881	17,221	10,519	5,882	16,401	44,464	22,162	66,626
Stock-based compensation	3,334	1,726	5,060	3,039	1,751	4,790	2,936	1,625	4,561	3,199	1,808	5,007	12,508	6,910	19,418
Impairment of goodwill	-	-	-	-	-	-	-	-	-	-	116,000	116,000	-	116,000	116,000
Acquisition-, disposal- and integration-related	241	956	1,197	29	1,023	1,052	165	1,790	1,955	46	3,382	3,428	481	7,151	7,632
Restructuring and related	5,620	330	5,950	1,095	1,735	2,830	1,125	642	1,767	215	891	1,106	8,055	3,598	11,653
Non-GAAP Adjusted EBITDA	$ 28,330	$ (8,678)	$ 19,652	$ 43,536	$ (482)	$ 43,054	$ 44,945	$ (13,240)	$ 31,705	$ 37,322	$ (11,238)	$ 26,084	$ 154,133	$ (33,638)	$ 120,495
Adjusted EBITDA Margin (Adjusted EBITDA/Revenue):															
GAAP Income (loss) from operations	3.7%	(25.7%)	(6.5%)	17.6%	(17.2%)	6.1%	18.5%	(35.9%)	0.9%	13.8%	(168.9%)	(52.1%)	13.7%	(67.3%)	(13.9%)
Depreciation	2.5%	1.6%	2.2%	2.2%	1.6%	2.0%	2.1%	1.8%	2.0%	2.0%	1.6%	1.9%	2.2%	1.6%	2.0%
Amortization of acquired intangible assets	9.0%	6.7%	8.2%	8.1%	8.4%	8.2%	8.0%	8.7%	8.3%	7.2%	7.0%	7.0%	8.1%	7.7%	7.9%
Stock-based compensation	2.7%	2.6%	2.6%	2.1%	2.5%	2.3%	2.1%	2.4%	2.2%	2.2%	2.2%	2.2%	2.2%	2.4%	2.3%
Impairment of goodwill	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	139.4%	50.3%	0.0%	40.2%	13.7%
Acquisition-, disposal- and integration-related	0.2%	1.4%	0.6%	*	1.5%	0.5%	0.1%	2.6%	0.9%	*	4.1%	1.5%	0.1%	2.5%	0.9%
Restructuring and related	4.5%	0.5%	3.1%	0.8%	2.5%	1.3%	0.8%	0.9%	0.8%	0.1%	1.1%	0.5%	1.4%	1.2%	1.4%
Non-GAAP Adjusted EBITDA Margin	22.6%	(12.9%)	10.2%	30.8%	(0.7%)	20.4%	31.6%	(19.5%)	15.1%	25.3%	(13.5%)	11.3%	27.7%	(11.7%)	14.3%

* Less than 0.1% impact on non-GAAP Adjusted EBITDA margin

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GAAP to Non-GAAP Reconciliation (Continued)

$000's	1Q22			2Q22			3Q22			3Q22 YTD		
	Cloud and Edge	IP Optical Networks	Consolidated	Cloud and Edge	IP Optical Networks	Consolidated	Cloud and Edge	IP Optical Networks	Consolidated	Cloud and Edge	IP Optical Networks	Consolidated
Revenue	$ 109,806	$ 63,392	$ 173,198	$ 137,080	$ 68,716	$ 205,796	$ 124,685	$ 82,442	$ 207,127	$ 371,571	$ 214,550	$ 586,121
GAAP Gross profit	$ 62,732	$ 15,323	$ 78,055	$ 88,250	$ 16,300	$ 104,550	$ 76,442	$ 27,876	$ 104,318	$ 227,424	$ 59,499	$ 286,923
GAAP Gross margin (Gross profit/Revenue)	57.1%	24.2%	45.1%	64.4%	23.7%	50.8%	61.3%	33.8%	50.4%	61.2%	27.7%	49.0%
Stock-based compensation	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%	0.4%	0.3%	0.4%	0.3%	0.3%	0.3%
Amortization of acquired technology	4.7%	4.9%	4.8%	3.5%	4.6%	3.8%	3.7%	3.8%	3.7%	3.9%	4.4%	4.1%
Non-GAAP Gross margin	62.2%	29.4%	50.2%	68.2%	28.6%	54.9%	65.4%	37.9%	54.5%	65.4%	32.4%	53.4%
GAAP Loss from operations	$ (2,347)	$ (36,707)	$ (39,054)	$ 25,953	$ (33,192)	$ (7,239)	$ 16,812	$ (20,108)	$ (3,296)	$ 40,418	$ (90,007)	$ (49,589)
Depreciation	2,715	1,170	3,885	2,685	1,203	3,888	2,753	1,162	3,915	8,153	3,535	11,688
Amortization of acquired intangible assets	9,528	6,014	15,542	9,118	6,283	15,401	8,995	6,281	15,276	27,641	18,578	46,219
Stock-based compensation	2,665	1,590	4,255	2,646	1,753	4,399	2,992	1,849	4,841	8,303	5,192	13,495
Acquisition-, disposal- and integration-related	44	1,805	1,849	70	1,465	1,535	42	946	988	156	4,216	4,372
Restructuring and related	3,366	1,448	4,814	2,321	573	2,894	1,287	(18)	1,269	6,974	2,003	8,977
Non-GAAP Adjusted EBITDA	$ 15,971	$ (24,680)	$ (8,709)	$ 42,793	$ (21,915)	$ 20,878	$ 32,881	$ (9,888)	$ 22,993	$ 91,645	$ (56,483)	$ 35,162
Adjusted EBITDA Margin (Adjusted EBITDA/Revenue):												
GAAP Loss from operations	(2.1%)	(57.9%)	(22.5%)	18.9%	(48.3%)	(3.5%)	13.5%	(24.4%)	(1.6%)	10.9%	(42.0%)	(8.5%)
Depreciation	2.5%	1.8%	2.2%	2.0%	1.8%	1.9%	2.2%	1.4%	1.9%	2.2%	1.6%	2.0%
Amortization of acquired intangible assets	8.6%	9.6%	8.9%	6.6%	9.1%	7.5%	7.3%	7.7%	7.4%	7.5%	8.8%	8.0%
Stock-based compensation	2.4%	2.5%	2.5%	1.9%	2.6%	2.1%	2.4%	2.2%	2.3%	2.2%	2.4%	2.3%
Acquisition-, disposal- and integration-related	*	2.8%	1.1%	0.1%	2.1%	0.7%	0.0%	1.1%	0.5%	*	2.0%	0.7%
Restructuring and related	3.1%	2.3%	2.8%	1.7%	0.8%	1.4%	1.0%	0.0%	0.6%	1.9%	0.9%	1.5%
Non-GAAP Adjusted EBITDA Margin	14.5%	(38.9%)	(5.0%)	31.2%	(31.9%)	10.1%	26.4%	(12.0%)	11.1%	24.7%	(26.3%)	6.0%

* Less than 0.1% impact on non-GAAP Adjusted EBITDA margin

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GAAP to Non-GAAP Reconciliation (Continued)

$000s	1Q21	2Q21	3Q21	4Q21	FY21	1Q22	2Q22	3Q22	3Q22 YTD
GAAP Operating expenses	$ 113,090	$ 105,775	$ 108,662	$ 234,929	$ 562,456	$ 117,109	$ 111,789	$ 107,614	$ 336,512
Stock-based compensation	(4,798)	(4,228)	(3,973)	(4,422)	(17,421)	(3,675)	(3,798)	(4,116)	(11,589)
Amortization of acquired intangible assets	(5,762)	(7,481)	(7,547)	(7,493)	(28,283)	(7,275)	(7,513)	(7,508)	(22,296)
Impairment of goodwill	-	-	-	(116,000)	(116,000)	-	-	-	-
Acquisition-, disposal- and integration-related	(1,197)	(1,052)	(1,955)	(3,428)	(7,632)	(1,849)	(1,535)	(988)	(4,372)
Restructuring and related	(5,950)	(2,830)	(1,767)	(1,106)	(11,653)	(4,814)	(2,894)	(1,269)	(8,977)
Non-GAAP Operating expenses	$ 95,383	$ 90,184	$ 93,420	$ 102,480	$ 381,467	$ 99,496	$ 96,049	$ 93,733	$ 289,278
(Loss) income from operations as a percentage of revenue ("Operating margin"):									
GAAP Operating margin	(6.5%)	6.1%	0.9%	(52.1%)	(13.9%)	(22.5%)	(3.5%)	(1.6%)	(8.5%)
Stock-based compensation	2.6%	2.3%	2.2%	2.2%	2.3%	2.5%	2.1%	2.3%	2.3%
Amortization of acquired intangible assets	8.2%	8.2%	8.3%	7.1%	7.9%	8.9%	7.6%	7.4%	8.0%
Impairment of goodwill	0.0%	0.0%	0.0%	50.3%	13.7%	0.0%	0.0%	0.0%	0.0%
Acquisition-, disposal- and integration-related	0.6%	0.5%	0.9%	1.5%	0.9%	1.1%	0.7%	0.5%	0.7%
Restructuring and related	3.1%	1.3%	0.8%	0.5%	1.4%	2.7%	1.4%	0.6%	1.5%
Non-GAAP Operating margin	8.0%	18.4%	13.1%	9.5%	12.3%	(7.3%)	8.3%	9.2%	4.0%

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GAAP to Non-GAAP Reconciliation (Continued)

	1Q21	2Q21	3Q21	4Q21	FY21	1Q22	2Q22	3Q22	3Q22 YTD
GAAP Diluted (loss) earnings per share	$ (0.31)	$ 0.15	$ (0.40)	$ (0.65)	$ (1.20)	$ (0.47)	$ (0.20)	$ (0.12)	$ (0.78)
Stock-based compensation	0.03	0.03	0.03	0.03	0.14	0.03	0.03	0.03	0.09
Amortization of acquired intangible assets	0.11	0.11	0.12	0.12	0.44	0.11	0.10	0.09	0.30
Impairment of goodwill	-	-	-	0.77	0.77	-	-	-	-
Acquisition-, disposal- and integration-related	0.01	0.01	0.01	0.02	0.05	0.01	0.01	0.01	0.03
Restructuring and related	0.05	0.02	0.01	0.01	0.08	0.03	0.02	0.01	0.06
Interest income on debentures	(0.01)	(0.01)	(0.01)	-	(0.02)	-	-	-	-
Gain on sale of business	-	(0.02)	-	-	(0.02)	-	-	-	-
Decrease (increase) in fair value of investments	0.16	(0.08)	0.38	0.04	0.50	0.18	0.08	0.01	0.27
Tax effect of non-GAAP adjustments	(0.01)	(0.04)	(0.03)	(0.33)	(0.42)	0.03	0.02	(0.01)	0.04
Non-GAAP Diluted earnings (loss) per share	$ 0.03	$ 0.17	$ 0.11	$ 0.01	$ 0.32	$ (0.08)	$ 0.06	$ 0.02	$ 0.01
Weighted average shares used to compute diluted earnings (loss) per share (000's):									
Shares used to compute **GAAP** diluted (loss) earnings per share	145,936	154,160	148,184	148,675	147,575	149,167	150,190	158,921	152,795
Shares used to compute **non-GAAP** diluted earnings (loss) per share	155,032	154,160	154,061	153,898	154,527	149,167	154,035	163,463	157,412

GAAP to Non-GAAP Reconciliation (Continued)

Outlook	Three months ending December 31, 2022 Range	
Revenue ($ millions)	$ 220	$ 240
Gross margin:		
GAAP outlook	50.6%	50.0%
Stock-based compensation	0.4%	0.3%
Amortization of acquired technology	3.5%	3.2%
Non-GAAP outlook	54.5%	53.5%
Earnings (loss) per share:		
GAAP outlook	$ (0.09)	$ (0.06)
Stock-based compensation	0.03	0.03
Amortization of acquired intangible assets	0.09	0.09
Acquisition-, disposal- and integration-related	0.01	0.01
Restructuring and related	0.03	0.03
Tax effect of non-GAAP adjustments	(0.08)	(0.09)
Non-GAAP outlook	$ (0.01)	$ 0.01
Weighted average shares used to compute GAAP diluted loss per share (in thousands)	168,000	168,000
Weighted average shares used to compute Non-GAAP diluted earnings per share (in thousands)	172,000	172,000
Adjusted EBITDA ($ millions):		
GAAP income from operations	$ (1.1)	$ 4.9
Depreciation	4.1	4.1
Amortization of acquired intangible assets	15.0	15.0
Stock-based compensation	5.5	5.5
Acquisition-, disposal- and integration-related	1.1	1.1
Restructuring and related	5.4	5.4
Non-GAAP outlook	$ 30.0	$ 36.0

Thank You