Ribbon Communications

Fourth Quarter and Full Year 2023 Results

February 14, 2024

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

The information in 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 presentation, including without limitation statements regarding the Company’s projected financial results for the first quarter of 2024 and beyond; the impact of the wars in Israel and Ukraine; customer engagement and momentum; plans and objectives for future operations, including cost reductions; capital structure changes 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 wars, including in Israel and Ukraine (and the impact of sanctions and trade restrictions imposed as a result thereof); operational disruptions at facilities located in Israel including as a result of military call-ups of the Company’s employees in Israel, closure of the offices there or the temporary or long-term closure of contract manufacturing in the region; the potential impact of litigation; risks related to supply chain disruptions, including as a result of component availability; risks that the Company will not realize the estimated cost savings and/or anticipated benefits from its strategic restructuring efforts; 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 resulting from rising interests rates and inflationary pressures; 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.

These factors are not intended to be an all-encompassing list of risks and uncertainties that may affect the Company's business and results from operations. Additional information regarding these and other factors can be found in the Company's reports filed with the Securities and Exchange Commission, including, without limitation, its Form 10-K for the year ended December 31, 2022 and its Form 10-Q for the quarter ended June 30, 2023. In providing forward-looking statements, the Company expressly disclaims any obligation to update these statements publicly or otherwise, whether as a result of new information, future events or otherwise, except as 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.

Fourth Quarter and Full Year 2023 Business Overview

Bruce McClelland, President & CEO

Mick Lopez, Executive Vice President & CFO

2023 Highlights | Consolidated

IP Optical Networks Growth

12% Revenue Growth
North America Growth >50%
2nd Half 2023 Profitability
+$8M Q4 Adj. EBITDA

Diversification

Enterprise Segment Expansion
VoIP Network Transformation
New Product Launches
IP and Optical Growth
U.S. Rural Expansion
Federal Wins

+41%

Growth in Adjusted EBITDA[1] vs 2022

Gross Margin Expansion
$24M Operating Expense Reductions

Operational Efficiencies

$17M Cash from Operations
$95M Term Loan Reduction
$55M Preferred Equity Issuance

Cash & Capital Structure

1. Please see the discussion of non-GAAP financial measures in the appendix.

Fourth Quarter and 2023 Business Highlights | Consolidated

Profitable Growth Driven by Portfolio Diversification and Efficiencies

Q4

$8M — IP Optical Networks Adjusted EBITDA

+440bps — Gross Margin Improvement YoY
IP Optical Growth / Product Mix
Cloud & Edge Software Sales Mix
Fixed Cost Absorption

+48% — Q4 Adjusted EBITDA YoY Growth
$43M Adjusted EBITDA
Gross Margin Expansion in both Segments
8% Reduction in Operating Expenses

-3% — Decline in Q4 Revenue YoY
Lower US Tier 1 Service Provider

FY 2023

+41% — FY 23 Adjusted EBITDA YoY Growth
$91M Adjusted EBITDA
6% Reduction in Operating Expenses

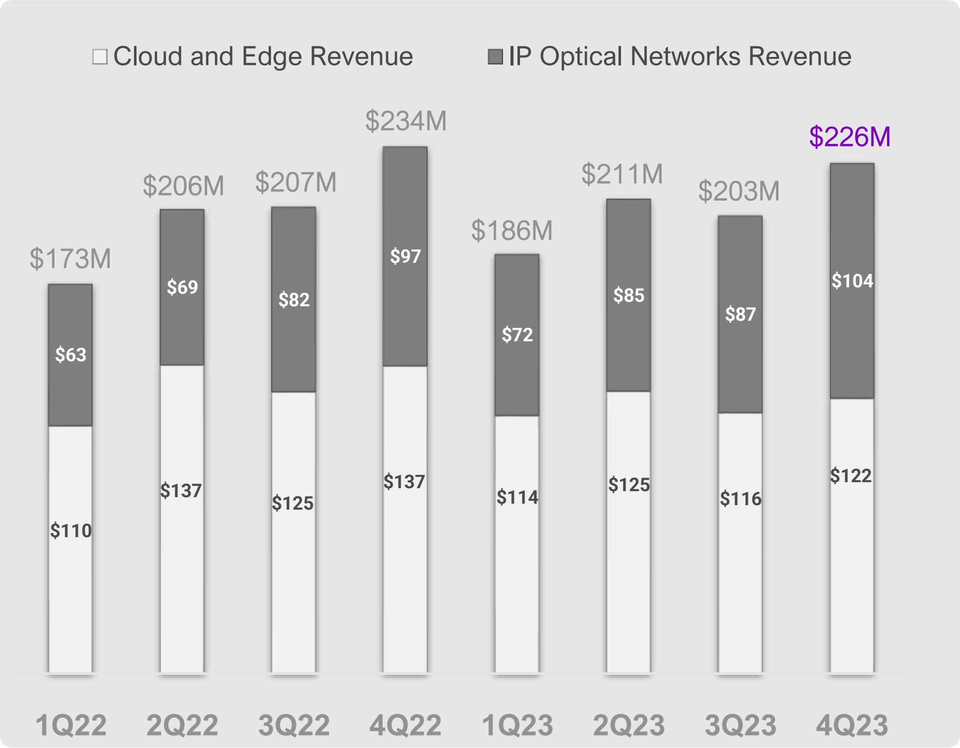
+315bp — EBITDA Margin Expansion
Gross Margin Improvement YoY in both Segments
11% EBITDA Margin

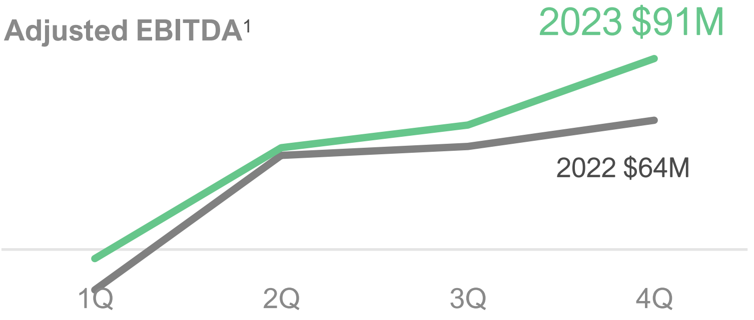
+1% — Growth in FY2023 Revenue

$17M — Cash from Operations
Significant Improvement YoY

$40M — Reduction in Total Debt
Improved Capital Structure

Key Financial Trends[1]





Note:
1. Please see the discussion of non-GAAP financial measures in the appendix.

ribbon

Non-GAAP[1] Segment Financial Highlights | IP Optical Networks

Q4

8%

EBITDA Margin (vs -8% in 2022)

IP Optical Achieves Goal of 2nd Half Profitability

+34%

Growth in N. America YoY

U.S. Rural: +26%

>$100M

Exceeded $100M in Revenue

FY 2023

+12%

Growth in Full Year Revenue

IP Routing Growth: +16%

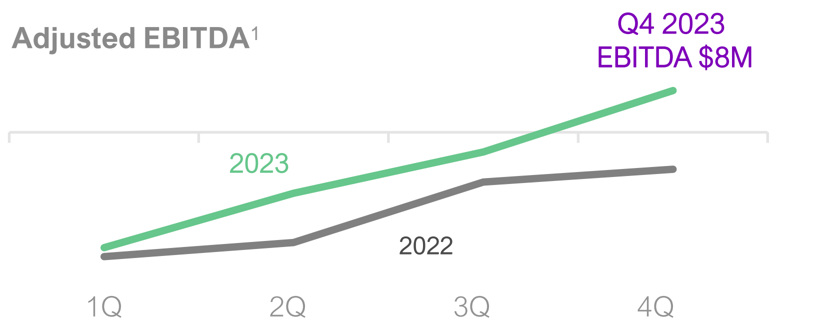
Optical Growth: +13%

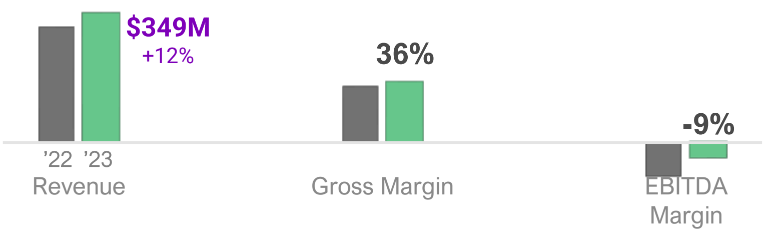
$33M

Improvement in Adj. EBITDA vs 2022

+$20M Gross Profit Growth

+$14M Operating Expense Reductions





Note:
1. Please see the discussion of non-GAAP financial measures in the appendix.

Non-GAAP[1] Segment Financial Highlights | Cloud & Edge

Q4

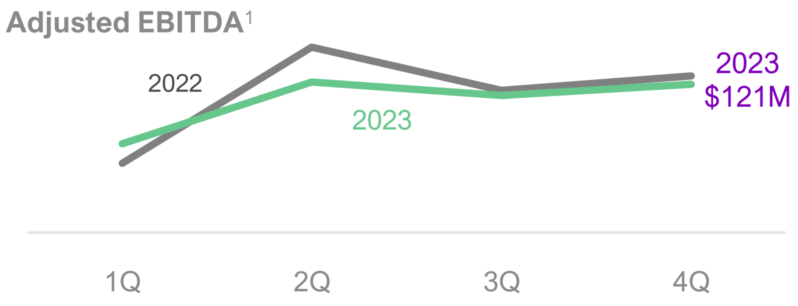
+400bps — Gross Margin Improvement YoY
Higher Software Mix (59% -> 69%)

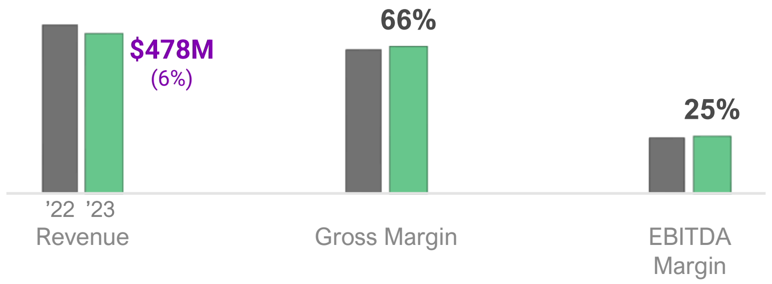
28% — Adj. EBITDA Margin
Up more than 150bps YoY
Gross Margin at 68%
5% Reduction in Operating Expenses YoY

FY 2023

-6% — Full Year Revenue Change
US Tier 1 Service Provider down 23%
All Other Customers up 4%

$10M — Operating Expense Improvement YoY
Down $10M or 5% YoY
Key contributor to strong 25% EBITDA margin, up 20bps YoY





Note:
1. Please see the discussion of non-GAAP financial measures in the appendix.

Fourth Quarter 2023 Key Metrics | Consolidated

Revenue Mix

Enterprise 33%[2]
Service Provider 67%[2]

31% Maintenance Revenue[3]

Top 10 Customers Revenue 51%[3]

Domestic 34%[3]
International 66%[3]

Book to Revenue 1.03x

Profitability

57% Gross Margin

Operating Expenses 8% Lower than Q4 2022

$43M Adjusted EBITDA[1]

$0.12 Non-GAAP EPS[1]

Balance Sheet

Senior Term Loan Debt[4] $235M

Outstanding Revolver Loan[4] $0M

Total Debt Including Preferred Stock $290M

Covenant Ratio Metrics[5]
Leverage 3.06x vs 4.25x max.
FCCR 1.55x vs 1.10x min.

Cash Flow

Cash Balance $27M

+$20M Cash from Operations

($5M) Principal Debt Paydown

($3M) Capital Expenditure

Notes:
1. Please see the discussion of non-GAAP financial measures in the appendix.
2. As a percentage of total product revenue.
3. As a percentage of total revenue.
4. Principal balance outstanding.
5. Calculated in accordance with the Amended and Restated Credit Agreement.

ribbon

Fourth Quarter and Full Year 2023 Non-GAAP[1] Financial Summary

	4Q22	3Q23	4Q23	2022	2023
Revenue	$234M	$203M	$226M	$820M	$826M
Non-GAAP Gross Margin[1]	52%	55%	57%	53%	53%
Non-GAAP Opex[1]	$97M	$87M	$90M	$386M	$363M
Non-GAAP Operating Margin[1]	11%	12%	17%	6%	9%
Non-GAAP Adjusted EBITDA[1]	$29M	$28M	$43M	$64M	$91M
Non-GAAP Diluted EPS[1]	$0.09	$0.05	$0.12	$0.11	$0.21

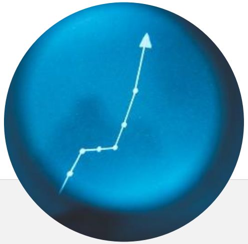
Note:
1. Please see the discussion of non-GAAP financial measures in the appendix.

Key Trends & Outlook

Positive Long Term Demand Drivers

Increased Fiber Investment

- Unprecedented federal funding to connect homes with fiber (including $42B US BEAD program) driving investment in Middle Mile



Exponential traffic growth, wireless broadband growth

- Consumption drives increased capacity for network requirements
- Imperative that network operators invest in new technology to lower the cost per bit

Game changing AI Analytics and Generative AI

- AI in its infancy on the curve of growth – by 2030, nearly two-thirds of network traffic will involve AI [1]
- Ribbon "AI Ready" – Automation, Planning, Technical Support

Growing adoption of Unified Communications

- Demand for remote collaboration and UCaaS driving 16% revenue CAGR thru 2030 [2]
- Session Border Controller sales expected to grow 3.5% CAGR thru 2029 [3]

TCO and Network Modernization

- Aging legacy voice networks represent $1B+ market [4] opportunity with significant ESG benefits
- US Federal Govt voice modernization effort underway

1. Omdia AI Network Traffic Forecast: 2022-30 Nov 2023
2. The Insight Partners Unified Communications Market Size and Forecasts (2020 – 2030) Oct 2023
3. 360 Research Reports SBC Market Size 2023-2030 Oct 2023
4. Company estimates.

ribbon

2024 Operating Environment: Improving Trends

The Strategy is Working!

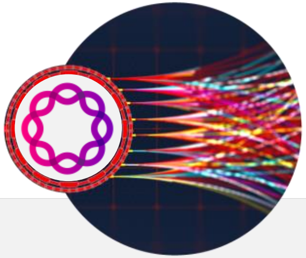
2023 sets the Foundation for Continued Growth and Margin Expansion

Cross Selling Momentum

Increasing Market Share

Lowering Customer's Cost of Network Operation

Optimizing Cost Structure



Diversification

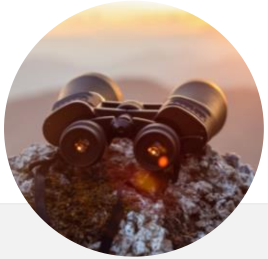
Expand Fiber Reach

Government Funding Programs

Middle Mile Opportunities

5G Global Investment

Interactive Platforms - Enterprise Growth Catalyst (Microsoft Teams/Zoom)



Regional Outlook

U.S. Rural Broadband Expansion

U.S. Tier 1 Service Provider Recovery in 2nd Half

Global Critical Infrastructure Opportunities

Growth in Africa

Defense & Homeland Security Spending

Investment Strategy

R&D Investments Focused on Middle Mile Opportunity and Migration to Cloud Native Architectures

New Products Across Portfolio improve Positioning and Differentiation

2024 Builds on Strategy and Accomplishments!

First Quarter and Full Year 2024 Business Outlook

	1Q23 (Actual)	FY23 (Actual)	1Q24 (Outlook)	FY24 (Outlook)
Revenue	$186M	$826M	$180M to $190M	$840M to $870M
Non-GAAP Gross Margin[1]	48%	53%	51% to 52%	53% to 54%
Non-GAAP Adjusted EBITDA[1]	($2M)	$91M	$5M to $10M	$110M to $120M

Note:
1. Please see the discussion of non-GAAP financial measures in the appendix.

Appendix

Quarterly Non-GAAP[1] Segment Trend | Cloud & Edge

	CLOUD & EDGE – 2022					CLOUD & EDGE – 2023				
	1Q	2Q	3Q	4Q	FY22	1Q	2Q	3Q	4Q	FY23
Revenue *vs Prior Year*	**$110M** *(12%)*	**$137M** *(3%)*	**$125M** *(12%)*	**$137M** *(7%)*	**$508M** *(9%)*	**$114M** *+4%*	**$125M** *(9%)*	**$116M** *(7%)*	**$122M** *(11%)*	**$478M** *(6%)*
Non-GAAP Gross Margin[1]	**62%**	**68%**	**65%**	**64%**	**65%**	**61%**	**67%**	**68%**	**68%**	**66%**
Non-GAAP Adjusted EBITDA[1]	**$16M**	**$43M**	**$33M**	**$36M**	**$128M**	**$21M**	**$35M**	**$32M**	**$34M**	**$121M**
Non-GAAP Adjusted EBITDA Margin[1]	**15%**	**31%**	**26%**	**26%**	**25%**	**18%**	**28%**	**27%**	**28%**	**25%**

Note:
1. Please see the discussion of non-GAAP financial measures in the appendix.

Quarterly Non-GAAP[1] Segment Trend | IP Optical Networks

	IP OPTICAL NETWORKS – 2022					IP OPTICAL NETWORKS – 2023				
	1Q	2Q	3Q	4Q	FY22	1Q	2Q	3Q	4Q	FY23
Revenue *vs Prior Year*	**$63M** *(6%)*	**$69M** *(2%)*	**$82M** *+21%*	**$97M** *+17%*	**$312M** *+8%*	**$72M** *+13%*	**$85M** *+24%*	**$87M** *+6%*	**$104M** *+7%*	**$349M** *+12%*
Non-GAAP Gross Margin[1]	29%	29%	38%	36%	34%	27%	31%	38%	44%	36%
Non-GAAP Adjusted EBITDA[1]	($25M)	($22M)	($10M)	($7M)	($64M)	($23M)	($12M)	($4M)	$8M	($31M)
Non-GAAP Adjusted EBITDA Margin[1]	(39%)	(32%)	(12%)	(8%)	(20%)	(32%)	(14%)	(4%)	8%	(9%)

Note:
1. Please see the discussion of non-GAAP financial measures in the appendix.

Fourth Quarter and Full Year 2023 GAAP Financial Summary

	4Q22	3Q23	4Q23	2022	2023
Revenue	$234M	$203M	$226M	$820M	$826M
Gross Margin	49%	51%	54%	49%	49%
OpEx	$113M	$103M	$105M	$449M	$432M
Income (loss) from operations	$1M	$1M	$17M	($48M)	($24M)
Other (expense) income, net	($8M)	($10M)	($10M)	($64M)	($31M)
Net income (loss)	$20M	($14M)	$7M	($98M)	($66M)
Diluted EPS	$0.12	($0.08)	$0.04	($0.63)	($0.39)

Ribbon Condensed Statements of Operations

USD Millions except percentages and EPS	1Q22	2Q22	3Q22	4Q22	FY22	1Q23	2Q23	3Q23	4Q23	FY23
GAAP FINANCIAL MEASURES										
Product Revenue	82	113	111	137	443	93	117	109	126	445
Service Revenue	91	93	96	97	377	93	93	95	100	381
Total Revenue	**173**	**206**	**207**	**234**	**820**	**186**	**211**	**203**	**226**	**826**
Gross Profit	**78**	**105**	**104**	**114**	**401**	**81**	**101**	**104**	**122**	408
Gross Margin %	*45%*	*51%*	*50%*	*49%*	*49%*	*44%*	*48%*	*51%*	*54%*	*49%*
Research and development	53	51	49	51	204	51	48	46	45	191
Selling, general and administrative	50	49	48	51	199	49	48	46	49	192
Amortization of acquired intangible assets	7	8	8	7	30	7	7	7	7	29
Integration and restructuring-related expenses	7	4	2	4	17	9	5	4	4	21
Total Operating Expenses	**117**	**112**	**108**	**113**	**449**	**117**	**108**	**103**	**105**	**432**
Income/(Loss) from Operations	**(39)**	**(7)**	**(3)**	**1**	**(48)**	**(35)**	**(7)**	**1**	**17**	**(24)**
Operating Margin %	*-23%*	*-4%*	*-2%*	*1%*	*-6%*	*-19%*	*-3%*	*0%*	*7%*	*-3%*
Net Income/(Loss)	**(70)**	**(30)**	**(18)**	**20**	**(98)**	**(38)**	**(21)**	**(14)**	**7**	**(66)**
Diluted EPS	**($0.47)**	**($0.20)**	**($0.12)**	**$0.12**	**($0.63)**	**($0.23)**	**($0.13)**	**($0.08)**	**$0.04**	**($0.39)**
Shares used to compute GAAP diluted earnings (loss) per share	149	150	159	172	157	169	170	171	173	170
Cash Flow from Operating Activities	**15**	**(39)**	**(18)**	**16**	**(26)**	**11**	**(3)**	**(12)**	**20**	**17**
NON-GAAP FINANCIAL MEASURE										
Adjusted EBITDA	**(9)**	**21**	**23**	**29**	**64**	**(2)**	**23**	**28**	**43**	**91**

Ribbon Condensed Balance Sheets

USD Millions	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23
ASSETS								
Cash and cash equivalents[1]	95	38	56	67	46	35	25	27
Accounts receivable, net	221	258	238	267	255	253	242	268
Inventory	62	65	70	75	76	74	70	78
Property and equipment, net	48	49	46	45	43	42	42	42
Intangible assets, net and Goodwill	636	621	611	596	581	566	552	539
Investment (AVCT)	17	5	-	-	-	-	-	-
Other Assets	185	196	204	205	191	196	190	191
Total Assets	**1,264**	**1,231**	**1,225**	**1,256**	**1,192**	**1,167**	**1,122**	**1,144**
LIABILITIES AND EQUITY								
Liabilities	311	318	292	278	333	338	305	326
Deferred revenue	128	126	112	133	140	134	125	133
Debt[2]	350	335	331	326	246	241	247	233
Stockholders' Equity	474	451	489	518	473	454	444	453
Total Liabilities and Equity	**1,264**	**1,231**	**1,225**	**1,256**	**1,192**	**1,167**	**1,122**	**1,144**

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

Ribbon Condensed Statements of Cash Flows

USD Millions	1Q22	2Q22	3Q22	4Q22	FY22	1Q23	2Q23	3Q23	4Q23	FY23
Cash from Operations	15	(39)	(18)	16	(26)	11	(3)	(12)	20	17
Purchases of property and equipment	(3)	(3)	(7)	(1)	(14)	(2)	(2)	(3)	(3)	(9)
Proceeds from sale of business	-	-	-	1	1	-	-	-	-	0
Borrowings, net	(21)	(16)	(5)	(5)	(47)	(80)	(5)	5	(15)	(95)
Equity / Preferred Stock placement	-	-	50	-	50	53	-	-	-	53
Other	(2)	1	(2)	(1)	(4)	(3)	(2)	(1)	(0)	(7)
Net Change	**(11)**	**(57)**	**18**	**11**	**(39)**	**(21)**	**(11)**	**(10)**	**2**	**(41)**
Cash[1] Beginning of Period	**106**	**95**	**38**	**56**	**106**	**67**	**46**	**35**	**25**	**67**
Cash[1] End of Period	**95**	**38**	**56**	**67**	**67**	**46**	**35**	**25**	**27**	**27**

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

Ribbon Key Revenue Statistics

USD Millions except for percentages	1Q22	2Q22	3Q22	4Q22	FY22	1Q23	2Q23	3Q23	4Q23	FY23
Revenue										
Product	82	113	111	137	443	93	117	109	126	445
Service	91	93	96	97	377	93	93	95	100	381
Total Revenue	**173**	**206**	**207**	**234**	**820**	**186**	**211**	**203**	**226**	**826**
% of Total Revenue:										
Revenue Mix										
Product	47%	55%	54%	59%	54%	50%	56%	53%	56%	54%
Services	53%	45%	46%	41%	46%	50%	44%	47%	44%	46%
Revenue by Geography										
Domestic	44%	48%	42%	39%	43%	44%	47%	42%	34%	42%
International	56%	52%	58%	61%	57%	56%	53%	58%	66%	58%
Product Revenue by Channel										
Direct	71%	75%	69%	67%	70%	62%	68%	65%	63%	65%
Indirect	29%	25%	31%	33%	30%	38%	32%	35%	37%	35%
Product Revenue By Market										
Enterprise	27%	20%	30%	35%	28%	29%	32%	34%	33%	32%
Service Providers	73%	80%	70%	65%	72%	71%	68%	66%	67%	68%
10% Total Revenue Customers	Verizon	Verizon	Verizon AT&T	Verizon	Verizon	Verizon	Verizon	Verizon		Verizon

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.

Litigation Costs

In connection with a certain ongoing contract litigation where Ribbon is defendant (as described in Note 25 to the Company's Consolidated Financial Statements included in its Annual Report on Form 10-K for the year ended December 31, 2022), the Company has incurred litigation costs beginning in the first quarter of 2023. These costs are included as a component of general and administrative expense. The Company believes that such costs are not part of its core business or ongoing operations, are unplanned and generally not within its control. Accordingly, the Company believes that excluding the litigation costs related to this specific legal matter 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 the Company and its acquired businesses. 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.

Decrease in Fair Value of Investments

Each reporting period, the Company calculated the fair values of the debentures (the "Debentures") and the warrants to purchase shares of AVCT common stock (the "AVCT Warrants") that it received as consideration in connection with the Kandy Sale on December 1, 2020. Effective September 8, 2021, the Company received 13,700,421 shares of AVCT common stock upon the conversion of the Debentures and AVCT Warrants. The AVCT common stock was also marked to market each reporting period by the Company 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 adjustments to the fair value of these investments in Other (expense) income, net. The Company excluded the gains and losses from the change in the fair value of these investments because it believes that such gains or losses were not part of its core business or ongoing operations.

Discussion of Non-GAAP Financial Measures (continued)

Preferred Stock and Warrant Liability Mark-to-Market Adjustment

The Company recorded adjustments to the fair value of its Series A Preferred Stock and warrants to purchase shares of the Company's common stock in Other (expense) income, net. Both instruments issued in March 2023 in connection with the Company's private placement and are classified as liabilities and marked to market each reporting period. The Company excluded these gains and losses from the change in the fair value of these liabilities because it believes that such gains or losses were not part of its core business or ongoing operations.

Preferred Stock and Warrant Liability Issuance Costs

The Company incurred $3.5 million of investment banking, advisory and legal fees in its March 2023 private placement of the Series A Preferred Stock and warrants to purchase shares of the Company's common stock, both of which are classified by the Company as liabilities that are marked to market each reporting period. The Company excludes these issuance costs to allow more accurate comparisons of its financial results to its historical operations and the financial results of other companies in its industry, and it allows management and investors to consider the ongoing operations of the business both with and without such expenses.

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; stock-based compensation; amortization of acquired intangible assets; acquisition-, disposal- and integration-related expense; certain litigation costs; and restructuring and related expense. 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	1Q22			2Q22			3Q22			4Q22			FY22		
	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	$ 109,806	$ 63,392	$ 173,198	$ 137,080	$ 68,716	$ 205,796	$ 124,685	$ 82,442	$ 207,127	$ 136,566	$ 97,073	$ 233,639	$ 508,137	$ 311,623	$ 819,760
GAAP Gross profit	$ 62,732	$ 15,323	$ 78,055	$ 88,250	$ 16,300	$ 104,550	$ 76,442	$ 27,876	$ 104,318	$ 82,873	$ 31,140	$ 114,013	$ 310,297	$ 90,639	$ 400,936
GAAP Gross margin (Gross profit/Revenue)	57.1%	24.2%	45.1%	64.4%	23.7%	50.8%	61.3%	33.8%	50.4%	60.7%	32.1%	48.8%	61.1%	29.1%	48.9%
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%	0.3%	0.3%	0.3%
Amortization of acquired technology	4.7%	4.9%	4.8%	3.4%	4.6%	3.8%	3.7%	3.8%	3.7%	2.9%	3.8%	3.3%	3.6%	4.2%	3.9%
Non-GAAP Gross margin	62.2%	29.4%	50.2%	68.1%	28.6%	54.9%	65.4%	37.9%	54.5%	63.9%	36.2%	52.4%	65.0%	33.6%	53.1%
GAAP Income (loss) from operations	$ (2,347)	$ (36,707)	$ (39,054)	$ 25,953	$ (33,192)	$ (7,239)	$ 16,812	$ (20,108)	$ (3,296)	$ 21,298	$ (20,033)	$ 1,265	$ 61,716	$(110,040)	$ (48,324)
Depreciation	2,715	1,170	3,885	2,685	1,203	3,888	2,753	1,162	3,915	2,605	1,002	3,607	10,758	4,537	15,295
Amortization of acquired intangible assets	9,528	6,014	15,542	9,118	6,283	15,401	8,995	6,281	15,276	8,090	6,879	14,969	35,731	25,457	61,188
Stock-based compensation	2,665	1,590	4,255	2,646	1,753	4,399	2,992	1,849	4,841	3,214	1,998	5,212	11,517	7,190	18,707
Acquisition-, disposal- and integration-related	44	1,805	1,849	70	1,465	1,535	42	946	988	-	1,914	1,914	156	6,130	6,286
Restructuring and related	3,366	1,448	4,814	2,321	573	2,894	1,287	(18)	1,269	970	886	1,856	7,944	2,889	10,833
Non-GAAP Adjusted EBITDA	$ 15,971	$ (24,680)	$ (8,709)	$ 42,793	$ (21,915)	$ 20,878	$ 32,881	$ (9,888)	$ 22,993	$ 36,177	$ (7,354)	$ 28,823	$ 127,822	$ (63,837)	$ 63,985
Adjusted EBITDA Margin (Adjusted EBITDA/Revenue):															
GAAP Income (loss) from operations	(2.1%)	(57.9%)	(22.5%)	18.9%	(48.3%)	(3.5%)	13.5%	(24.4%)	(1.6%)	15.6%	(20.6%)	0.5%	12.1%	(35.3%)	(5.9%)
Depreciation	2.5%	1.8%	2.2%	2.0%	1.8%	1.9%	2.2%	1.4%	1.9%	1.9%	1.0%	1.5%	2.1%	1.5%	1.9%
Amortization of acquired intangible assets	8.6%	9.6%	8.9%	6.6%	9.1%	7.5%	7.3%	7.7%	7.4%	5.9%	7.0%	6.5%	7.1%	8.1%	7.4%
Stock-based compensation	2.4%	2.5%	2.5%	1.9%	2.6%	2.1%	2.4%	2.2%	2.3%	2.4%	2.1%	2.2%	2.3%	2.3%	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%	0.8%	*	2.0%	0.8%
Restructuring and related	3.1%	2.3%	2.8%	1.7%	0.8%	1.4%	1.0%	0.0%	0.6%	0.7%	0.9%	0.8%	1.6%	0.9%	1.3%
Non-GAAP Adjusted EBITDA Margin	14.5%	(38.9%)	(5.0%)	31.2%	(31.9%)	10.1%	26.4%	(12.0%)	11.1%	26.5%	(7.6%)	12.3%	25.2%	(20.5%)	7.8%

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

ribbon

GAAP to Non-GAAP Reconciliation (Continued)

$000's	1Q23			2Q23			3Q23			4Q23			FY23		
	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	$ 114,480	$ 71,679	$ 186,159	$ 125,256	$ 85,362	$ 210,618	$ 115,765	$ 87,396	$ 203,161	$ 122,146	$ 104,255	$ 226,401	$ 477,647	$ 348,692	$ 826,339
GAAP Gross profit	$ 66,077	$ 15,325	$ 81,402	$ 79,330	$ 22,140	$ 101,470	$ 74,731	$ 28,772	$ 103,503	$ 79,880	$ 41,828	$ 121,708	$ 300,018	$ 108,065	$ 408,083
GAAP Gross margin (Gross profit/Revenue)	57.7%	21.4%	43.7%	63.3%	25.9%	48.2%	64.6%	32.9%	50.9%	65.4%	40.1%	53.8%	62.8%	31.0%	49.4%
Stock-based compensation	0.3%	0.4%	0.4%	0.3%	0.3%	0.3%	0.4%	0.3%	0.3%	0.4%	0.1%	0.3%	0.4%	0.3%	0.3%
Amortization of acquired technology	3.1%	5.4%	4.0%	2.9%	4.6%	3.5%	2.8%	4.4%	3.6%	2.0%	3.8%	2.7%	2.7%	4.4%	3.4%
Non-GAAP Gross margin	61.1%	27.2%	48.1%	66.5%	30.8%	52.0%	67.8%	37.6%	54.8%	67.8%	44.0%	56.8%	65.9%	35.7%	53.1%
GAAP Income (loss) from operations	$ 839	$ (36,028)	$ (35,189)	$ 19,022	$ (25,644)	$ (6,622)	$ 16,862	$ (16,006)	$ 856	$ 20,075	$ (3,405)	$ 16,670	$ 56,798	$ (81,083)	$ (24,285)
Depreciation	2,499	1,011	3,510	2,477	1,072	3,549	2,426	1,118	3,544	2,396	1,106	3,502	9,798	4,307	14,105
Amortization of acquired intangible assets	7,639	7,014	14,653	7,704	6,995	14,699	7,381	6,992	14,373	6,171	6,995	13,166	28,895	27,996	56,891
Stock-based compensation	3,657	2,191	5,848	3,817	2,299	6,116	3,146	1,804	4,950	3,436	1,456	4,892	14,056	7,750	21,806
Litigation costs	129	48	177	83	31	114	349	129	478	393	145	538	954	353	1,307
Acquisition-, disposal- and integration-related	-	1,642	1,642	-	498	498	-	842	842	-	1,494	1,494	-	4,476	4,476
Restructuring and related	5,742	1,195	6,937	1,678	2,629	4,307	1,470	1,210	2,680	1,747	538	2,285	10,637	5,572	16,209
Non-GAAP Adjusted EBITDA	$ 20,505	$ (22,927)	$ (2,422)	$ 34,781	$ (12,120)	$ 22,661	$ 31,634	$ (3,911)	$ 27,723	$ 34,218	$ 8,329	$ 42,547	$ 121,138	$ (30,629)	$ 90,509
Adjusted EBITDA Margin (Adjusted EBITDA/Revenue):															
GAAP Income (loss) from operations	0.7%	(50.3%)	(18.9%)	15.2%	(30.0%)	(3.1%)	14.6%	(18.3%)	0.4%	16.4%	(3.3%)	7.4%	11.9%	(23.3%)	(2.9%)
Depreciation	2.2%	1.4%	1.9%	2.0%	1.3%	1.7%	2.1%	1.3%	1.7%	2.0%	1.1%	1.5%	2.1%	1.2%	1.7%
Amortization of acquired intangible assets	6.7%	9.7%	7.9%	6.2%	8.1%	7.0%	6.3%	7.9%	7.2%	5.1%	6.8%	5.8%	6.1%	8.1%	6.9%
Stock-based compensation	3.2%	3.1%	3.1%	3.0%	2.7%	2.9%	2.7%	2.1%	2.4%	2.8%	1.4%	2.2%	2.9%	2.2%	2.6%
Litigation costs	0.1%	0.1%	0.1%	0.1%	*	0.1%	0.3%	0.1%	0.2%	0.3%	0.1%	0.2%	0.2%	0.1%	0.2%
Acquisition-, disposal- and integration-related	0.0%	2.3%	0.9%	0.0%	0.6%	0.2%	0.0%	1.0%	0.4%	0.0%	1.4%	0.7%	0.0%	1.3%	0.5%
Restructuring and related	5.0%	1.7%	3.7%	1.3%	3.1%	2.0%	1.3%	1.4%	1.3%	1.4%	0.5%	1.0%	2.2%	1.6%	2.0%
Non-GAAP Adjusted EBITDA Margin	17.9%	(32.0%)	(1.3%)	27.8%	(14.2%)	10.8%	27.3%	(4.5%)	13.6%	28.0%	8.0%	18.8%	25.4%	(8.8%)	11.0%

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

GAAP to Non-GAAP Reconciliation (Continued)

$000s	1Q22	2Q22	3Q22	4Q22	FY22	1Q23	2Q23	3Q23	4Q23	FY23
GAAP Operating expenses	$ 117,109	$ 111,789	$ 107,614	$ 112,748	$ 449,260	$ 116,591	$ 108,092	$ 102,647	$ 105,038	$ 432,368
Stock-based compensation	(3,675)	(3,798)	(4,116)	(4,490)	(16,079)	(5,164)	(5,475)	(4,293)	(4,217)	(19,149)
Amortization of acquired intangible assets	(7,275)	(7,513)	(7,508)	(7,350)	(29,646)	(7,264)	(7,260)	(7,216)	(6,861)	(28,601)
Litigation costs	-	-	-	-	-	(177)	(114)	(478)	(538)	(1,307)
Acquisition-, disposal- and integration-related	(1,849)	(1,535)	(988)	(1,914)	(6,286)	(1,642)	(498)	(842)	(1,494)	(4,476)
Restructuring and related	(4,814)	(2,894)	(1,269)	(1,856)	(10,833)	(6,937)	(4,307)	(2,680)	(2,285)	(16,209)
Non-GAAP Operating expenses	$ 99,496	$ 96,049	$ 93,733	$ 97,138	$ 386,416	$ 95,407	$ 90,438	$ 87,138	$ 89,643	$ 362,626
Income (loss) from operations as a percentage of revenue ("Operating margin"):										
GAAP Operating margin	(22.5%)	(3.5%)	(1.6%)	0.5%	(5.9%)	(18.9%)	(3.1%)	0.4%	7.4%	(2.9%)
Stock-based compensation	2.5%	2.1%	2.3%	2.2%	2.3%	3.1%	2.9%	2.4%	2.2%	2.6%
Amortization of acquired intangible assets	8.9%	7.6%	7.4%	6.5%	7.4%	7.9%	7.0%	7.2%	5.7%	6.8%
Litigation costs	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%	0.2%	0.2%
Acquisition-, disposal- and integration-related	1.1%	0.7%	0.5%	0.8%	0.8%	0.9%	0.2%	0.4%	0.7%	0.5%
Restructuring and related	2.7%	1.4%	0.6%	0.8%	1.3%	3.7%	2.0%	1.3%	1.0%	2.0%
Non-GAAP Operating margin	(7.3%)	8.3%	9.2%	10.8%	5.9%	(3.2%)	9.1%	11.9%	17.2%	9.2%

GAAP to Non-GAAP Reconciliation (Continued)

	1Q22	2Q22	3Q22	4Q22	FY22	1Q23	2Q23	3Q23	4Q23	FY23
GAAP Diluted earnings (loss) per share	$ (0.47)	$ (0.20)	$ (0.12)	$ 0.12	$ (0.63)	$ (0.23)	$ (0.13)	$ (0.08)	$ 0.04	$ (0.39)
Stock-based compensation	0.03	0.03	0.03	0.03	0.12	0.04	0.03	0.03	0.03	0.13
Amortization of acquired intangible assets	0.11	0.10	0.09	0.09	0.39	0.08	0.09	0.08	0.08	0.33
Litigation costs	-	-	-	-	-	*	*	*	*	0.01
Acquisition-, disposal- and integration-related	0.01	0.01	0.01	0.01	0.04	0.01	0.01	*	0.01	0.03
Restructuring and related	0.03	0.02	0.01	0.01	0.07	0.04	0.02	0.02	0.01	0.09
Decrease in fair value of investments	0.18	0.08	0.01	-	0.26	-	-	-	-	-
Preferred stock liability and warrant mark-to-market adjustment	-	-	-	-	-	-	0.01	*	0.02	0.03
Preferred stock liability and warrant issuance costs	-	-	-	-	-	0.02	-	-	-	0.02
Tax effect of non-GAAP adjustments	0.03	0.02	(0.01)	(0.17)	(0.14)	0.02	0.01	*	(0.07)	(0.04)
Non-GAAP Diluted earnings (loss) per share	$ (0.08)	$ 0.06	$ 0.02	$ 0.09	$ 0.11	$ (0.02)	$ 0.04	$ 0.05	$ 0.12	$ 0.21
Weighted average shares used to compute diluted earnings (loss) per share (000's):										
Shares used to compute **GAAP** diluted earnings (loss) per share	149,167	150,190	158,921	168,163	156,668	168,541	170,103	171,190	171,755	170,408
Shares used to compute **non-GAAP** diluted earnings (loss) per share	149,167	154,035	163,463	172,213	161,325	168,541	175,220	176,298	172,990	172,947

* Less than 0.01 impact on non-GAAP Diluted earnings (loss) per share

GAAP to Non-GAAP Reconciliation (Continued)

	Three months ending March 31, 2024		Year ending December 31, 2024	
	Midpoint[1]	Range	Midpoint[1]	Range
Revenue ($ millions)	$ 185	+/- $5M	$ 855	+/- $15M
Gross margin:				
GAAP outlook	47.7%		50.3%	
Stock-based compensation	0.3%		0.3%	
Amortization of acquired technology	3.5%		2.9%	
Non-GAAP outlook	51.5%	+/- 0.5%	53.5%	+/- 0.5%
Adjusted EBITDA ($ millions):				
GAAP income (loss) from operations	$ (16.7)		$ 13.4	
Depreciation	3.7		14.8	
Stock-based compensation	4.8		18.6	
Amortization of acquired intangible assets	13.3		50.8	
Litigation costs	0.9		2.7	
Restructuring and related	1.5		14.7	
Non-GAAP outlook	$ 7.5	+/- $2.5M	$ 115.0	+/- $5M

1. Q1 2024 and FY 2024 outlook represents the midpoint of the expected ranges

Thank You

ribbon®