



Ribbon Communications

Second Quarter 2020 Results

August 5, 2020



Bruce McClelland
President & CEO



Mick Lopez
EVP & CFO

Cautionary Note Regarding Forward-Looking Statements

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 proposed sale of our Kandy Communications business and the expected effects, our outlook for the Company in the sections titled “COVID-19 Update,” “Key Trends and Outlook,” the future results of operations and financial position, customer engagement and momentum, integration activities, opportunities for the Company, growth in the business, plans for future cost reductions, plans for future product offerings, development and manufacturing business strategy, resolution of the fee dispute between customers and the government in India, strategic position, plans and objectives of management for future operations and plans for future product development and manufacturing, are forward-looking statements. Without limiting the foregoing, the words “believes”, “estimates”, “expects”, “expectations”, “intends”, “may”, “plans”, “projects” and other similar language, whether in the negative or affirmative, are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Forward-looking statements are based on our current expectations and assumptions regarding our 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. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements including, but not limited to, risks related to the COVID-19 pandemic on the global economy and financial markets, as well as on the Company, our customers and suppliers, which may impact our sales, gross margin, customer demand and our ability to supply our products to our customers; risks that the businesses of ECI Telecom Group Ltd. (“ECI”) will not be integrated successfully or that the combined companies will not realize estimated cost savings; failure to realize anticipated benefits of the merger with ECI; integration activities with respect to ECI and our other acquisitions; failure to consummate the proposed sale of the Kandy business; failure to make or take any filing or other action required to consummate the proposed Kandy transaction in a timely matter or at all; failure to satisfy other closing conditions to the Kandy transaction; failure to realize anticipated benefits from the Kandy transaction; potential litigation relating to the proposed transaction and disruptions from the proposed transaction that could harm our business; the potential impact of announcement or consummation of the proposed Kandy transaction on relationships with third parties, including customers, employees and competitors; supply chain disruptions resulting from geopolitical instabilities and disputes; unpredictable fluctuations in quarterly revenue and operating results; failure to compete successfully against telecommunications equipment and networking companies; failure to grow our customer base or generate recurring business from our existing customers; consolidation in the telecommunications industry; credit risks; the timing of customer purchasing decisions and our recognition of revenues; economic conditions; our ability to recruit and retain key personnel; difficulties supporting our strategic focus on channel sales; difficulties retaining and expanding our customer base; difficulties leveraging market opportunities; the impact of restructuring and cost-containment activities; litigation; actions taken by significant stockholders; difficulties providing solutions that meet the needs of customers; market acceptance of our products and services; rapid technological and market change; our ability to protect our intellectual property rights and obtain necessary licenses; our ability to maintain partner, reseller, distribution and vendor support and supply relationships; the limited supply of certain components of our products; the potential for defects in our products; risks related to the terms of our credit agreement; higher risks in international operations and markets; the impact of increased competition; increases in tariffs, trade restrictions or taxes on our products; currency fluctuations; changes in the market price of our common stock; and/or failure or circumvention of our controls and procedures.

Cautionary Note Regarding Forward-Looking Statements (continued)

All of our forward-looking statements involve known and unknown risks, uncertainties (some of which are significant or beyond our control) and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements express or implied by the forward-looking statements and such assumptions could cause actual results to differ materially from our historical experience and our present expectations or projections. Unlisted factors may present significant additional obstacles to the realization of forward-looking statements. Therefore, we caution you against relying on any of these forward-looking statements. Important factors that could cause actual results to differ materially from these forward-looking statements are discussed in Ribbon's most recent Quarterly Report on Form 10-Q and Annual Report on Form 10-K filed with the SEC and the Company's other SEC filings. Any forward-looking statements represent Ribbon's views only as of the date on which such statement is made and should not be relied upon as representing Ribbon's views as of any subsequent date. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. While Ribbon Communications may elect to update forward-looking statements at some point, Ribbon Communications specifically disclaims any obligation to do so, except as may be required by law.

Use of Non-GAAP Financial Measures

This presentation includes certain non-GAAP financial measures in addition to the U.S. GAAP financials. Ribbon Communications management believes that presenting certain non-GAAP financial measures provides meaningful information to investors in understanding 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. Ribbon Communications urges you to review the reconciliation of Ribbon's 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 Ribbon Communications' business.

2Q20 Business Overview



Bruce McClelland
President & CEO



Q2 FY 2020 Business Highlights



Transformation

- Integration on Track
- New Leadership
- Cost Management



Unlocking value!



Customers

- Bharti Airtel (top 3 global mobile provider) 5G-ready IP/MPLS network deployment
- 5G/VoLTE transcoding win with Tier One North American Carrier
- Bandwidth Inc. leverages Ribbon cloud-based SBC using Amazon Web Services for rapid deployment
- Japanese mobile carrier OpenRAN Wireless 4G launch using Ribbon SBC
- Microsoft 365 Business Voice Direct Routing Training for One Commercial Partners
- AT&T API Marketplace launches IP Toll Free Click-to-Connect service using Kandy Business Services platform
- Kandy UCaaS surpasses 200k seats and signed 80k seat 6-year regional health care deal



Financial

- Continued growth in higher margin software sales
- Growth in Enterprise sales
- Recovery in Packet Optical Networks sales
- Cost management
- Effectively managing Covid-19 challenges
- Improving visibility in 2H20

KANDY Transaction Overview and Rationale

Strategic Rationale

- Kandy portfolio addresses large and fast growing UCaaS, CPaaS and CCaaS markets but needs additional investment to scale
- Sale to American Virtual Cloud Technologies (NASDAQ: AVCT) should **unlock value** and allow Ribbon shareholders to benefit from higher potential valuation upside as a shareholder in AVCT
- Customers and employees will benefit from stronger combined portfolio and expected **acceleration of business plan**
- Continued technology and market collaboration leveraging Ribbon portfolio
- Expected to be immediately accretive to Ribbon financial performance
- Allow Ribbon to increase focus on its Service Provider and Enterprise strategy

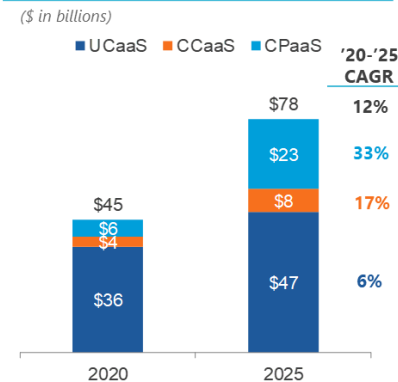
Transaction Structure

- Asset purchase including associated customer contracts and certain intellectual property
- Key customers include AT&T, IBM, Etisalat, City of Los Angeles
- Transaction expected to close in 2H20 contingent on financing, AVCT shareholder approval, approval of Ribbon's lenders and other customary closing conditions

Consideration

- 13M shares of AVCT with total value ~\$50M based on current AVCT share price

Large TAM⁽¹⁾...



Large and growing TAM, with CPaaS in the early stages of adoption

Large Market Opportunity

(1) IDC - Worldwide Unified Communications and Collaboration Forecast

COVID-19 Update

Employees & Community

- Majority of employees working from home
- Phasing in voluntary partial return to work in some regions
- Broad travel restrictions
- Extensive employee engagement
- Community involvement



Power banks donated to temporary hospital in Murcia, Spain

Customers & Markets

- Service Providers and Enterprises continue focus on digital transformation
- Elevated network utilization related to work-from-home traffic creating sustained demand for capacity and security
- Continued concern over high unemployment levels and impacts in 2H20 and 2021
- Customers prioritizing speed of deployment and certainty of solution
- Challenging operating environment in regions such as India and Japan

Business & Operations

- 2H demand visibility improving
- Supply chain and logistics challenges evolving but manageable
- Key headwinds include:
 - Slowly recovering India demand
 - Limited direct customer access
 - Currency FX in certain markets
- Strong focus on cost management and cash preservation
- Temporary salary reduction supported by employees and directors

Business performing well in a challenging environment

2Q20 Financial Results



Mick Lopez
EVP & CFO



Second Quarter 2020 Highlights

Growing Revenue

Sales of \$210M, up \$65M YoY¹
Includes \$64M from Packet Optical
Networks

Cash Flow and Balance Sheet

Ending Cash of \$94M

Improving Profitability

Adjusted EBITDA² of \$30M, up \$7M¹

Cloud and Edge²



Growing Software Sales

Revenue from pure software
products was
60% of total product revenue



Accelerating Gross Margin

Non-GAAP Gross Margin²
of 67%, up 5 ppts YoY¹

Packet Optical Networks²



Revenue Trend

Down 26% YoY³
Up 15% QoQ⁴

Projected Growth
2H20⁵



Customer Success

8 New Customer
Wins

Strengthening 2H20⁵
Pipeline



Profit Stabilization

Non-GAAP Gross Margin²
of 39%

Focused on Expense
Controls

¹Three months ended June 30, 2020 compared with the corresponding period in 2019.

²Please see the basis of presentation and the non-GAAP reconciliation in the appendix.

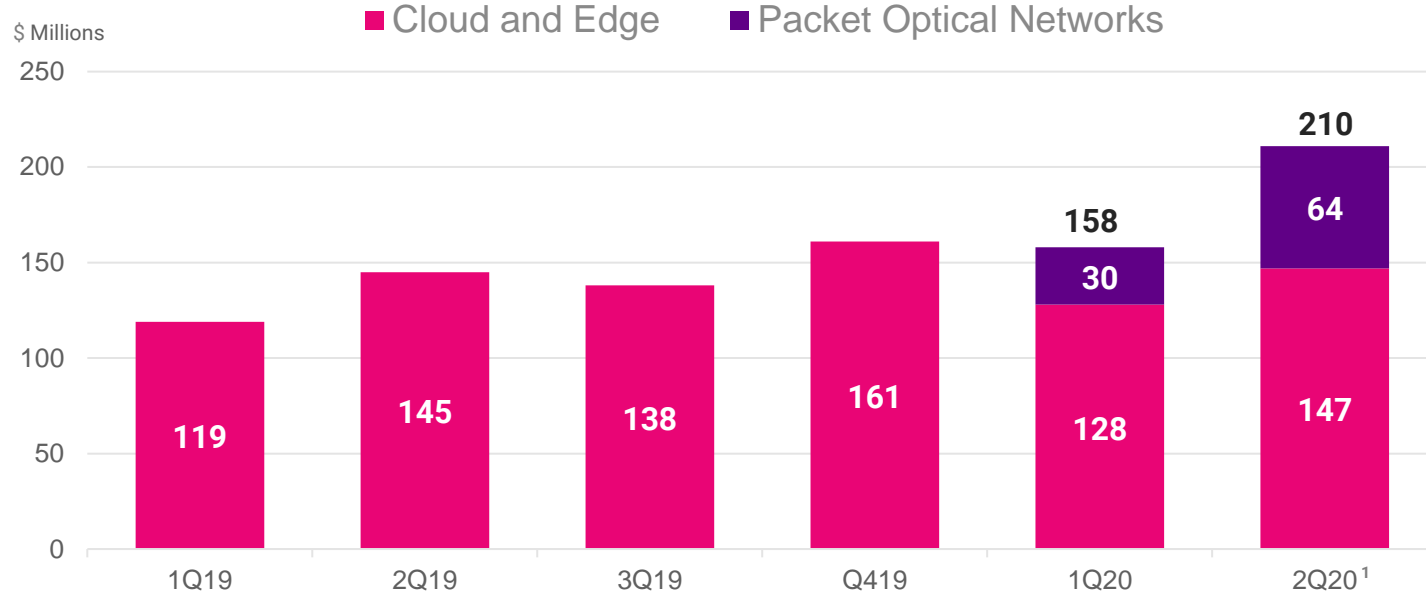
³Calculated as Packet Optical Networks total revenue of \$64M and \$86M for the three months ended June 30, 2020 and 2019, respectively. The amount for the three months ended June 30, 2019 is not included in Ribbon's consolidated results as this period was prior to the March 3, 2020 merger date.

⁴Calculated as Packet Optical Networks total revenue of \$64M and \$55M for the three months ended June 30, 2020 and March 31, 2020, respectively. Of the amount for the three months ended March 31, 2020, \$30M was included in Ribbon's consolidated results. The remaining \$25M was not included in Ribbon's consolidated results as this revenue was recognized by Packet Optical Networks prior to the March 3, 2020 merger date.

⁵Six months ended December 31, 2020 compared to the six months ended June 30, 2020.

Total Revenue

Revenue by Quarter: Cloud & Edge and Packet Optical Networks



¹Includes reduction of revenue related to Packet Optical Networks purchase accounting of \$2M in 2Q20.

Please see the basis of presentation in the appendix.

GAAP Financial Highlights

	1Q19	2Q19	1Q20 ¹	2Q20 ¹
Revenue	\$119M	\$145M	\$158M	\$210M
Gross Margin	48%	55%	52%	53%
OPEX	\$93M	\$88M	\$110M	\$111M
Net income (loss)	\$(31)M	\$49M	\$(33)M	\$(8)M
Diluted EPS	\$(0.29)	\$0.45	\$(0.27)	\$(0.06)

¹Please see the basis of presentation in the appendix. For the three months ended March 31, 2020, Ribbon's consolidated results includes Packet Optical Networks post the March 3, 2020 merger date. For the three months ended June 30, 2020, Ribbon's consolidated results includes Packet Optical Networks for the full quarter.

Non-GAAP Financial Highlights 2Q20

	Cloud and Edge 2Q20	Packet Optical Networks (ECI Legal Entity) 2Q20	Consolidated 2Q20	
Revenue	\$147M +1% YoY ¹	\$64M -26% YoY ³	\$210M	
Non-GAAP Gross Margin ²	67% + 5 ppts YoY ¹	39%	59%	
Non-GAAP OPEX ²	\$64M - 10% YoY ¹	\$34M	\$99M	
Non-GAAP Operating Margin ²	23% +10 ppts YoY ¹	(15%)	12%	
Non-GAAP Adjusted EBITDA ²	\$37M	(\$7M)	\$30M +31% YoY ¹	Non-GAAP EPS \$0.06

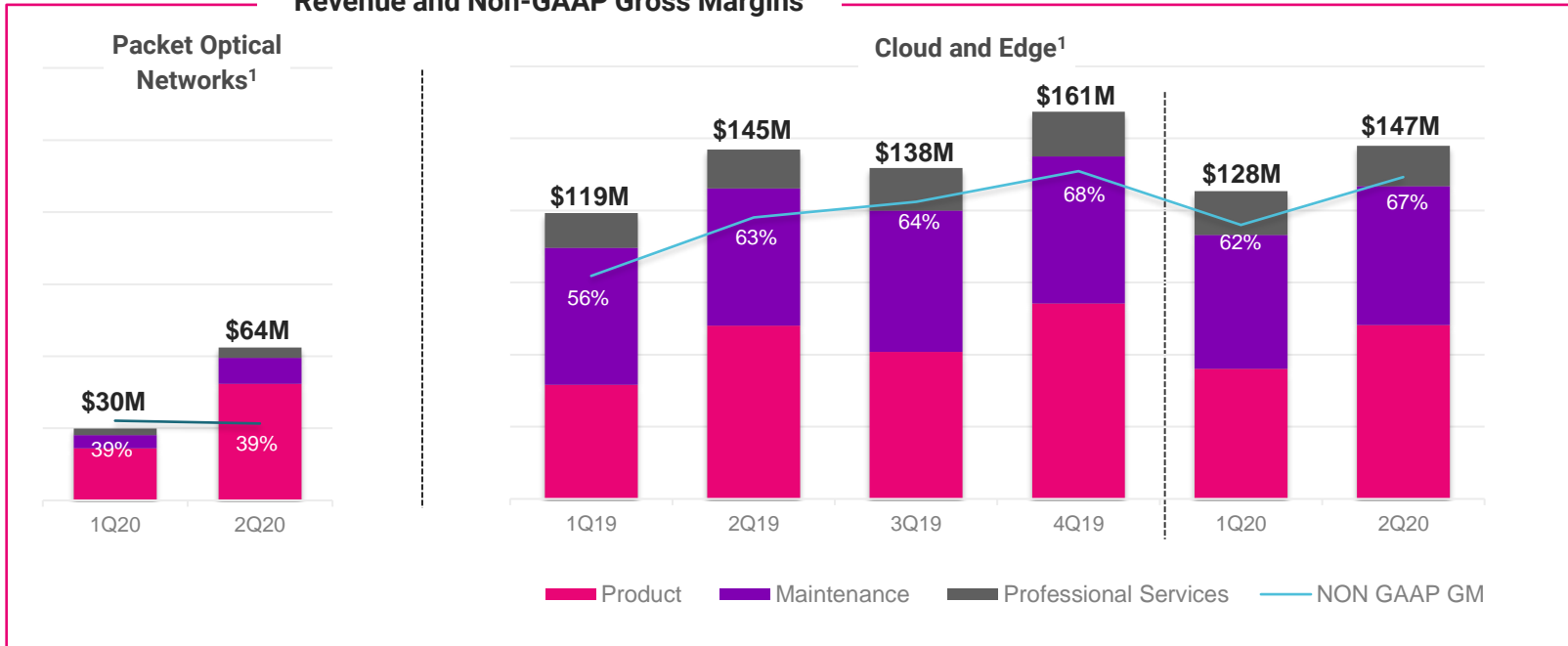
¹Three months ended June 30, 2020 compared with the corresponding period in 2019.

²Please see the basis of presentation and the non-GAAP reconciliation in the appendix.

³Calculated as Packet Optical Network's total revenue of \$64M and \$86M for the three months ended June 30, 2020 and 2019, respectively. The amount for the three months ended June 30, 2019 is not included in Cloud and Edge's consolidated results as this period was prior to the March 3, 2020 merger date.

Quarterly Performance

Revenue and Non-GAAP Gross Margins



¹Please see the basis of presentation in the appendix.

Second Quarter 2020 Key Metrics

Bookings



Improving 2H20¹ Visibility

Product/PS Book to Bill²
Ratio of 1.12 in 2Q20

Solid Pipeline

Revenue Mix



39% Software Revenue⁴

33% Maintenance Revenue⁵

Top 10 Customers Revenue 47%⁵

Enterprise 30%⁴
Service Provider 70%⁴

Domestic 48%⁵
International 52%⁵

Balance Sheet



Cash Balance \$94M

Term Loan \$397.5M
Effective Rate 3.9%

Cash Flow



Cash From Operations (\$3M)
Unlevered Free Cash Flow (\$6M)

\$9M Capex in 2Q20 included
\$5M of real estate facility
improvements

¹Six months ended December 31, 2020 compared to the six months ended June 30, 2020.

²Product and Professional Services (excluding maintenance) divided by Product and Profession Services Revenue for the three months ended June 30, 2020.

³Three months ended June 30, 2020 compared with the corresponding period in 2019.

⁴As a percentage of total product revenue.

⁵As a percentage of total revenue.

Please see the basis of presentation and the non-GAAP reconciliation in the appendix.



Key Trends and Outlook



Cloud & Edge Portfolio

Products & Services

Core and Edge Solutions

- **Digital Network Transformation (NTR)**
 - Application Server, Call Control, Media GW, Policy & Routing, Signaling
- **Session Management (SBC)**
 - Carrier Session Border Control
 - Enterprise Session Border Control
 - Enterprise Edge uCPE
 - 4G/5G VoLTE Voice Transcoding

Network Intelligence & Management (Applications)

- **Unified Communications**
- **Analytics, Security & Network Insights**
- **Call Trust & Identity Assurance**

Cloud and Edge Revenue Mix



Looking Forward

Key Trends

- Work-from-home driving continued higher network utilization and need for capacity augmentation
- Digital transformation to modernize networks and reduce costs remains a high priority
- Enterprise adoption of Unified Communications as foundational technology for both advanced collaboration and traditional voice services with security top of mind

Short Term Priorities

- Grow share of Enterprise Session Management with major focus on Microsoft Teams and Zoom platforms
- Successful launch of Ribbon Connect – SBCaaS Direct Routing for Microsoft Teams
- Expand Analytics Use Cases and customer deployments
- Drive thought and technology leadership for Trust and Identity solutions
- Cross-sell Packet Optical Networks portfolio to key accounts

Outlook

- Modest YoY sales growth with improving margins and lower opex yielding 20%+ EBITDA margin
- Solid 2H outlook on both products and services
- 7-8% YoY growth in Session Management driven by both Enterprise and Service Provider demand
- Lower near-term demand for on-premise Enterprise Edge CPE

Packet Optical Networks Portfolio

Products & Services



Apollo

- Optical Transport
- OTN Switching



Neptune

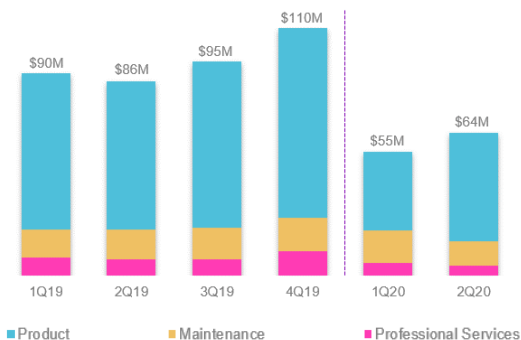
- Multiservice aggregation with advanced IP Networking support
- 5G-enabled with advanced timing and configurable hard/soft network slicing support advanced Private Network



Muse

- Network lifecycle applications and automation
- 5G network slice management
- SDN and NFV orchestration

Packet Optical Networks Revenue Mix



Note: 1Q19 through 4Q19 was not included in Ribbon's consolidated results as it was prior to the March 3, 2020 merger date. Of the amount for the three months ended March 31, 2020, \$30M was included in Ribbon's consolidated results. All of 2Q20 was included in Ribbon's consolidated results.

Looking Forward

Key Trends

- Work-from-home driving continued higher network utilization and need for capacity augmentation
- Mobile network traffic growing exponentially and will increase 5x by 2025, with 5G traffic accounting for 45% of all mobile data traffic¹
- Significant influx of investment from Internet companies into Indian economy
- Legacy TDM and SDH/Sonet networks reaching end of life and migrating to IP
- Global pressure on China creating level playing field

Short Term Priorities

- Leverage key technology advantages to increase market share: 5G timing and hard-slicing, optimized IP-MPLS platforms, performance (1.2Tbps dual-transceiver design)
- Penetrate North American Service Provider and Critical Infrastructure markets
- Cross-sell Packet Optical Networks portfolio to key accounts
- Maintain maximum operational flexibility to quickly respond to demand recovery from Indian carriers

Outlook

- Significant recovery in 2H20 as Indian telecom providers settle AGR fee dispute and return to normal spend cycle
- Increasing mind-share in North American market and positioned to challenge for business in 2021
- Optimized cost structure improving profitability and leverage combined scale
- Growing China vendor replacement opportunities
- Significant international defense and critical infrastructure opportunities to drive further growth

Competitive Landscape Assessment from Global Data for 5G Transport Solutions

Ribbon 5G Transport Portfolio – Rated “Very Strong”

 GlobalData. July 21, 2020

5G Transport: Competitive Landscape Assessment



Emir Halilovic

Buying Criteria Ratings

- Timing and Synchronization: **Leader**
- Network Slicing and Programmability: **Leader**
- Power and Physical Characteristics: **Leader**
- Capacity and Scale: **Very Strong**
- 5G Xhaul Support: **Very Strong**
- Portfolio Breadth: **Competitive**

Strengths

- Solution portfolio providing multilayer-optimized packet and optical transport for 5G
- Comprehensive hard and soft slicing technologies; including FlexE, segment routing, OTN
- Comprehensive timing with SyncE and 1588v2, Class C and designed for Class D support in most platforms
- Network slicing domain orchestrator and holistic security with encryption, service isolation, & secured platforms
- Multilayer-optimized packet and optical transport

Focused on serving customers and caring for our employees

Strong focus on Packet Optical Networks integration and transformation of Ribbon to deliver significant shareholder value

Extensive portfolio review and actions to improve cost structure and achieve deal synergies while investing in key growth areas

Confident in strategy to accelerate profitable growth

2020 Business Outlook

Cloud and Edge¹

- Good visibility with solid backlog
- 2-3% YoY sales growth with expanded margins

Packet Optical Networks¹

- Visibility improving with expanded pipeline
- COVID-19 global pandemic continues to impact deployment velocity and pace of new opportunity wins
- Cost actions improving profitability

3Q20 Outlook²

- Revenue between \$210 million and \$220 million
- Non-GAAP earnings per share² of \$0.05 to \$0.07
- Adjusted EBITDA² of \$25 million to \$29 million

¹Please see the basis of presentation in the appendix.

²This outlook excludes any potential effects of the sale of Kandy. Please see non-GAAP reconciliations in the Appendix.

APPENDIX



Ribbon Condensed Statements of Operations

USD Millions except percentages and EPS	1Q18	2Q18	3Q18	4Q18	FY18	1Q19	2Q19	3Q19	4Q19	FY19	1Q20	2Q20
GAAP FINANCIAL MEASURES												
Product Revenue	52	63	77	87	279	47	72	61	81	262	76	121
Service Revenue	70	74	75	80	299	71	73	77	80	301	82	90
Total Revenue	121	137	152	167	578	119	145	138	161	563	158	210
Gross Profit	55	75	82	96	308	57	81	79	101	317	82	112
<i>Gross Margin %</i>	46%	55%	54%	57%	53%	48%	55%	57%	63%	56%	52%	53%
Research and development	39	36	34	36	145	36	35	34	36	141	42	52
Selling, general and administrative	48	46	47	54	194	49	41	38	44	172	54	53
Impairment of goodwill	-	-	-	-	-	-	-	-	164	164	-	-
Acquisition, Integration and Restructuring	11	10	8	5	34	8	11	4	6	29	14	6
Total Operating Expenses	98	92	90	95	374	93	88	76	250	507	110	111
Income/(Loss) from Operations	(42)	(17)	(8)	1	(65)	(36)	(7)	3	(149)	(189)	(29)	2
<i>Operating Margin %</i>	-35%	-12%	-5%	1%	-11%	-30%	-5%	2%	-92%	-34%	-18%	1%
Net Income/(Loss)	(45)	(20)	(10)	(2)	(77)	(31)	49	2	(150)	(130)	(33)	(8)
Diluted EPS	(\$0.44)	(\$0.20)	(\$0.10)	(\$0.02)	(\$0.74)	(\$0.29)	\$0.45	\$0.01	(\$1.36)	(\$1.19)	(\$0.27)	(\$0.06)
Weighted Average Diluted Shares	102	102	105	107	104	108	111	111	110	110	121	144
Cash Flow from Operating Activities	3	(26)	(1)	14	(10)	20	10	(6)	33	56	40	(3)
NON-GAAP FINANCIAL MEASURES												
Adjusted EBITDA	(8)	16	25	29	62	(3)	22	23	43	86	10	30
Unlevered Free Cash Flow	2	(28)	(3)	13	(15)	17	9	(8)	31	49	35	(6)

Please see the basis of presentation and the non-GAAP reconciliations in the appendix.

Ribbon Condensed Balance Sheets

USD Millions	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20
ASSETS										
Cash and Investments ¹	85	55	43	51	46	51	40	45	110	94
Accounts Receivable, Net	126	136	151	188	135	155	163	193	206	205
Inventory, Net	21	19	22	23	19	17	14	15	67	58
Property Plant Equipment, Net	24	24	26	27	28	28	27	29	47	48
Goodwill and Intangibles	568	556	646	635	640	627	615	438	866	866
Other Assets	38	37	37	34	78	98	98	95	177	157
Total Assets	861	828	924	957	946	977	957	815	1,472	1,428
LIABILITIES AND EQUITY										
Revolving Credit Facility	20	20	58	55	57	35	34	8	-	-
Liabilities	116	112	154	165	160	153	141	155	384	362
Deferred Revenue	117	105	98	123	125	112	102	121	140	130
Debt	23	23	24	24	25	50	49	48	395	392
Stockholders' Equity	585	567	590	590	579	627	631	483	554	545
Total Liabilities and Equity	861	828	924	957	946	977	957	815	1,472	1,428

¹Includes cash, cash equivalents, short- and long-term investments and restricted cash

Ribbon Condensed² Statements of Cash Flows

USD Millions	1Q18	2Q18	3Q18	4Q18	FY18	1Q19	2Q19	3Q19	4Q19	FY19	1Q20	2Q20
Cash from Operations	3	(26)	(1)	14	(10)	20	10	(6)	33	56	40	(3)
Purchases of PP&E	(2)	(2)	(2)	(2)	(8)	(4)	(2)	(2)	(2)	(11)	(6)	(9)
Stock Repurchase	-	-	-	-	-	-	(5)	-	-	(5)	-	-
Business Acquisitions	-	-	(46)	-	(46)	(22)	-	-	-	(22)	(347)	-
Sale of Fixed Assets	-	-	-	-	-	-	-	-	-	-	44	-
Borrowings, net	-	-	38	(3)	35	2	3	(2)	(27)	(23)	336	(4)
Other	-	(1)	(1)	(1)	(4)	(1)	-	-	0	(1)	(1)	0
Net Change	2	(30)	(12)	8	(32)	(5)	5	(11)	4	(6)	65	(16)
Cash¹ Beginning of Period	83	85	55	43	83	51	46	51	40	51	45	110
Cash¹ End of Period	85	55	43	51	51	46	51	40	45	45	110	94

¹Includes cash, cash equivalents, short- and long-term investments and restricted cash.

²Please see the basis of presentation in the appendix

Ribbon Revenue Key Statistics

USD Millions except for percentages	1Q18	2Q18	3Q18	4Q18	FY18	1Q19	2Q19	3Q19	4Q19	FY19	1Q20	2Q20
GAAP Revenue												
Product	52	63	77	87	279	47	72	61	81	262	76	121
Service	70	74	75	80	299	71	73	77	80	301	82	90
Total Revenue	121	137	152	167	578	119	145	138	161	563	158	210
% of Total GAAP Revenue:												
GAAP Revenue Mix												
Product	43%	46%	51%	52%	48%	40%	50%	44%	50%	47%	48%	57%
Services	57%	54%	49%	48%	52%	60%	50%	56%	50%	53%	52%	43%
GAAP Revenue by Geography												
Domestic	47%	61%	61%	62%	58%	58%	58%	64%	62%	61%	50%	48%
International	53%	39%	39%	38%	42%	42%	42%	36%	38%	39%	50%	52%
GAAP Revenue by Channel												
Direct	84%	88%	66%	69%	75%	60%	60%	65%	69%	64%	62%	73%
Indirect	16%	12%	34%	31%	25%	40%	40%	35%	31%	36%	38%	27%
GAAP Product Revenue By Market												
Enterprise	14%	11%	31%	23%	21%	31%	21%	29%	29%	27%	36%	30%
Service Providers	86%	89%	69%	77%	79%	69%	79%	71%	71%	73%	64%	70%
10% Total Revenue Customers												
	Verizon	Verizon	Verizon AT&T	Verizon	Verizon	Verizon AT&T	Verizon	Verizon AT&T	Verizon AT&T	Verizon AT&T	Verizon AT&T	Verizon

Please see the basis of presentation in the appendix.

Basis of Presentation

Totals may not sum due to rounding.

The terms “Cloud and Edge”, “Ribbon standalone”, “Ribbon’s organic business” and “organic” as used herein refer to the business, continuing operations and/or financial results, as the context dictates, of Ribbon Communications excluding the recently acquired ECI Telecom business, which was completed on March 3, 2020. The term “overall” as used herein refers to Ribbon consolidated results (including the results of ECI post-merger through June 30, 2020) for the metric or period indicated. Periods prior to the first quarter of 2020 represent Ribbon reported results for the respective period.

ECI results prior to the closing of the merger with Ribbon Communications on March 3, 2020 have been combined with (added to) the Ribbon standalone results for certain financial metrics, for illustrative purposes only. These combined results are presented for illustrative purposes and are not intended to represent or be indicative of the actual results of the combined company that would have been achieved had the merger occurred on January 1, 2019.

Packet Optical Networks relates to the ECI Telecom business.

Cloud and Edge relates to Ribbon standalone and excludes the ECI Telecom business.

Discussion of Non-GAAP Financial Measures

Ribbon Communications' management uses several different financial measures, both GAAP and non-GAAP, in analyzing and assessing the overall performance of the business, making operating decisions, planning and forecasting future periods, and determining payments under compensation programs. Our annual financial plan is prepared on a non-GAAP basis and is approved by our board of directors. 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. We consider the use of non-GAAP financial measures helpful in assessing the core performance of our continuing operations and when planning and forecasting future periods. By continuing operations, we mean the ongoing results of the business adjusted for certain expenses and credits, including, but not limited to, stock-based compensation; amortization of intangible assets; acquisition-related facilities adjustments; certain litigation costs; impairment of goodwill; settlement expense; cancelled debt offering costs; acquisition- and integration-related expense; restructuring and related expense; a gain on the settlement of litigation; a reduction to deferred purchase consideration; the tax effect of these adjustments; and the income tax benefit arising from purchase accounting. Effective for the first quarter of 2019 and for subsequent reporting periods, we no longer adjust for the impact of the adoption of the new revenue standard in 2018.

The term "Cloud and Edge" as used herein refers to the business, continuing operations and/or financial results, as the context dictates, of Ribbon Communications on a non-GAAP basis excluding the recently acquired ECI business. The term "Packet Optical Networks" as used herein refers to the business, continuing operations and/or financial results, as the context dictates, of ECI on a non-GAAP basis for the period since March 3, 2020. The term "Consolidated" refers to the consolidated results of Ribbon, including the recently acquired ECI business. While our management uses non-GAAP financial measures as a tool to enhance their understanding of certain aspects of our financial performance, our management does not consider these measures to be a substitute for, or superior to, GAAP measures. In addition, our 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.

Discussion of Non-GAAP Financial Measures (continued)

Investors are cautioned that there are material limitations associated with the use of non-GAAP financial measures as an analytical tool. In particular, many of the adjustments to our financial measures reflect the exclusion of items that are recurring and will be reflected in our financial results for the foreseeable future.

Impact of New Revenue Standard

For periods prior to the first quarter of 2019, we adjusted our non-GAAP financial measures for eliminated revenue resulting from our adoption of the new revenue recognition standard in 2018 and related cost of revenue. Effective for the first quarter of 2019 and for subsequent reporting periods, we no longer adjust our non-GAAP financial measures for the 2018 revenue standard adoption.

Stock-Based Compensation

Stock-based compensation expense is different from other forms of compensation, as it is a non-cash expense. For example, a cash salary generally has a fixed and unvarying cash cost. In contrast, the expense associated with an equity-based award is generally unrelated to the amount of cash ultimately received by an employee, and the cost to us is based on a stock-based compensation valuation methodology, subjective assumptions and the variety of award types, all of which may vary over time. We evaluate performance without these measures because stock-based compensation expense is influenced by the Company's stock price and other factors, such as volatility and interest rates that are beyond our control. 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. As such, we do not include such charges in our operating plans, and we believe that presenting non-GAAP operating results that exclude stock-based compensation provides investors with visibility and insight into our management's method of analysis and the Company's core operating performance. It is reasonable to expect that stock-based compensation will continue in future periods.

Discussion of Non-GAAP Financial Measures (continued)

Amortization of Intangible Assets

We exclude the amortization of acquired intangible assets from non-GAAP expense and income measures. These amortization amounts are inconsistent in frequency and amount and are significantly impacted by the timing and size of acquisitions. Although we exclude amortization of acquired intangible assets from our non-GAAP expenses, we believe that it is important for investors to understand that intangible assets contribute to revenue generation. We believe that excluding non-cash amortization of intangible assets facilitates the comparison of our financial results to our historical operating results and to other companies in our industry as if the acquired intangible assets had been developed internally rather than acquired. Amortization of intangible assets that relate to past acquisitions will recur in future periods until such intangible assets have been fully amortized.

Acquisition-Related Facilities Adjustments

GAAP accounting requires that the deferred rent liability of an acquired company be written off as part of purchase accounting and that a combined company's rent expense on a straight-line basis begin as of the acquisition date. As a result, we recorded more rent expense than would have been recognized but for the purchase accounting treatment of GENBAND's assumed deferred rent liability. We included this adjustment, which related to the acquisition of GENBAND, through the fourth quarter of 2018, to allow for more complete comparisons to the financial results of our historical operations and the financial results of peer companies.

Litigation Costs

We were involved in litigation with a certain competitor with whom we reached a settlement in the second quarter of 2019 (see also "Gain on Litigation Settlement" below). In connection with this litigation, we incurred litigation costs beginning in the fourth quarter of 2017. In addition, we reached a settlement with a former business partner of GENBAND regarding amounts loaned to this former business partner that were never repaid, for which we began incurring litigation costs in the fourth quarter of 2019. In the second quarter of 2020 we recorded a credit of \$0.9 million, which represents discounts on certain legal invoices and insurance reimbursements. We believe that such costs and credits are not part of our core business or ongoing operations. Accordingly, we believe that excluding the litigation costs related to these specific legal matters facilitates the comparison of our financial results to our historical operating results and to other companies in our industry.

Discussion of Non-GAAP Financial Measures (continued)

Impairment of Goodwill

We performed our annual testing for impairment of goodwill in the fourth quarter of 2019. We operate as a single operating segment with one reporting unit and consequently we evaluate goodwill for impairment based on an evaluation of the fair value of the Company as a whole. Upon completion of the goodwill impairment test, we determined that it was necessary to reduce our goodwill carrying amount and recorded a non-cash impairment charge in the fourth quarter of 2019. We believe that such non-cash costs are not part of our core business or ongoing operations. Accordingly, we believe that excluding the goodwill impairment charge facilitates the comparison of our financial results to our historical operating results and to other companies in our industry.

Settlement Expense

In the first quarter of 2018, we recorded \$1.7 million of expense related to settlements, comprised of \$1.4 million for the settlement of litigation in connection with our acquisition of Taqua LLC and \$0.3 million of patent litigation settlement expense. These amounts are included as components of general and administrative expense. We believe that such settlement costs are not part of our core business or ongoing operations, are unplanned and generally not within our control. Accordingly, we believe that excluding these costs facilitates the comparison of our financial results to our historical operating results and other companies in our industry.

Cancelled Debt Offering Costs

In the fourth quarter of 2018, we announced that we intended to offer, subject to market conditions and other factors, \$150 million aggregate principal amount of convertible senior notes due 2023 in a private offering to qualified institutional buyers. Subsequent to the announcement, we determined the then-current market conditions were not conducive for an offering on terms that would be in the best interests of our stockholders. In connection with this offering, we incurred \$1.0 million of expense. We do not consider these debt offering costs to be related to the continuing operations of the Company. We believe that excluding these cancelled debt offering costs facilitates the comparison of our financial results to our historical operating results and to other companies in our industry.

Discussion of Non-GAAP Financial Measures (continued)

Acquisition- and Integration-Related Expense

We consider certain acquisition- and integration-related costs to be unrelated to the continuing operations of our acquired businesses and the Company, and such costs are generally not relevant to assessing or estimating the long-term performance of the acquired assets. In addition, the size, complexity and/or volume of an acquisition, which often drive the magnitude of acquisition- and integration-related costs, may not be indicative of future acquisition- and integration-related costs. By excluding these acquisition- and integration-related costs from our non-GAAP measures, we believe that our management is better able to evaluate our ability to utilize our existing assets and estimate the long-term value that the acquired assets will generate for us. We exclude certain acquisition- and integration-related costs to allow more accurate comparisons of our financial results to our historical operations and the financial results of less acquisitive peer companies. In addition, we believe that providing supplemental non-GAAP measures that exclude these items allows management and investors to consider the ongoing operations of the business both with and without such expenses.

Restructuring and Related Expense

We have recorded restructuring and related expense to streamline operations and reduce operating costs by closing and consolidating certain facilities and reducing our worldwide workforce. We review our restructuring accruals and facilities requirements regularly and record adjustments to these estimates as required. We believe that excluding restructuring and related expense facilitates the comparison of our financial results to our historical operating results and to other companies in our industry, as there are no future revenue streams or other benefits associated with these costs.

Discussion of Non-GAAP Financial Measures (continued)

Gain on Litigation Settlement

We were involved in litigation with a certain competitor with whom we reached a settlement in the second quarter of 2019, under which such competitor agreed to pay us an aggregate amount of \$63.0 million (see “Litigation Costs” above). This gain is included as a component of other income (expense), net. We believe that such gains are not part of our core business or ongoing operations. Accordingly, we believe that excluding the gain on litigation settlement related to this specific legal matter facilitates the comparison of our financial results to our historical results and to other companies in our industry.

Reduction to Deferred Purchase Consideration

We recorded \$8.1 million in other income (expense), net, in the first quarter of 2019 related to the reduction of cash deferred purchase consideration for Edgewater. We believe that such reductions to cash deferred purchase consideration are not part of our core business or ongoing operations, as they relate to specific acquisitive transactions. Accordingly, we believe that excluding such reductions related to acquisition transactions facilitates the comparison of our financial results to our historical results and to other companies in our industry.

Tax Effect of Non-GAAP Adjustments

Beginning with the second quarter of 2019, non-GAAP income tax expense is presented based on an estimated tax rate applied against forecasted annual non-GAAP income. The non-GAAP income tax expense assumes no available net operating losses or any valuation allowances as a result of reporting significant cumulative non-GAAP income over the past several years. Due to the methodology applied to our estimated annual tax rate, our estimated tax rate on non-GAAP income will differ from our GAAP tax rate and from our actual tax liabilities.

Discussion of Non-GAAP Financial Measures (continued)

Tax Benefit Arising from Purchase Accounting

In 2018, we assessed our ability to use our tax benefits and determined that it was more likely than not that some of these benefits will be recognized. As a result, we reduced our deferred tax asset valuation allowance, resulting in an income tax benefit of \$0.7 million and a reduction to our income tax provision in 2018. We believe that such a benefit is not part of our core business or ongoing operations, as it was the result of an acquisition and was unrelated to our revenue-producing activities. Accordingly, we believe that excluding the benefit arising from this adjustment to our income tax provision facilitates the comparison of our financial results to our historical results and to other companies in our industry.

Adjusted EBITDA

We use Adjusted EBITDA as a supplemental measure to review and assess our performance. We calculate Adjusted EBITDA by excluding from net income (loss): interest income (expense), net; income tax provision; depreciation; and amortization of intangible assets. In addition, we exclude from net income (loss): historical adjustments to revenue and cost of revenue related to our adoption of the new revenue standard (for periods prior to the first quarter of 2019); stock-based compensation expense; acquisition-related facilities adjustments; certain litigation costs; impairment of goodwill; settlement expense; cancelled debt offering costs; acquisition- and integration-related expense; restructuring and related expense; and other income (expense), net. In general, we add back the expenses that we consider to be non-cash and/or not part of our ongoing operations. Adjusted EBITDA is a non-GAAP financial measure that is used by our investing community for comparative and valuation purposes. We disclose this metric to support and facilitate our dialogue with research analysts and investors. Other companies may calculate Adjusted EBITDA differently than we do, limiting its usefulness as a comparative measure.

Discussion of Non-GAAP Financial Measures (continued)

Unlevered Free Cash Flow

We use Unlevered Free Cash Flow to measure the cash we generate or utilize from operations and to maintain our capital assets. We calculate Unlevered Free Cash Flow as net cash provided by (used in) operating activities excluding interest paid, less capital expenditures. We disclose this metric to support and facilitate our dialogue with research analysts and investors, as we believe Unlevered Free Cash Flow is representative of cash that is available for working capital, investments and financing de-leveraging. Accordingly, we believe that Unlevered Free Cash Flow provides useful information to investors in understanding and evaluating our liquidity in the same manner as management. Other companies may calculate Unlevered Free Cash Flow differently than we do, limiting its usefulness as a comparative measure.

We believe that providing non-GAAP information to investors, in addition to the GAAP presentation, will allow investors to view the financial results in the way our management views them. We further believe that providing this information helps investors to better understand our core financial and operating performance and evaluate the efficacy of the methodology and information used by our management to evaluate and measure such performance.

GAAP to Non-GAAP Reconciliation

\$000's	1Q18	2Q18	3Q18	4Q18	FY18	1Q19	2Q19	3Q19	4Q19	FY19	1Q20	2Q20
Adjusted EBITDA												
GAAP Net (loss) income	\$ (44,904)	\$ (19,922)	\$ (10,158)	\$ (1,826)	\$ (76,810)	\$ (30,832)	\$ 49,470	\$ 1,650	\$ (150,363)	\$ (130,075)	\$ (33,170)	\$ (8,251)
Interest expense, net	599	735	1,420	1,476	4,230	1,364	1,262	726	525	3,877	3,395	5,400
Income tax provision (benefit)	2,170	499	(82)	813	3,400	1,014	5,033	(197)	1,332	7,182	191	2,036
Depreciation	2,507	2,811	2,952	2,930	11,200	2,921	2,970	2,933	3,125	11,949	3,474	4,786
Amortization of intangible assets	12,309	11,964	13,448	12,002	49,723	11,922	12,647	12,260	12,396	49,225	14,334	14,669
Adjustment to revenue for new revenue standard*	3,015	2,949	2,178	1,903	10,045	-	-	-	-	-	-	-
Adjustment to cost of revenue for new revenue standard*	(110)	-	-	-	(110)	-	-	-	-	-	-	-
Stock-based compensation	2,824	2,081	2,516	3,651	11,072	4,139	1,530	2,485	4,447	12,601	2,976	3,222
Acquisition-related facilities adjustment	211	252	251	252	966	-	-	-	-	-	-	-
Litigation costs	673	1,901	3,147	1,961	7,682	6,186	1,315	(1,534)	1,767	7,734	3,038	(937)
Impairment of goodwill	-	-	-	-	-	-	-	-	164,300	164,300	-	-
Settlement expense	1,730	-	-	-	1,730	-	-	-	-	-	-	-
Cancelled debt offering costs	-	-	-	1,003	1,003	-	-	-	-	-	-	-
Acquisition- and integration-related expense	4,412	4,280	5,570	2,689	16,951	3,199	1,965	1,697	6,092	12,953	12,384	857
Restructuring and related expense	6,668	6,097	2,397	1,853	17,015	4,932	9,144	2,372	(49)	16,399	2,075	5,361
Other (income) expense, net	(248)	2,052	1,254	714	3,772	(7,774)	(62,861)	507	(316)	(70,444)	844	2,407
Non-GAAP Adjusted EBITDA	\$ (8,144)	\$ 15,699	\$ 24,893	\$ 29,421	\$ 61,869	\$ (2,929)	\$ 22,475	\$ 22,899	\$ 43,256	\$ 85,701	\$ 9,541	\$ 29,550
Unlevered Free Cash Flow												
GAAP Net cash provided by (used in) operating activities	\$ 3,392	\$ (26,083)	\$ (850)	\$ 13,946	\$ (9,595)	\$ 19,579	\$ 9,540	\$ (6,488)	\$ 33,054	\$ 55,685	\$ 39,932	\$ (3,220)
Interest paid	667	228	673	799	2,367	831	1,814	1,004	423	4,072	668	5,607
Purchases of property and equipment	(1,827)	(1,665)	(2,458)	(1,957)	(7,907)	(3,766)	(2,387)	(2,441)	(2,230)	(10,824)	(6,017)	(8,874)
Non-GAAP Unlevered free cash flow	\$ 2,232	\$ (27,520)	\$ (2,635)	\$ 12,788	\$ (15,135)	\$ 16,644	\$ 8,967	\$ (7,925)	\$ 31,247	\$ 48,933	\$ 34,583	\$ (6,487)

* Effective Q1 2019, the Company no longer adjusted for the impact of the adoption in 2018 of the new revenue standard.

GAAP to Non-GAAP Reconciliation (continued)

\$000's	1Q19					1Q20			2Q20		
	1Q19	2Q19	3Q19	4Q19	FY19	Cloud and Edge	Packet Optical Networks	Consolidated	Cloud and Edge	Packet Optical Networks	Consolidated
Revenue											
Product	\$ 47,480	\$ 72,059	\$ 61,152	\$ 81,339	\$ 262,030	\$ 54,210	\$ 21,689	\$ 75,899	\$ 72,310	\$ 48,552	\$ 120,862
Service											
Maintenance	56,989	57,141	58,901	61,197	234,228	55,556	5,512	61,068	57,853	10,770	68,623
Professional services	14,459	16,221	17,600	18,573	66,853	18,265	2,750	21,015	16,744	4,264	21,008
Total service	71,448	73,362	76,501	79,770	301,081	73,821	8,262	82,083	74,597	15,034	89,631
Total revenue	\$ 118,928	\$ 145,421	\$ 137,653	\$ 161,109	\$ 563,111	\$ 128,031	\$ 29,951	\$ 157,982	\$ 146,907	\$ 63,586	\$ 210,493
Total gross profit	\$ 56,589	\$ 80,673	\$ 78,877	\$ 100,945	\$ 317,084	\$ 70,919	\$ 10,651	\$ 81,570	\$ 90,706	\$ 21,611	\$ 112,317
GAAP Gross margin - total (Total gross profit/Revenue)	47.6%	55.5%	57.3%	62.7%	56.3%	55.4%	35.6%	51.6%	61.7%	34.0%	53.4%
Stock-based compensation	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%	*	0.1%
Amortization of intangible assets	8.1%	6.9%	6.9%	5.1%	6.7%	6.2%	3.6%	5.7%	5.4%	4.8%	5.2%
Non-GAAP Gross margin - total	55.8%	62.5%	64.3%	67.9%	63.1%	61.7%	39.2%	57.4%	67.2%	38.8%	58.7%

* Less than 0.1% impact on Gross margin.

GAAP to Non-GAAP Reconciliation (continued)

\$000s	2Q19	2Q20		
		Cloud and Edge	Packet Optical Networks	Consolidated
GAAP Operating expenses	\$ 87,769	\$ 74,820	\$ 35,905	\$ 110,725
Stock-based compensation	(1,357)	(2,950)	(74)	(3,024)
Amortization of intangible assets	(2,555)	(3,439)	(280)	(3,719)
Litigation costs	(1,315)	937	-	937
Acquisition- and integration-related expense	(1,965)	(856)	(1)	(857)
Restructuring and related expense	(9,144)	(4,246)	(1,115)	(5,361)
Non-GAAP Operating expenses	\$ 71,433	\$ 64,266	\$ 34,435	\$ 98,701
Income (loss) from operations as a percentage of revenue ("Operating margin")				
GAAP Operating margin	-4.9%	10.8%	-22.5%	0.8%
Stock-based compensation	1.1%	2.1%	0.1%	1.5%
Amortization of intangible assets	8.6%	7.7%	5.3%	7.0%
Litigation costs	0.9%	-0.6%	0.0%	-0.4%
Acquisition- and integration-related expense	1.4%	0.6%	*	0.4%
Restructuring and related expense	6.3%	2.9%	1.8%	2.5%
Non-GAAP Operating margin	13.4%	23.5%	-15.3%	11.8%

* Less than 0.1% impact on Operating margin.

GAAP to Non-GAAP Reconciliation (continued)

(\$000s, except (Loss) earnings per share)

	<u>2Q19</u>	<u>2Q20</u>
(Loss) earnings per share		
GAAP (loss) per share or diluted earnings per share	\$ 0.45	\$ (0.06)
Stock-based compensation	0.01	0.02
Amortization of intangible assets	0.12	0.10
Litigation costs	0.01	(0.01)
Acquisition- and integration-related expense	0.02	0.01
Restructuring and related expense	0.08	0.04
Gain on litigation settlement	(0.57)	-
Tax effect of non-GAAP adjustments	0.02	(0.04)
Non-GAAP diluted earnings per share	<u>\$ 0.14</u>	<u>\$ 0.06</u>

Weighted average shares used to compute diluted earnings per share or (loss) per share

GAAP Shares used to compute diluted earnings per share or (loss) per share	110,698	144,483
Non-GAAP Shares used to compute diluted earnings per share	110,698	150,512

	<u>2Q19</u>	<u>2Q20</u>		
		Cloud and Edge	Packet Optical Networks	Consolidated
Adjusted EBITDA				
GAAP Net income (loss)	\$ 49,470	\$ 8,853	\$ (17,104)	\$ (8,251)
Interest expense, net	1,262	4,464	936	5,400
Income tax provision	5,033	1,453	583	2,036
Depreciation	2,970	2,984	1,802	4,786
Amortization of intangible assets	12,647	11,324	3,345	14,669
Stock-based compensation	1,530	3,138	84	3,222
Litigation costs	1,315	(937)	-	(937)
Acquisition- and integration-related expense	1,965	856	1	857
Restructuring and related expense	9,144	4,246	1,115	5,361
Other (income) expense, net	(62,861)	788	1,619	2,407
Non-GAAP Adjusted EBITDA	<u>\$ 22,475</u>	<u>\$ 37,169</u>	<u>\$ (7,619)</u>	<u>\$ 29,550</u>

GAAP to Non-GAAP Reconciliation (continued)

	Three months ending September 30, 2020	
	Range	
Outlook		
Revenue	\$ 210	\$ 220
(Loss) earnings per share		
GAAP outlook	\$ (0.04)	\$ (0.02)
Stock-based compensation	0.02	0.02
Amortization of intangible assets	0.11	0.11
Acquisition- and integration-related expense	0.01	0.01
Restructuring and related expense	0.02	0.02
Tax effect of non-GAAP adjustments	(0.07)	(0.07)
Non-GAAP outlook	<u>\$ 0.05</u>	<u>\$ 0.07</u>
Weighted average shares used to compute (loss) per share or diluted earnings per share (in thousands)		
GAAP Shares used to compute loss per share	145,000	145,000
Non-GAAP Shares used to compute diluted earnings per share	150,000	150,000
Adjusted EBITDA (in \$ millions)		
GAAP net loss outlook	\$ (6.8)	\$ (2.8)
Interest expense, net	5.6	5.6
Income tax benefit	(3.9)	(3.9)
Depreciation	4.3	4.3
Amortization of intangible assets	16.3	16.3
Stock-based compensation	3.6	3.6
Acquisition- and integration-related expense	1.2	1.2
Restructuring and related expense	3.1	3.1
Other expense, net	1.6	1.6
Non-GAAP outlook	<u>\$ 25.0</u>	<u>\$ 29.0</u>



Thank You