Ribbon Communications

Fourth Quarter 2018

Legal Disclaimers

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 statements regarding our outlook for the Company in the sections “2018 Full Year Guidance”, “Investment Highlights”, “Strategy”, “Ribbon’s Leadership Position and Market Opportunity”, and “Addressable Markets”, the future results of operations, financial position, integration efforts and opportunities for the Company, business strategy, strategic position, plans and objectives of management for future operations 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. Our actual results may differ materially from those contemplated in these forward-looking statements due to various risks, uncertainties and other important factors, including our success integrating the respective businesses of Sonus Networks, Inc. (“Sonus”) and GENBAND Holdings Company (“GENBAND”); achievement of the anticipated synergies of the transaction between Sonus and GENBAND (the “Transactions”); our ability to realize the benefits from the Transactions and other acquisitions that we have completed; the effects of disruption from the Transactions, making it more difficult to maintain relationships with employees, customers, business partners or government entities; 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; our ability to maintain partner, reseller, distribution and vendor support and supply relationships; higher risks in international operations and markets; the impact of increased competition; currency fluctuations; changes in the market price of our common stock; and/or failure or circumvention of our controls and procedures.

Our forward-looking statements involve known and unknown risks, uncertainties and other important 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. 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 Part I, Item IA “Risk Factors” and Part II, Item 7A “Quantitative and Qualitative Disclosures About Market Risk” in Ribbon Communications’ most recent Annual Report on Form 10-K filed with the SEC and Part I, Item 2 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Ribbon Communications’ most recent Quarterly Report on Form 10-Q filed with the SEC. Any forward-looking statement made by us in this presentation speaks only as of the date of this presentation. 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. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

In addition to the U.S. GAAP financials, this presentation includes certain non-GAAP financial measures. 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. There are a number of limitations related to the use of these non-GAAP financial measures versus their nearest GAAP equivalents. 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, and not to rely on any single financial measure to evaluate Ribbon Communications’ business.

Ribbon Communications Overview

About Ribbon Communications

Ribbon is a global leader in secure real-time communications, providing software, cloud and network infrastructure solutions to communications service providers and enterprises

Transforming Communications Networks

Orchestrating the Intelligent Edge

Securing Communications

Providing Analytics and Service Assurance

Enabling Cloud Communications

Ribbon Announced Completion of Edgewater Networks Acquisition

edgewater NETWORKS

Leader[1] in Network Edge Orchestration, providing service assurance, security and analytics for Unified Communications and SD-WAN through a hybrid cloud/edge model

Communications Service Providers, Managed Service Providers and Enterprises use the company's solutions to monitor, secure, and optimize real time communications services from the network core to the edge

EdgeView cloud-based Service Control Center provisions, configures and monitors EdgeMarc Intelligent Edges

EdgeMarc Intelligent Edge devices actively monitor, secure, and optimize service quality

#1
SME E-SBC MARKET SHARE NORTH AMERICA FY2017[1]

20M+
CONNECTED ENDPOINTS AS OF Q1-2018

635K+
EDGES DEPLOYED AS OF Q1-2018

25%+
3 YEARS OF YoY REVENUE GROWTH (2014-2017)

1. Leadership Ranking Source: IHS, 2017 Enterprise Session Border Controllers Market Tracker – #1 market share leader in less than 800 Sessions SME segment

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Ribbon Communications - Scope and Scale

Four Decades of Combined Leadership Experience in Real-Time Communications

~ 2,300 Employees Serving Customers in over 100 Countries

1,000+ Service Provider and Enterprise Customers Globally

#1 in Media Gateways, #2 in SBCs, #2 in VoIP Call Controllers

Leader in Network Edge Orchestration

800+ Patents Worldwide

Publicly Traded Company on NASDAQ

Leadership Ranking Source: IHS Research Q2-2018 Market share data (Ribbon includes GENBAND, Sonus, and Edgewater)

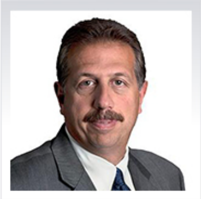
Executive Team

Fritz W. Hobbs
President & Chief Executive Officer

Daryl Raiford
EVP, Chief Financial Officer

David Walsh
Founder, Kandy

Steven Bruny
EVP, Global Operations



Tony Scarfo
EVP, Products and R&D

Mike Swade
EVP, Global Sales

Petrena Ferguson
SVP, Human Resources

Justin Ferguson
EVP, General Counsel and Corporate Secretary

John McCready
EVP, Chief Strategy Officer

Susan Villare
SVP, FP&A and Treasurer

Kevin Riley
CTO & EVP, Advanced R&D

David Norman
EVP & GM, Edgewater Networks Products

Patrick Joggerst
CMO & EVP, Business Development

Strategy

Invest	In Core Products with Balanced Investments
Broaden	Solution Offers to Global Installed Base
Expand	Into New Adjacent Markets and Applications
Scale	With Acquisitions and Alliances

What We Do For Our Customers

Service Providers

Enterprises

End-User Benefits

IP Software Services

- Upgrade Communications Networks to IP and Cloud
- Enable Software-Defined and Virtualized Networks
- Secure IP Communications Networks
- Enable Edge Orchestration, Intelligent Edge and SD-WAN

Cloud Software Services

- Enable Cloud Unified Communications - UCaaS
- Enable Embedded Communications - CPaaS
- Secure Communications and Provide Analytics and Network Visibility

Advanced Communications

Integrated Communications

Secure Communications

Reliable Communications

Competitive and Technology Differentiation

- Large Installed Base
- End-to-End Breadth of Products and Solutions
- Leader in Network Edge Orchestration
- Leader in Media Processing Technology – CPU, GPU
- Cloud, Security and Virtualization Innovation and Expertise
- Solution Reliability, Performance, Functionality at Scale

End-to-End Solutions are Key Differentiator

	Service Provider Market				Enterprise Market			
Brand/Product		ORACLE	cisco broadsoft	metaswitch		ORACLE	cisco	AudioCodes
Session Border Controllers	✓	✓		✓	✓	✓	✓	✓
Intelligent Edge, Orchestration and SD-WAN	✓		✓		✓		✓	✓
Application Server & WebRTC	✓		✓	✓	✓	✓	✓	
Call Controllers	✓			✓	✓			
Media Gateways	✓			✓	✓			✓
Network Functions Virtualization	✓	✓		✓	✓	✓	✓	✓
Signaling, Policy & Routing	✓	✓			✓			
Security Solution	✓	✓			✓	✓		

Ribbon's Leadership Position and Market Opportunity

IP Software Services

Network Transformation
2022 TAM: $3.2B
'18 -'22 CAGR: 5%

- #2 Session Border Controllers
- #1 Media Gateways
- #2 Voice Over IP Call Controllers
- #3 Voice Application Server

Cloud Software Services

Cloud Communications and Security
2022 TAM: $13.6B
'18 -'22 CAGR: 23%

- Kandy Cloud Communications as a Service
- Ribbon Protect Security and Analytics

TELCO

Leadership Ranking Source: IHS Research Q2-2018 Market share data (last 12 months)[1] (source reference defined in the Appendix section)

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Addressable Markets

Anticipate 2022 Total Addressable Market $16.8B
Estimated 2018-2022 CAGR 18%

Core Business ($B)

Expected 2022 TAM: $3.2B
2018 – 2022 CAGR +5%

Estimated Service Provider ($B)
CAGR: 2%

SS, MGW, SP-SBC, VAS, MRF, STP, VMC Client

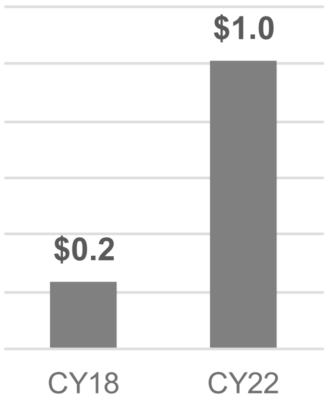
Estimated Enterprise ($B)
CAGR: 12%

E-SBC, Edge SD-WAN, PBX/UC Evolution

Security & Analytics Business ($B)

Expected 2022 TAM: $1B
2018 – 2022 CAGR +44%

Estimated Security & Analytics ($B)
CAGR: 44%



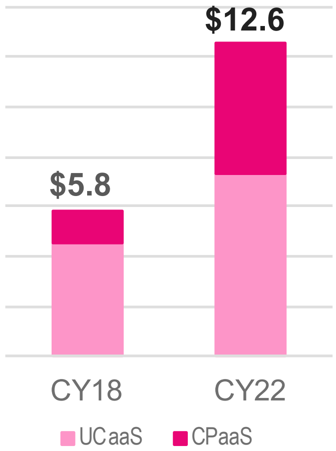
Security & Analytics

SaaS Business ($B)

Expected 2022 TAM: $12.6B
2018 – 2022 CAGR +21%

Estimated UCaaS/CPaaS ($B)
CAGR: 21%

UCaaS CAGR: 13% CPaaS CAGR: 42%



Source: IHS Markit[1,2,3,4], Exact Ventures [5], IDC Research [6], Gartner [7,8], Juniper [9], Statista [10], Frost & Sullivan [11], Ribbon Modeling (source references defined in the Appendix section)

Cloud Software Services

Cloud Communications

Communications software platform and applications offered "as a Service" that enable service providers and enterprises to deploy embedded[1] and unified[2] communications

Kandy

Communications Security

Communications security, fraud management and network intelligence solution that helps service providers and enterprises secure customer and employee communications environments

Ribbon Protect

1. Embedded communications – Embedding of real-time communications into software applications and business workflows
2. Unified communications – Communications solutions for businesses that enable productive employee and customer communications

Investment Highlights

Market leader with financial scale to benefit from further consolidation potential

Technology embedded in largest service providers worldwide positions us well to capture share in network modernization

Investment in innovations ahead of the market is a key competitive advantage to take share in shift to NFV and cloud

Accelerating EBITDA growth from cost synergies, product streamlining and shift to higher margin businesses

Strong management team made up of industry veterans with deep domain expertise

Financials

Ribbon Non-GAAP[1] Statements of Operations[2]

USD Millions except percentages and EPS	FY16	Q117	Q217	Q317	Q417	FY17	Q118	Q218	Q318
Product Revenue	146	25	29	44	86	184	60	67	81
Service Revenue	106	28	27	31	83	169	76	77	77
Total Non-GAAP Revenue	**253**	**53**	**56**	**75**	**169**	**353**	**135**	**145**	**159**
Gross Margin	175	36	38	56	104	235	77	92	99
Gross Margin %	*69%*	*67%*	*69%*	*76%*	*61%*	*66%*	*57%*	*63%*	*63%*
Operating Expense	157	40	39	43	80	202	79	75	73
Income/(Loss) from Operations	**18**	**(5)**	**(1)**	**13**	**25**	**32**	**(2)**	**17**	**26**
Net Income/(Loss)	**17**	**(4)**	**(1)**	**13**	**23**	**31**	**(4)**	**14**	**23**
Diluted EPS	**$0.33**	**($0.09)**	**($0.02)**	**$0.26**	**$0.27**	**$0.51**	**($0.04)**	**$0.14**	**$0.21**
Diluted Shares	50	49	50	50	87	60	102	102	106
Adjusted EBITDA	**26**	**(3)**	**1**	**15**	**28**	**41**	**1**	**20**	**29**
Adjusted EBITDA %	*10%*	*-5%*	*1%*	*20%*	*16%*	*12%*	*1%*	*14%*	*18%*

1) Please see non-GAAP reconciliations in presentation appendix.
2) Results for the period January 1, 2017 through September 30, 2017 are those of Sonus. Results in the quarter ended December 31, 2017 represent three months of Sonus and include the results of GENBAND for the period October 27, 2017 through December 31, 2017. Results in the quarter ended September 30, 2018 represent three months of Ribbon and results of Edgewater for the period August 3, 2018 through September 30, 2018.

Note: Totals may not sum due to rounding.

Ribbon Condensed Balance Sheets

USD Millions	Q416	Q117	Q217	Q317	Q417	Q118	Q218	Q318
ASSETS								
Cash and Investments[1]	126	129	126	132	83	85	55	43
Accounts Receivable, Net	54	40	43	52	165	126	136	151
Inventory, Net	18	18	17	16	21	21	19	22
Property Plant Equipment, Net	12	11	11	10	25	24	24	26
Goodwill and Intangibles	80	78	76	73	580	568	556	646
Other Assets	18	19	21	20	36	38	37	37
Total Assets	**308**	**294**	**292**	**302**	**911**	**861**	**828**	**924**
LIABILITIES AND EQUITY								
Revolving Credit Facility	0	0	0	0	20	20	20	58
Liabilities	38	28	31	37	138	116	112	154
Deferred Revenue	51	55	59	55	115	117	105	98
Long-term Debt	0	0	0	0	23	23	23	24
Stockholders' Equity	219	212	203	211	615	585	567	590
Total Liabilities and Equity	**308**	**294**	**292**	**302**	**911**	**861**	**828**	**924**
DSO	74	67	69	62	88	83	85	85

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

Note: Totals may not sum due to rounding.

Ribbon Condensed Statements of Cash Flows

USD Millions	FY16	Q117	Q217	Q317	Q417	FY17	Q118	Q218	Q318
Cash from Operations	19	4	(1)	6	(1)	8	3	(26)	(1)
Purchases of PP&E	(5)	(1)	(2)	(1)	(1)	(4)	(2)	(2)	(2)
Stock Repurchase	(10)	0	0	0	0	0	0	0	0
Business Acquisitions	(21)	0	0	0	(43)	(43)	0	0	(46)
Revolver borrowings (payments), net	0	0	0	0	2	2	0	0	38
Other	(0)	0	(1)	0	(5)	(6)	0	(2)	(1)
Net Change	**(16)**	**3**	**(3)**	**6**	**(48)**	**(43)**	**2**	**(30)**	**(12)**
Cash[1] Beginning of Period	**142**	**126**	**129**	**126**	**132**	**126**	**83**	**85**	**55**
Cash[1] End of Period	**126**	**129**	**126**	**132**	**83**	**83**	**85**	**55**	**43**

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

Note: Totals may not sum due to rounding.

Ribbon GAAP Revenue Key Stats[1]

USD Millions except for percentages	FY16	Q117	Q217	Q317	Q417	FY17	Q118	Q218	Q318
GAAP Revenue									
Product	146	25	29	44	83	181	52	63	77
Services	106	28	27	31	63	149	70	74	75
Total GAAP Revenue	**253**	**53**	**56**	**75**	**146**	**330**	**121**	**137**	**152**
% of Total GAAP Revenue:									
GAAP Revenue Mix									
Product	58%	48%	52%	59%	57%	55%	43%	46%	51%
Services	42%	52%	48%	41%	43%	45%	57%	54%	49%
GAAP Revenue by Geography									
Domestic	69%	67%	69%	75%	60%	66%	47%	61%	61%
International	31%	33%	31%	25%	40%	34%	53%	39%	39%
GAAP Revenue by Channel									
Direct	74%	66%	70%	76%	82%	76%	84%	88%	66%
Indirect	26%	34%	30%	24%	18%	24%	16%	12%	34%
10% Customers	AT&T	Verizon	Verizon AT&T	Verizon AT&T	Verizon	Verizon	Verizon	Verizon	Verizon AT&T
% of GAAP Product Revenue									
Enterprise	19%	28%	25%	22%	14%	20%	14%	11%	31%
Service Providers	81%	72%	75%	78%	86%	80%	86%	89%	69%

1) Results for the period January 1, 2017 through September 30, 2017 are those of Sonus. Results in the quarter ended December 31, 2017 represent three months of Sonus and include the results of GENBAND for the period October 27, 2017 through December 31, 2017. Results in the quarter ended September 30, 2018 represent three months of Ribbon and results of Edgewater for the period August 3, 2018 through September 30, 2018.

Note: Information is prepared on a GAAP basis.

2018 Full Year Guidance

Full year revenue Outlook [3]

- *2018 Non-GAAP Revenue expected to be approximately $610 million*
  - *FY17 pro forma[1] non-GAAP revenue was $643 million*

Full year adjusted EBITDA Outlook [3]

- *Adjusted EBITDA[2] expected be in excess of $80 million*
  - *FY17 pro forma[1] Adjusted EBITDA was $45 million*

1) Sonus/GENBAND merger closed on 10/27/2017. Pro forma results were calculated as if Sonus and GENBAND were combined at the beginning of all periods presented. Prepared on a non-GAAP basis and does not include the impact of purchase accounting reductions affecting GENBAND revenue.
2) Ribbon is unable to project without unreasonable efforts the comparable GAAP net loss figure, which includes interest expense, net; income tax provision; depreciation; amortization of intangible assets; acquisition-related revenue and related cost of revenue adjustments; adjustment for the impact of the new revenue standard; stock-based compensation; litigation costs; acquisition- and integration-related expense; restructuring; and other income (expense), net.
3) This earnings guidance was given as of October 30, 2018. This presentation does not confirm or update such prior guidance.

Appendix

TAM and Market Share References

1. TAM & Market Share (SS, MGW, VAS, SP-SBC): IHS Markit, Service Provider VoIP and IMS Equipment and Subscribers, Published August 23, 2018, Edition: Q2-2018 (for the quarter ended 30 June 2018) (Quarterly)
2. TAM & Market Share (E-SBC): IHS Markit, Enterprise SBCs and VoIP Gateways, Published September 5, 2018, Edition: Q2-2018 (for the quarter ended 31 June 2018) (Quarterly)
3. TAM & Market Share (UCaaS): IHS Markit, VoIP and Unified Communication Services and Subscribers, Published April 13, 2018, Edition: 2018 (for the year ended 31 December 2017) (Annually)
4. TAM and Market Share (PBX): IHS Markit Enterprise Unified Communications and Voice Equipment, Published May 31, 2018, Edition Q1-2018 (for quarter ended 31 March 2018)
5. TAM (STP): Exact Ventures, STP Signaling Forecast Edition April 2018
6. TAM (CPaaS): IDC, Worldwide Voice and Text Messaging Communications Platform-as-a-Service Forecast, 2018–2022, Published May 2018, (#US43805418)
7. TAM (Security): Gartner, Forecast: Enterprise Application Software, Worldwide, 2016-2022, Q1-2018 Update, Published March 28, 2018, (G00353888),
8. TAM (Security): Gartner, Forecast: Information Security, Worldwide, 2015-2021, Q4-2017 Update, Published March 28, 2018, (G00350860)
9. TAM (VMC-Client): Juniper Research, MOBILE VOICE Market Sizing & Forecasts 2017-2021, Published March 2017
10. TAM (VMC-Client): Statista, Global smartphone shipments forecast from 2010 to 2021 (in million units), Online query October 20, 2017
11. TAM (SD-WAN): Frost & Sullivan, Forecast: Analysis of the Software-Defined WAN Market, 2017, Global, 2017-2022, Q1-2018 Update, Published October 2017 (BCS 11-5)

Product Definitions

Call Controllers
Call Controllers are communications network elements that connect voice calls between subscribers within a network and route voice calls between networks. Call controllers are essential elements in service provider networks utilized to provide regulated and un-regulated business and consumer voice services. In combined voice over internet protocol (VoIP) and circuit-based networks, call controllers are the intelligence in the network that connect and route calls, and media gateways carry and transmit the voice conversation.

Media Gateways
Media Gateways are communications network elements that bridge and interwork the voice conversation between circuit-based networks and packet-based internet protocol (IP) networks on instruction from a call controller. Media Gateways are essential elements in service provider networks utilized to provide regulated and un-regulated business and consumer voice services and interconnect services.

Session Border Controllers (SBCs)
Session Border Controllers are essential communication network elements in voice over internet protocol (VoIP) that secure, route and interwork voice calls or sessions across internet protocol (IP) network borders. SBCs are the voice firewalls in internet protocol communication networks and are required at service provider access or interconnect network borders for deploying business and consumer voice services. SBCs are also essential elements within enterprise networks for securing internet protocol based unified business communications within and across business locations. SBCs can be deployed in network or consumed from the cloud as a Service. As networks migrate to virtualization and the cloud, and traffic on voice over internet protocol networks grows, so does the demand for SBCs.

Software-Defined Wide Area Network (SD-WAN)
The software-defined wide-area network (SD-WAN) is a specific application of software-defined networking (SDN) technology applied to WAN connections, which are used to connect enterprise networks – including branch offices and data centers – over large geographic distances.

Product Definitions

Application Servers
Application servers are the elements in internet protocol (IP) communication networks that enable a variety of unified business communications capabilities like voice calling, messaging and collaboration across different devices. Application servers are essential elements needed by service providers to offer unified communications as a service to businesses from their network or their cloud. Application servers are also deployed by businesses on their premises or in their data center to provide unified communications for their employees and to engage with their customers.

Cloud Communications as a Service - Kandy
Kandy is a cloud communications platform that enables service providers and enterprises to provide embedded communications and unified communications under their own brand and consume them as a service from the platform. These services are referred to as communications platform as a service (CPaaS) and unified communications as a service (UCaaS) respectively. Embedded communications is the embedding of real-time communications into software applications and business workflows. Unified communications are business communications capabilities like voice calling, messaging and collaboration supported across communications devices and the web. Both CPaaS and UCaaS enable highly productive customer and employee communications. CPaaS and UCaaS are fast growing markets as service providers and enterprises increasingly shift their communication services to the cloud.

Communications Security and Analytics – Ribbon Protect
In a “zero trust” security paradigm, no application including real time communications can be trusted and must be secured to prevent intrusion and fraud. Moreover, the attack vector surface area is increased as real time communications applications migrate to the cloud. Ribbon Protect is a real-time communications security, fraud management and intelligence solution that empowers service providers and enterprises to respond to attacks and fraud by performing network-wide data analytics, machine learning and policy enforcement. The solution also provides network operations with a centralized and single view of the end to end communications network. The communications security market is a fast-growing market as service providers and enterprises mobilize to protect their environments and address these security challenges.

Discussion of Non-GAAP Financial Measures

Ribbon 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 both on a GAAP and non-GAAP basis, and the non-GAAP annual financial plan is approved by our board of directors. Continuous budgeting and forecasting for revenue and expenses are conducted on a non-GAAP basis (in addition to GAAP) 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 acquisition-related revenue as a result of purchase accounting and the related cost of revenue, the impact of the new revenue standard, and excluding certain expenses and credits, including, but not limited to stock-based compensation, amortization and impairment of intangible assets, merger integration costs, settlement expense, certain litigation costs, acquisition-related facilities adjustments, acquisition- and integration-related expense, restructuring, certain gains included in other income (loss), net, and income tax benefits arising from purchase accounting and tax reform. 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.

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 Ribbon’s financial measures reflect the exclusion of items that are recurring and will be reflected in our financial results for the foreseeable future.

Discussion of Non-GAAP Financial Measures (continued)

Acquisition-Related Revenue and Cost of Revenue; Impact of New Revenue Standard

We provide the supplementary non-GAAP financial measures, non-GAAP Product revenue, non-GAAP Service revenue and non-GAAP Total revenue, which include revenue related to the acquisition of GENBAND that we would have recognized but for the purchase accounting treatment of these transactions and eliminated revenue as a result of our adoption in 2018 of the new revenue recognition standard. Because GAAP accounting requires the elimination of this revenue, as well as the impact on future revenue of our adoption in 2018 of the new revenue standard, GAAP results alone do not fully capture all of our economic activities. These non-GAAP adjustments are intended to reflect the full amounts of such revenue and the related cost of revenue. We include these adjustments to allow for more complete comparisons to the financial results of our historical operations, forward-looking guidance and the financial results of peer companies. We believe these adjustments are useful to management and investors as a measure of the ongoing performance of the business. These adjustments do not accelerate revenue, but instead include revenue (and the related cost of revenue) that would have been recognized in our 2017 results, and included in our 2018 guidance and results, but for the purchase accounting and new revenue standard adjustments required by GAAP.

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 the 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 the 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.

Impairment of Intangible Assets

In the fourth quarter of 2017, we discontinued our ongoing development of certain intangible assets that we had previously acquired, as we had determined that there were no alternative uses of the technology within either our existing or future product lines. As a result, we recorded an impairment charge of $5.5 million to write down the carrying value of the assets to zero. Had we developed those intangible assets internally and made the decision to discontinue their ongoing development, we would have ceased work on such development projects and eliminated the related future costs. Because we do not capitalize these costs, there would have been no asset to write off. As a result, we believe that excluding non-cash impairment charges from our non-GAAP operating results as if these impaired intangible assets had been developed internally rather than acquired facilitates a comparison to our historical operating results and to other companies in our industry.

Discussion of Non-GAAP Financial Measures (continued)

Settlement Expense

In March 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. In September 2017, we recorded $1.6 million of expense related to potential fines in connection with an ongoing SEC investigation and an additional $0.3 million of expense in connection with this matter in December 2017. In June 2016, we recorded $0.6 million for patent litigation settlement costs. 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 costs such as the SEC potential fines and patent litigation settlement expense facilitates the comparison of our financial results to our historical operating results and to other companies in our industry.

Litigation Costs

In connection with certain ongoing litigation between GENBAND and one of its competitors, we have incurred litigation costs beginning in the fourth quarter of 2017. In March 2018, we filed litigation on behalf of Sonus against the same competitor asserting additional intellectual property infringement. We expect to incur significant future litigation costs related to these matters. These costs are included as a component of general and administrative expense. We believe that such costs are not part of our core business or ongoing operations, are unplanned and generally not within our control. Accordingly, we believe that excluding the litigation costs related to this specific legal matter 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)

Merger Integration Costs

We consider certain merger integration costs to be unpredictable and dependent on a significant number of factors that may be outside of our control. This amount represents costs related to the Merger initially recorded as a component of General and administrative expense in the third quarter of 2017. In the fourth quarter of 2017, we reclassified these merger integration costs, aggregating $0.2 million, to Acquisition- and integration-related expense. We do not consider these merger integration costs to be related to the continuing operations of the combined business or the Company. We believe that excluding merger integration costs facilitates the comparison of our financial results to our historical operating results and to other companies in our industry.

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 the 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 include this adjustment, which relates to the acquisition of GENBAND, to allow for more complete comparisons to the financial results of our historical operations, forward-looking guidance and the financial results of peer companies. We believe these adjustments provide an indication of the rent expense that would have been recognized, but for the purchase accounting in connection with the acquisition of GENBAND.

Discussion of Non-GAAP Financial Measures (continued)

Depreciation Expense Related to Abandoned Facilities

During the second quarter of 2015, we reached an agreement with the landlord of one of our previously restructured facilities to vacate the facility without penalty or future payments. As a result, we were able to vacate the facility earlier than originally planned. In connection with this settlement, we recorded incremental depreciation expense to account for the change in estimated life of the fixed assets related to this facility. This incremental non-cash depreciation expense is not related to our ongoing operations or our core business activities, as it is no longer associated with any revenue-generating activities. As a result, we believe that excluding this incremental depreciation expense facilitates the comparison of our financial results to our historical operating results and to other companies in our industry. Future facility consolidation activities could result in additional incremental depreciation expense related to abandoned facilities.

Acquisition- and Integration-Related Costs

We consider certain acquisition- and integration-related costs to be unrelated to the organic continuing operations of our acquired businesses and the Company and they 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 drives 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, management is better able to evaluate our ability to utilize our existing assets and estimate the long-term value that 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, forward-looking guidance 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.

Discussion of Non-GAAP Financial Measures (continued)

Restructuring

We have recorded restructuring expense to streamline operations and reduce operating costs by closing and consolidating certain facilities and reducing our worldwide workforce. We review our restructuring accruals regularly and record adjustments (both expense and credits) to these estimates as required. We believe that excluding restructuring expense and credits 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.

Gain on Sales of Intangible Assets

In 2017 and 2016, we sold intangible assets that we had acquired in connection with two previous acquisitions. These amounts, aggregating $0.6 million in 2017 and $1.3 million in 2016, are included as components of other income, net. We believe that such gains are not part of our core business or ongoing operations, as we had not used the intangible assets in connection with revenue-producing activities and would not have used them as such in the future. Accordingly, we believe that excluding the gains arising from these sales from our results facilitates the comparison of our financial results to our historical results and to other companies in our industry.

Discussion of Non-GAAP Financial Measures (continued)

Tax Benefits Arising from Purchase Accounting and Tax Reform

In both the third quarter of 2018 and the fourth quarter of 2017, 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 income tax benefits of $0.8 million recorded in the third quarter of 2018 and $16.4 million recorded in the fourth quarter of 2017. In addition, we recognized an income tax benefit of $4.8 million related to the Tax Cut and Jobs Act of 2017, which we recorded in the fourth quarter of 2017. These benefits reduced our income tax provisions for those quarter and year-to-date periods. We believe that such benefits are not part of our core business or ongoing operations, as they are either the result of acquisitions or new tax legislation, neither of which relates to our revenue-producing activities. Accordingly, we believe that excluding the benefits arising from these adjustments to our income tax provision facilitates the comparison of our financial results to our historical results and to other companies in our industry.

Discussion of Non-GAAP Financial Measures (continued)

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 benefit (provision); depreciation; and amortization and impairment of intangible assets. In addition, we exclude from net income (loss): adjustments to revenue and cost of revenue related to revenue reductions resulting from purchase accounting and adoption of the new revenue standard; stock-based compensation expense; settlement expense; certain litigation costs; acquisition-related facilities adjustments; acquisition- and integration-related expense; restructuring; 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.

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 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.

Annual and Quarterly GAAP to Non-GAAP Reconciliation

$000's	Q116	Q216	Q316	Q416	FY16	Q117	Q217	Q317	Q417	FY17	Q118	Q218	Q318
GAAP Product revenue	$ 34,769	$ 35,349	$ 38,601	$ 37,662	$ 146,381	$ 25,395	$ 28,790	$ 44,120	$ 82,814	$ 181,119	$ 51,531	$ 63,123	$ 77,283
Acquisition-related revenue adjustment	-	-	-	-	-	-	-	-	3,230	3,230	5,499	1,741	2,178
Adjustment for new revenue standard	-	-	-	-	-	-	-	-	-	-	2,540	2,437	1,778
Non-GAAP Product revenue	$ 34,769	$ 35,349	$ 38,601	$ 37,662	$ 146,381	$ 25,395	$ 28,790	$ 44,120	$ 86,044	$ 184,349	$ 59,570	$ 67,301	$ 81,239
GAAP Service revenue	$ 24,382	$ 25,508	$ 26,410	$ 29,910	$ 106,210	$ 27,973	$ 26,943	$ 30,509	$ 63,398	$ 148,823	$ 69,649	$ 74,238	$ 75,185
Acquisition-related revenue adjustment	-	-	-	-	-	-	-	-	20,050	20,050	5,619	2,547	1,885
Adjustment for new revenue standard	-	-	-	-	-	-	-	-	-	-	475	512	400
Non-GAAP Service revenue	$ 24,382	$ 25,508	$ 26,410	$ 29,910	$ 106,210	$ 27,973	$ 26,943	$ 30,509	$ 83,448	$ 168,873	$ 75,743	$ 77,297	$ 77,470
GAAP Total revenue	$ 59,151	$ 60,857	$ 65,011	$ 67,572	$ 252,591	$ 53,368	$ 55,733	$ 74,629	$ 146,212	$ 329,942	$ 121,180	$ 137,361	$ 152,468
Acquisition-related revenue adjustment	-	-	-	-	-	-	-	-	23,280	23,280	11,118	4,288	4,063
Adjustment for new revenue standard	-	-	-	-	-	-	-	-	-	-	3,015	2,949	2,178
Non-GAAP Total revenue	$ 59,151	$ 60,857	$ 65,011	$ 67,572	$ 252,591	$ 53,368	$ 55,733	$ 74,629	$ 169,492	$ 353,222	$ 135,313	$ 144,598	$ 158,709
GAAP Gross profit - total	$ 38,403	$ 40,228	$ 43,586	$ 45,394	$ 167,611	$ 33,748	$ 36,402	$ 54,547	$ 76,799	$ 201,496	$ 55,273	$ 75,111	$ 82,234
Acquisition-related revenue adjustment	-	-	-	-	-	-	-	-	23,280	23,280	11,118	4,288	4,063
Acquisition-related cost of revenue adjustment	-	-	-	-	-	-	-	-	(10,364)	(10,364)	(1,977)	-	-
Adjustment for new revenue standard	-	-	-	-	-	-	-	-	-	-	3,015	2,949	2,178
Adjustment to cost of revenue for new revenue standard	-	-	-	-	-	-	-	-	-	-	(110)	-	-
Stock-based compensation	403	415	426	429	1,673	416	348	274	924	1,962	183	86	86
Amortization of intangible assets	1,627	1,455	1,455	1,501	6,038	1,566	1,601	1,601	8,119	12,887	9,592	9,270	10,593
Impairment of intangible assets	-	-	-	-	-	-	-	-	5,471	5,471	-	-	-
Acquisition-related facilities adjustment	-	-	-	-	-	-	-	-	-	-	68	81	80
Non-GAAP gross profit	$ 40,433	$ 42,098	$ 45,467	$ 47,324	$ 175,322	$ 35,730	$ 38,351	$ 56,422	$ 104,229	$ 234,732	$ 77,162	$ 91,785	$ 99,234
GAAP Gross margin - total	64.9%	66.1%	67.0%	67.2%	66.4%	63.2%	65.3%	73.1%	52.5%	61.1%	45.6%	54.7%	53.9%
Acquisition-related revenue adjustment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.6%	2.6%	3.9%	1.1%	1.0%
Acquisition-related cost of revenue adjustment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-6.1%	-2.9%	-1.6%	0.0%	0.0%
Adjustment for new revenue standard	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.8%	0.5%
Adjustment to cost of revenue for new revenue standard	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%
Stock-based compensation	0.7%	0.7%	0.7%	0.6%	0.7%	0.8%	0.6%	0.4%	0.5%	0.6%	0.2%	0.1%	0.1%
Amortization of intangible assets	2.8%	2.4%	2.2%	2.2%	2.3%	3.0%	2.9%	2.1%	4.8%	3.6%	7.9%	6.7%	6.9%
Impairment of intangible assets	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%	1.5%	0.0%	0.0%	0.0%
Acquisition-related facilities adjustment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
Non-GAAP Gross margin - total	68.4%	69.2%	69.9%	70.0%	69.4%	67.0%	68.8%	75.6%	61.5%	66.5%	57.0%	63.5%	62.5%

Annual and Quarterly GAAP to Non-GAAP Reconciliation (continued)

$000s	Q116	Q216	Q316	Q416	FY16	Q117	Q217	Q317	Q417	FY17	Q118	Q218	Q318
GAAP Operating expenses	$ 42,284	$ 42,936	$ 47,902	$ 48,098	$ 181,220	$ 44,530	$ 49,105	$ 50,628	$ 112,462	$ 256,725	$ 97,956	$ 91,747	$ 89,800
Stock-based compensation	(4,012)	(4,226)	(5,982)	(3,875)	(18,095)	(2,847)	(3,889)	(3,613)	(13,346)	(23,695)	(2,641)	(1,995)	(2,430)
Amortization of intangible assets	(319)	(318)	(319)	(506)	(1,462)	(693)	(692)	(692)	(2,148)	(4,225)	(2,717)	(2,694)	(2,855)
Merger integration expense	-	-	-	-	-	-	-	(178)	178	-	-	-	-
Settlement expense	-	(605)	-	-	(605)	-	-	(1,600)	(300)	(1,900)	(1,730)	-	-
Litigation costs	-	-	-	-	-	-	-	-	(373)	(373)	(673)	(1,901)	(3,147)
Acquisition-related facilities adjustment	-	-	-	-	-	-	-	-	-	-	(143)	(171)	(171)
Acquisition- and integration-related expense	-	-	(951)	(201)	(1,152)	(56)	(4,679)	(1,543)	(8,485)	(14,763)	(4,412)	(4,280)	(5,570)
Restructuring	-	-	(1,620)	(1,120)	(2,740)	(570)	(501)	-	(8,365)	(9,436)	(6,668)	(6,097)	(2,397)
Non-GAAP Operating expenses	$ 37,953	$ 37,787	$ 39,030	$ 42,396	$ 157,166	$ 40,364	$ 39,344	$ 43,002	$ 79,623	$ 202,333	$ 78,972	$ 74,609	$ 73,230
GAAP Income (loss) from operations	$ (3,881)	$ (2,708)	$ (4,316)	$ (2,704)	$ (13,609)	$ (10,782)	$ (12,703)	$ 3,919	$ (35,663)	$ (55,229)	$ (42,383)	$ (16,636)	$ (7,566)
Acquisition-related revenue adjustment	-	-	-	-	-	-	-	-	23,280	23,280	11,118	4,288	4,063
Acquisition-related cost of revenue adjustment	-	-	-	-	-	-	-	-	(10,364)	(10,364)	(1,977)	-	-
Adjustment for new revenue standard	-	-	-	-	-	-	-	-	-	-	3,015	2,949	2,178
Adjustment to cost of revenue for new revenue standard	-	-	-	-	-	-	-	-	-	-	(110)	-	-
Stock-based compensation	4,415	4,641	6,408	4,304	19,768	3,263	4,237	3,887	14,270	25,657	2,824	2,081	2,516
Amortization of intangible assets	1,946	1,773	1,774	2,007	7,500	2,259	2,293	2,293	10,267	17,112	12,309	11,964	13,448
Impairment of intangible assets	-	-	-	-	-	-	-	-	5,471	5,471	-	-	-
Merger integration expense	-	-	-	-	-	-	-	178	(178)	-	-	-	-
Settlement expense	-	605	-	-	605	-	-	1,600	300	1,900	1,730	-	-
Litigation costs	-	-	-	-	-	-	-	-	373	373	673	1,901	3,147
Acquisition-related facilities adjustment	-	-	-	-	-	-	-	-	-	-	211	252	251
Acquisition- and integration-related expense	-	-	951	201	1,152	56	4,679	1,543	8,485	14,763	4,412	4,280	5,570
Restructuring	-	-	1,620	1,120	2,740	570	501	-	8,365	9,436	6,668	6,097	2,397
Non-GAAP Income (loss) from operations	$ 2,480	$ 4,311	$ 6,437	$ 4,928	$ 18,156	$ (4,634)	$ (993)	$ 13,420	$ 24,606	$ 32,399	$ (1,510)	$ 17,176	$ 26,004

Thank You

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