

Ribbon Communications

Fourth Quarter and Full Year 2022 Results February 15, 2023

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 first quarter of 2023 and beyond; customer engagement and momentum; plans and objectives for future operations, including cost reductions; changes to the capital structure; 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 forward-looking statements relates and inflationary pressures; 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's products; increases in tariffs, trade restrictions or taxes on the Company's products; and currency fluctuations. Additional information regarding these and other factors can be found in the Company's reports filed with the Securities and descriptions, including, without limitation, its Form 10-K for the year ended December 31, 2021. Any forward-looking statements represent our views only as of the date on which such statements is made and should not be relied upon as

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 2022 Business Overview

Bruce McClelland, President & CEO Mick Lopez, Executive Vice President & CFO



Fourth Quarter 2022 Business Highlights | Consolidated





Pipeline of New ProductsXDR 2100 / 2300Apollo 9400Edge 8000Ribbon Connect supporting GoogleSipLink & Cisco Webex



Global Customer Momentum

Product/PS book-to-bill 1.10x

verizon





SoftBank

ık JPMorgan Chase & Co.



\bigcirc

Improved Balance Sheet

\$16M Free Cash Flow \$67M Cash at year end



Fourth Quarter 2022 Business Highlights | IP Optical



Building Customer Momentum





Fourth Quarter 2022 Business Highlights | Cloud and Edge







Improvement in EBITDA Margin YoY

11% Opex Reduction

64% Gross Margin



Recurring Maintenance Revenue

Strong multi-year renewal base



Fourth Quarter 2022 Financial Highlights

4Q22 Revenue

\$234M up 13% QoQ International 61% of Sales Service Provider 65% of Sales

Balance Sheet

\$67M Ending Cash Average interest rate **5.40%**

Profitability Metrics

\$29M Adjusted EBITDA **\$0.09** Non-GAAP EPS

Cloud & Edge



Steady Contribution EBITDA up 10% QoQ

Software 59% of total Cloud and Edge product revenue

Enterprise 67% growth QoQ

1.15x book to revenue ratio

Continued Profitability 64% Non-GAAP Gross Margin

> Non-GAAP OpEx \$6.4M lower YoY

26% Adj. EBITDA Margin

IP Optical Networks



Revenue Growth Up 18% QoQ and 17% YoY

North America up 31% in 2022 – strongest year ever

APAC Strong Q4 with Revenue **up 49% QoQ** and **35% YoY**



Market Momentum Major Tier 1 carrier opportunities 21% Increase YoY in Trial Activity

1.05x book to revenue ratio



Fourth Quarter and Full Year 2022 GAAP Financial Summary

	4Q21	3Q22	4Q22	2021	2022
Revenue	\$231M	\$207M	\$234M	\$845M	\$820M
Gross Margin	50%	50%	49 %	53%	49%
Opex ¹	\$235M	\$108M	\$113M	\$562M	\$449M
Income (loss) from operations	(\$120M)	(\$3M)	\$1M	(\$118M)	(\$48M)
Other (expense) income, net ²	(\$9M)	(\$4M)	(\$2M)	(\$75M)	(\$44M)
Net income (loss)	(\$96M)	(\$18M)	\$20M	(\$177M)	(\$98M)
Diluted EPS	(\$0.65)	(\$0.12)	\$0.12	(\$1.20)	(\$0.63)

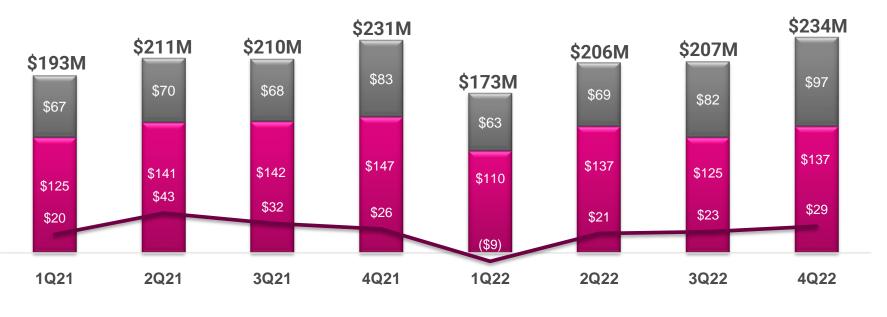
Note:

1. Opex – includes Goodwill impairment charges of \$116M in 2021, \$0M in 2022

2. Other (expense) income, net includes the following non-cash measurement gains (losses) associated with the quarterly mark-to-market adjustments to the investment in AVCT: FY21 (\$75M) / FY22 (\$41M)



Total Revenue and Adjusted EBITDA¹



Cloud and Edge Revenue IP Optic

IP Optical Networks Revenue

Adjusted EBITDA



Fourth Quarter and Full Year 2022 Non-GAAP Financial Summary

	4Q21	3Q22	4Q22
Revenue	\$231M	\$207M	\$234M
Non-GAAP Gross Margin ¹	54%	54%	52%
Non-GAAP Opex ¹	\$102M	\$94M	\$97M
Non-GAAP Operating Margin ¹	9%	9%	11%
Non-GAAP Adjusted EBITDA ¹	\$26M	\$23M	\$29M
Non-GAAP Diluted EPS ¹	\$0.01	\$0.02	\$0.09

Note:



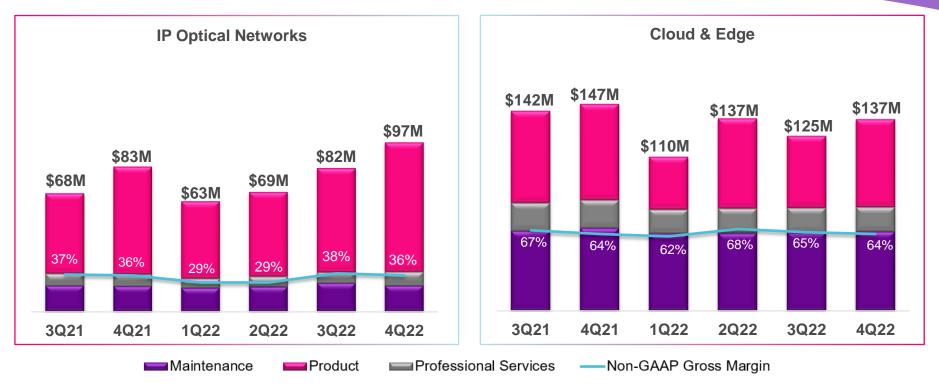
Fourth Quarter and Full Year 2022 Non-GAAP Segment Summary

	4Q22 Cloud and Edge	4Q22 IP Optical Networks	4Q22 Consolidated	FY22 Cloud and Edge	FY22 IP Optical Networks	FY22 Consolidated
Revenue vs Prior Year	\$137M (7%)	\$97M +17%	\$234M +1%	\$508M (9%)	\$312M +8%	\$820M (3%)
Non-GAAP Gross Margin ¹	64%	36%	52%	65%	34%	53%
Non-GAAP Adjusted EBITDA ¹	\$36M	(\$7M)	\$29M	\$128M	(\$64M)	\$64M
Non-GAAP Adjusted EBITDA Margin ¹	26%	-8%	12%	25%	-20%	8%

Note:

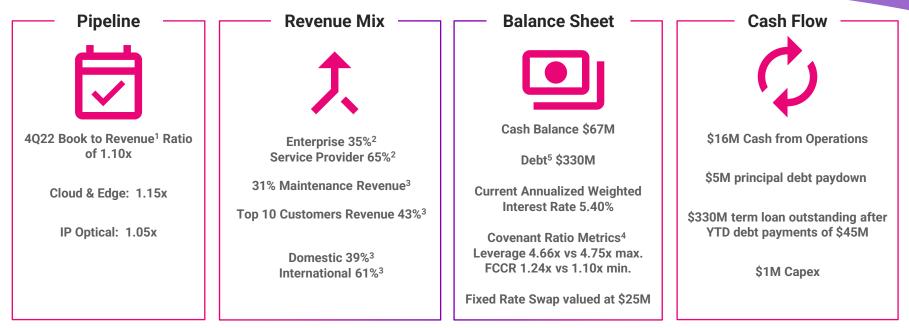


Quarterly Performance: Revenue & Non-GAAP Gross Margins



Note:

Fourth Quarter 2022 Key Metrics



Notes:

- 1. Product and Professional Services (excluding maintenance) Bookings divided by Product and Professional Services Revenue (excluding maintenance) for the three months ended December 31, 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.



Key Trends & Outlook



2023 Operating Environment







Healthy Telecom Environment

'Digital mobile lifestyle'



Efficiency and ROIC



Quest for new revenue generating services



Geopolitical impact on competitive environment



Inflation



Energy Security

Imperative for our customers to innovate and to invest!



2023 Customer Investment Priorities



Mobile Remains a Top Priority

Cell site Router Aggregation Optical transport



Surge in Investment Broadband Access (Fiber, HFC, Fixed Wireless)

IP routing Metro and Access Optical transport



Relentless Pursuit to Lower Total Cost of Ownership

Analytics Enhanced Security Energy Efficiency



Digital Transformation

> Telco Cloud As-a-Service Automation

Ribbon solutions directly address these key investment priorities



Growing momentum in 2023 as investments provide profitable growth



2022 Accomplishments

- Strong momentum in 2H22 36% IP Optical sales growth vs. 1H22
- Major new growth vector on strength of expanded IP Networking portfolio
- Major new IP Optical wins



- Telco Cloud momentum and Enterprise growth
- New product launches including Neptune XDR 2000 Series



Profitable Growth in 2023

- 10%+ IP Optical Transport revenue growth target with path to profitability
- Cloud & Edge stability with major Secure VoIP opportunities in Federal and Enterprise
- Improving supply chain environment
- Additional cost savings (5%) implemented to better leverage entire portfolio differentiation and improve efficiency
- Will result in significant improvement in overall profitability



- Investment in Tier One Service Provider opportunities provides non-linear growth opportunity
- Portfolio investment leads to expanded addressable market
- Partnership opportunities to increase scale and accelerate market share gains
- Federal opportunities provide multi-year investment cycle
- Increasing software and recurring revenue mix

Committed to Our Strategy to Drive Profitable Growth



2023 Growth Areas



Cloud & Edge

Enterprise

Target F1000 Customers in key verticals Expand adoption of Cloud Services - Ribbon Connect, Identity Management, Analytics

Convert US Federal Opportunities



Telco Cloud Transformation Projects

US Tier 1, NA Tier 2, Europe, APAC, CALA



SBC share

Market expected to grow 6%+ in 2023

Leverage Application portfolio

IP Optical Networks



Optical Major Accounts

Expand on recent major account wins Convert Tier One pipeline in 1H23 Leapfrog with new Apollo 9400 platform



Establish Ribbon as major IP Networking solution provider

New XDR 2000 Series portfolio and rNOS

Cloud-native Muse management platform

Multiple entry points – 5G, TDM, CIN, multiservice access, automation/orchestration



2023 Organization / Efficiencies

Ribbon 3.0 Organization



Business Unit Re-alignment

Cloud & Edge and IP Optical Business units combined under Sam Bucci as COO

Growing number of opportunities to leverage solutions across entire portfolio

Optimized R&D investment

Continue to report results in two segments

Integrated Global Sales Org

Global team with local presence combined under one sales leader Dan Redington Increased emphasis on IP Networking Increased collaboration and efficiency Reduced investment in under-performing regions

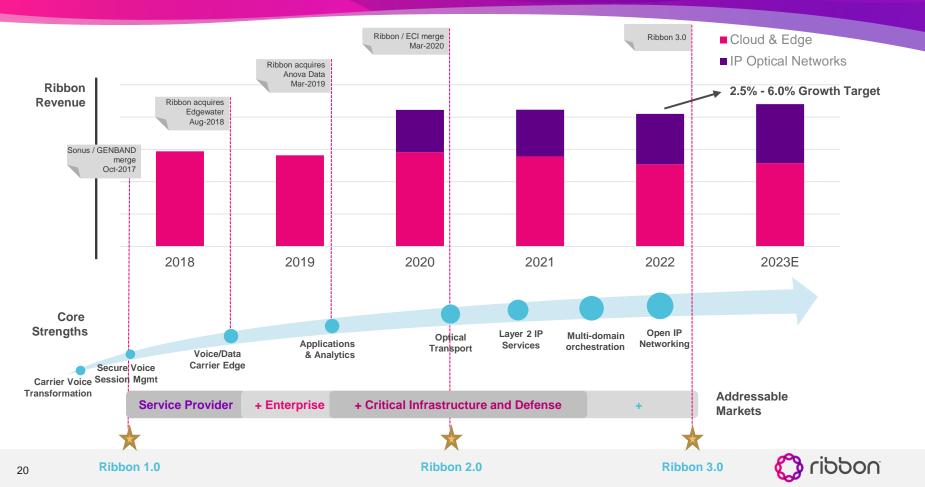
Operating Efficiencies

5% Annualized Cost Savings for 2023





Ribbon 3.0 – the next phase of growth and profitability



First Quarter and Full Year 2023 Business Outlook

	FY22 (Actual)	1Q23	FY23
Revenue	\$820M	\$180M to 190M	\$840M to \$870M
Non-GAAP Gross Margin ¹	53%	46% to 48%	53% to 54%
Non-GAAP Adjusted EBITDA ¹	\$64M	(\$6M) to \$1M	\$95M to \$110M
Interest and Other Expense	(\$23M)	~(\$6M)	~(\$23M)

Note:

1. Please see non-GAAP reconciliations in the appendix.







Ribbon Condensed Statements of Operations

USD Millions										
except percentages and EPS	1Q21	2Q21	3Q21	4Q21	FY21	1Q22	2Q22	3Q22	4Q22	FY22
GAAP FINANCIAL MEASURES										
Product Revenue	98	113	112	130	453	82	113	111	137	443
Service Revenue	95	98	99	100	392	91	93	96	97	377
Total Revenue	193	211	210	231	845	173	206	207	234	820
Gross Profit	100	119	111	115	445	78	105	104	114	401
Gross Margin %	52%	56%	53%	50%	53%	45%	51%	50%	49%	49%
Research and development	47	47	49	52	195	53	51	49	51	204
Selling, general and administrative	53	48	48	55	204	50	49	48	51	199
Amortization of acquired intangible assets	6	7	8	7	28	7	8	8	7	30
Integration and restructuring-related expenses	7	4	4	5	19	7	4	2	4	17
Impairment of goodwill	-	-	-	116	116	-	-	-	-	-
Total Operating Expenses	113	106	109	235	562	117	112	108	113	449
Income/(Loss) from Operations	(13)	13	2	(120)	(118)	(39)	(7)	(3)	1	(48)
Operating Margin %	-7%	6%	1%	-52%	-14%	-23%	-4%	-2%	1%	-6%
Net Income/(Loss)	(45)	23	(59)	(96)	(177)	(70)	(30)	(18)	20	(98)
Diluted EPS	(\$0.31)	\$0.15	(\$0.40)	(\$0.65)	(\$1.20)	(\$0.47)	(\$0.20)	(\$0.12)	\$0.12	(\$0.63)
Shares used to compute GAAP diluted earnings (loss) per share	146	154	148	149	148	149	150	159	172	157
Cash Flow from Operating Activities	(6)	14	-	11	19	15	(39)	(18)	16	(26)
NON-GAAP FINANCIAL MEASURE										
Adjusted EBITDA	20	43	32	26	120	(9)	21	23	29	64



Ribbon Condensed Balance Sheets

USD Millions	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22
ASSETS								
Cash and cash equivalents ¹	109	115	104	106	95	38	56	67
Accounts receivable, net	209	220	236	283	221	258	238	267
Inventory	45	47	45	54	62	65	70	75
Property and equipment, net	49	49	49	48	48	49	46	45
Intangible assets, net and Goodwill	818	801	784	652	636	621	611	596
Investment (AVCT)	93	106	50	44	17	5	-	-
Other Assets	129	121	120	161	185	196	204	205
Total Assets	1,453	1,459	1,387	1,348	1,264	1,231	1,225	1,256
LIABILITIES AND EQUITY								
Liabilities	301	287	287	321	311	318	292	278
Deferred revenue	125	124	111	130	128	126	112	133
Debt ²	384	379	375	370	350	335	331	326
Stockholders' Equity	643	669	614	527	474	451	489	518
Total Liabilities and Equity	1,453	1,459	1,387	1,348	1,264	1,231	1,225	1,256

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	4Q22	FY22
Cash from Operations	(6)	14	-	11	19	15	(39)	(18)	16	(26)
Purchases of property and equipment	(5)	(5)	(4)	(3)	(17)	(3)	(3)	(7)	(1)	(14)
Proceeds from sale of business	-	3	-	-	3	-	-	-	1	1
Borrowings, net	(4)	(5)	(5)	(5)	(19)	(21)	(16)	(5)	(5)	(47)
Equity placement	-	-	-	-	-	-	-	50	-	50
Other	(12)	(1)	(2)	(1)	(15)	(2)	1	(2)	(1)	(4)
Net Change	(27)	6	(11)	3	(29)	(11)	(57)	18	11	(39)
Cash ¹ Beginning of Period	136	109	115	104	136	106	95	38	56	106
Cash ¹ End of Period	109	115	104	106	106	95	38	56	67	67

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	4Q22	FY22
Revenue	1021	2021	3021	TOL	1121	TQ22	ZQZZ	JQLL	TQLL	1122
Product	98	113	112	130	453	82	113	111	137	443
Service	90 95	98	99	100	392	91	93	96	97	377
Total Revenue	<u> </u>	<u> </u>	<u> </u>	231	845	173	 206	207	234	820
% of Total Revenue:										
Revenue Mix										
Product	51%	54%	53%	57%	54%	47%	55%	54%	59%	54%
Services	49%	46%	47%	43%	46%	53%	45%	46%	41%	46%
Revenue by Geography										
Domestic	41%	48%	44%	45%	45%	44%	48%	42%	39%	43%
International	59%	52%	56%	55%	55%	56%	52%	58%	61%	57%
Revenue by Channel										
Direct	79%	76%	77%	66%	74%	71%	75%	69%	67%	70%
Indirect	21%	24%	23%	34%	26%	29%	25%	31%	33%	30%
Product Revenue By Market										
Enterprise	23%	22%	18%	34%	25%	27%	20%	30%	35%	28%
Service Providers	77%	78%	82%	66%	75%	73%	80%	70%	65%	72%
10% Total Revenue Customers	Verizon	Verizon	Verizon	Verizon	Verizon	Verizon	Verizon	Verizon AT&T	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.

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 the impairment test completed in the fourth quarter of 2021, 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. 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 American Cloud Technologies, Inc. ("AVCT") Series A-1 convertible debentures (the "Debentures") it received as consideration in connection with the sale of its Kandy Communications business (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.



Gain on Sale of Business

On May 12, 2021, the Company sold its QualiTech business, which it had acquired as part of its acquisition of ECI Telecom Group Ltd., 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 expense; 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		1Q21		2Q21				3Q21			4Q21		FY21		
	Cloud and		Consolidated			onsolidated			nsolidated	Cloud and		Consolidated	Cloud and		Consolidated
	Edge	Networks		Edge	Networks		Edge	Networks		Edge	Networks		Edge	Networks	
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 \$	5 (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 \$	6 (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%)
	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



\$000's	1Q22	2Q22	3Q22	4Q22	FY22
	Cloud and IP Optical Cons Edge Networks	olidated Cloud and IP Optical Consoli Edge Networks	ated Cloud and IP Optical Consolidated Edge Networks	Cloud and IP Optical Consolidated Edge Networks	Cloud and IP Optical Consolidated Edge Networks
	Luge Networks	Luge Networks	Luge Networks	Luge Networks	Luge Networks
Revenue	\$ 109,806 \$ 63,392 \$	173,198 \$ 137,080 \$ 68,716 \$ 20	,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 \$ 10	,550 \$ 76,442 \$ 27,876 \$ 104,318	\$ 82,873 \$ 31,140 \$ 114,013	<u>\$ 310,297 \$ 90,639 \$ 400,936</u>
GAAP Gross margin (Gross profit/Revenue)	57.1% 24.2%	45.1% 64.4% 23.7%	0.8% 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%
Amortization of acquired technology	4.7% 4.9%	4.8% 3.5% 4.6%	3.8% 3.7% 3.8% 3.7%		3.6% 4.2% 3.9%
Non-GAAP Gross margin	62.2% 29.4%	50.2% 68.2% 28.6%	4.9% 65.4% 37.9% 54.5%	63.9% 36.2% 52.4%	65.0% 33.6% 53.1%
GAAP Loss from operations	\$ (2,347) \$ (36,707) \$		(3,239) \$ 16,812 \$ (20,108) \$ (3,296)		\$ 61,716 \$ (110,040) \$ (48,324)
Depreciation	2,715 1,170		,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		,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		,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	,535 42 946 988	- 1,914 1,914	156 6,130 6,286
Restructuring and related	3,366 1,448		<u>1,287 (18) 1,269</u>	970 886 1,856	7,944 2,889 10,833
Non-GAAP Adjusted EBITDA	\$ 15,971 \$ (24,680) \$	(8,709) \$ 42,793 \$ (21,915) \$ 2	,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 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%)	0.1% 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



\$000s	 1Q21	2Q21	3Q21	4Q21	FY21	 1Q22	2Q22	3Q22	4Q22	FY22
GAAP Operating expenses	\$ 113,090 \$	105,775 \$	108,662 \$	234,929 \$	562,456	\$ 117,109 \$	111,789 \$	107,614 \$	112,748 \$	449,260
Stock-based compensation	(4,798)	(4,228)	(3,973)	(4,422)	(17,421)	(3,675)	(3,798)	(4,116)	(4,490)	(16,079)
Amortization of acquired intangible assets	(5,762)	(7,481)	(7,547)	(7,493)	(28,283)	(7,275)	(7,513)	(7,508)	(7,350)	(29,646)
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)	(1,914)	(6,286)
Restructuring and related	(5,950)	(2,830)	(1,767)	(1,106)	(11,653)	(4,814)	(2,894)	(1,269)	(1,856)	(10,833)
Non-GAAP Operating expenses	\$ 95,383 \$	90,184 \$	93,420 \$	102,480 \$	381,467	\$ 99,496 \$	96,049 \$	93,733 \$	97,138 \$	386,416
(Loss) income from operations as a percentage of revenue ("Operating margin"): GAAP Operating margin Stock-based compensation Amortization of acquired intangible assets Impairment of goodwill Acquisition-, disposal- and integration-related	(6.5%) 2.6% 8.2% 0.0% 0.6%	6.1% 2.3% 8.2% 0.0% 0.5%	0.9% 2.2% 8.3% 0.0% 0.9%	(52.1%) 2.2% 7.1% 50.3% 1.5%	(13.9%) 2.3% 7.9% 13.7% 0.9%	(22.5%) 2.5% 8.9% 0.0% 1.1%	(3.5%) 2.1% 7.6% 0.0% 0.7%	(1.6%) 2.3% 7.4% 0.0% 0.5%	0.5% 2.2% 6.5% 0.0% 0.8%	(5.9%) 2.3% 7.4% 0.0% 0.8%
Restructuring and related	3.1%	1.3%	0.8%	0.5%	1.4%	2.7%	1.4%	0.6%	0.8%	1.3%
Non-GAAP Operating margin	 8.0%	18.4%	13.1%	9.5%	12.3%	 (7.3%)	8.3%	9.2%	10.8%	5.9%



	1Q2 [,]	1	2Q21	3Q21	4Q21	FY21	 1Q22	2Q22	3Q22	4Q22	FY22
GAAP Diluted (loss) earnings per share	\$	(0.31) \$	0.15 \$	(0.40) \$	(0.65) \$	(1.20)	\$ (0.47) \$	(0.20) \$	(0.12) \$	0.12 \$	(0.63)
Stock-based compensation		0.03	0.03	0.03	0.03	0.14	0.03	0.03	0.03	0.03	0.12
Amortization of acquired intangible assets		0.11	0.11	0.12	0.12	0.44	0.11	0.10	0.09	0.09	0.39
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	0.01	0.04
Restructuring and related		0.05	0.02	0.01	0.01	0.08	0.03	0.02	0.01	0.01	0.07
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	-	0.26
Tax effect of non-GAAP adjustments		(0.01)	(0.04)	(0.03)	(0.33)	(0.42)	 0.03	0.02	(0.01)	(0.17)	(0.14)
Non-GAAP Diluted earnings (loss) per share	\$	0.03 \$	0.17 \$	0.11 \$	0.01 \$	0.32	\$ (0.08) \$	0.06 \$	0.02 \$	0.09 \$	0.11
Weighted average shares used to compute diluted earnings (loss) per share (000's): Shares used to compute GAAP diluted (loss) earnings per share Shares used to compute non-GAAP diluted earnings (loss) per share		5,936 5,032	154,160 154,160	148,184 154,061	148,675 153,898	147,575 154,527	149,167 149,167	150,190 154,035	158,921 163,463	168,163 172,213	156,668 161,325



Revenue (\$ millions)	Three months ending March 31, 2023 Range			Year ending December 31, 2023 Range				
	\$	180	\$	190	\$	840	\$	870
Gross margin:								
GAAP outlook		42.5%		43.7%		49.3%		50.4%
Stock-based compensation		0.4%		0.4%		0.3%		0.3%
Amortization of acquired technology		4.1%		3.9%		3.4%		3.3%
Non-GAAP outlook		47.0%		48.0%		53.0%		54.0%
Adjusted EBITDA (\$ millions):								
GAAP (loss) income from operations	\$	(36.4)	\$	(29.4)	\$	(17.3)	\$	(2.3)
Depreciation		3.8		3.8		15.4		15.4
Stock-based compensation		5.4		5.4		22.0		22.0
Amortization of acquired intangible assets		14.7		14.7		56.9		56.9
Acquisition-, disposal- and integration-related		0.4		0.4		0.6		0.6
Restructuring and related	<u> </u>	6.1		6.1		17.4		17.4
Non-GAAP outlook	\$	(6.0)	\$	1.0	\$	95.0	\$	110.0





