



Needham Growth Conference

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Forward Looking Statements



During the course of this presentation, we will provide projections and other forward looking statements regarding future events or the future financial performance of Harmonic, including expectations concerning our business strategy for 2018 and beyond, and our Q4 and full year 2018 guidance. Such statements are only current expectations and actual events or results may differ materially. We refer you to Harmonic's filings with the SEC, particularly our most recent Reports on Form 10-K, Form 10-Q and Form 8-K. These documents identify important risk factors that could cause actual results to differ materially from our projections or other forward looking statements. We will also present financial metrics determined on a "non-GAAP" basis. These items, together with the corresponding GAAP numbers and a reconciliation to GAAP, are contained in this presentation and the related earnings press release on our website at www.harmonicinc.com.



Harmonic-at-a-Glance



\$359M

2017
Net Revenue

Two market-leading
business units:

**VIDEO &
CABLE
ACCESS**

**SILICON
VALLEY**

Headquarters

>5,000

Media & Service
Provider Global
Customers

>\$90M

R&D Spend



Two Market-Leading Business Segments



VIDEO

- **\$1.5B** 2018 Target Market
- 2018 Revenue Guidance Range: **\$304M - \$307M**

Mission

To provide smarter, faster and simpler **video streaming** solutions to the world's leading media companies who are transforming their businesses to compete in the premium OTT video world



CABLE ACCESS

- **\$2.0B** 2018 Target Market
- 2018 Revenue Guidance Range: **\$92M - \$102M**

Mission

To provide innovative **cloud-native cable access** solutions to the world's leading cable companies, enabling flexible and scalable roll out of next generation Gigabit services

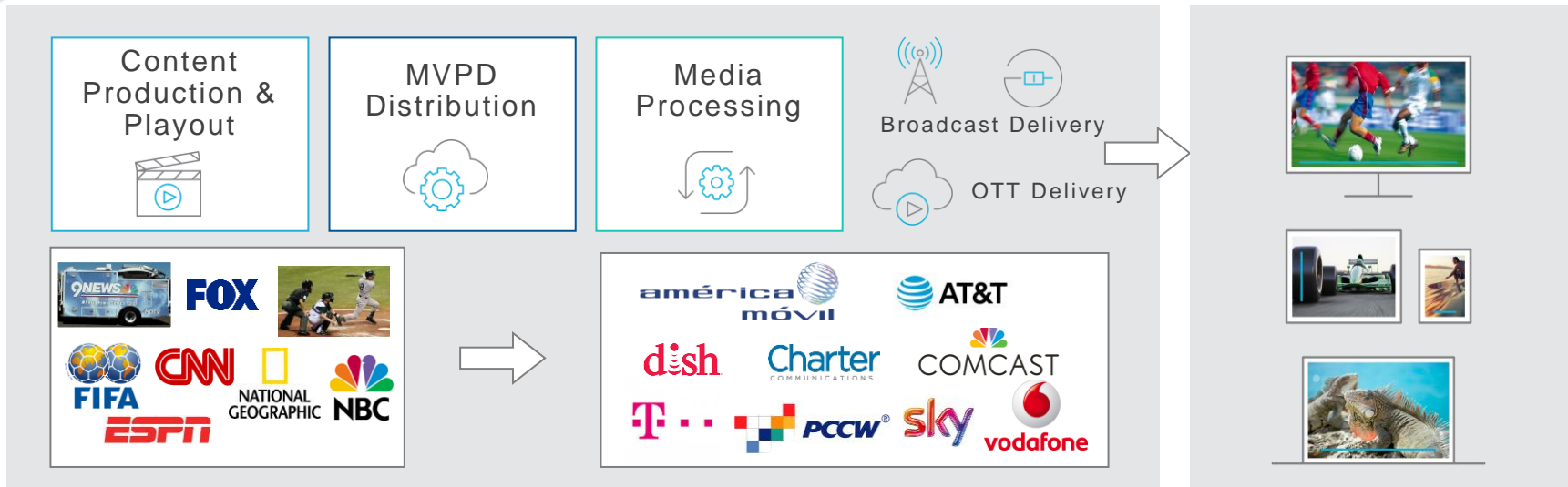




Video Business Overview



OTT Streaming Transformation is Accelerating



Premium Video Transitions and Digital Transformation Driving Investment:

- Content, analytics and new streaming services
- Greater operational efficiencies with Cloud / SaaS business models

Harmonic Cable Business Segment Core Strategy:

- Profitably lead the video Appliances & Software market
- Bridge traditional customers to simpler, more profitable SaaS
- Leverage SaaS to address new customers and markets

Harmonic is Leading the Live OTT Charge



~35,000

OTT channels
deployed globally

Over
3,000
cloud-native
OTT channels

150%
growth in cloud-
native OTT channels
in 9 months

Over
6 PetaBytes
cumulative monthly
OTT egress

Cloud Adoption for Linear and Catch-up Services is Real

TAM Expansion Business Cases



*"Partnering with Harmonic, the market leader in **OTT video service** deployments, we plan to deliver a full range of features streaming consumers demand,"*

SHANE CANNON,
CEO at VIDGO



Consistent Financial Performance*

- Gross margin 57.2%, operating margin 7.2%
- Fifth consecutive quarter of positive operating profit
- Healthy backlog and deferred revenue, enabling visibility and consistency



Growth Transformation On Track

- Over 35,000 linear OTT channels deployed, up 4% sequentially and 23% year over year
- UHD shipments up 138% sequentially
 - Launched UHD NASA channel on Roku, powered by Video SaaS
- Number of Video SaaS customers up 200% year over year

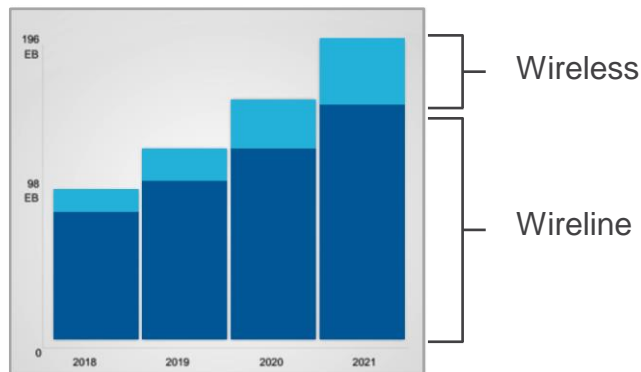
* Non-GAAP financial results



Cable Access Business Overview

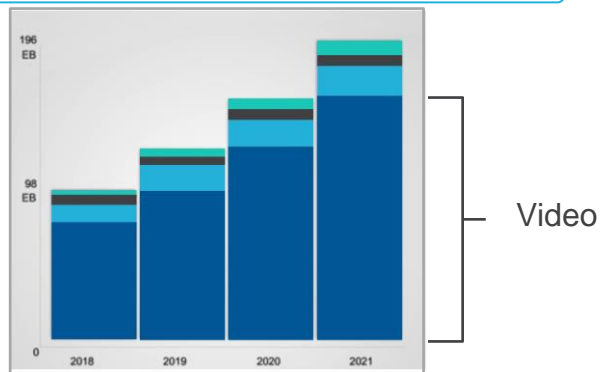
A Coming Global Mega-Upgrade to Gigabit Networks

Network traffic keeps increasing and is set to double between 2018 and 2021



Source: Cisco VNI 2007

Video will account for >80%



Source: Cisco VNI 2007

A Major Transformation Driving New Growth Initiative:

- Fast deployment of new IP-based data, video and voice services
- Greater efficiency and agility with virtualization and Distributed networks

Harmonic Cable Business Segment Core Strategy:

- Lead the cable industry toward distributed access architecture, virtualized CCAP platform
- Leverage market-leading EdgeQAM & cable industry relationships
- Joint development partnerships with leading Cable operator partners

CableOS – A Disruptive Solution for Gigabit Cable Broadband



Awarded foundational virtualized CCAP architecture patent

Cloud-native solution resolves space and power constraints

Unprecedented scalability and agility



Data Center

Virtualized CCAP
Software Core



PHY Options

Centralized

Remote-shelf

Remote-node

Cable Access – Significant Shift in DAA Deployments

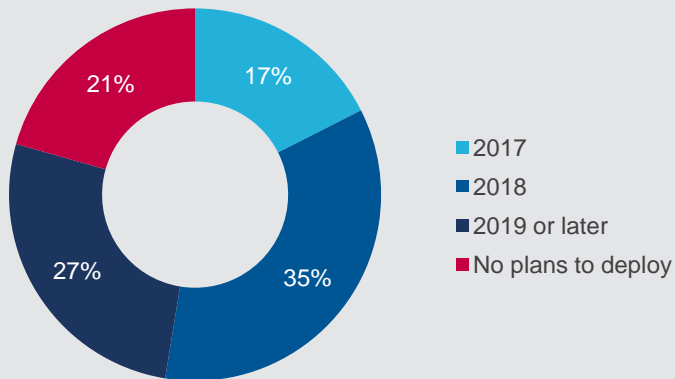
Key Cable Operator Challenges:

Power, space, cooling, time to launch services, upgrade cycles, CAPEX growth

Solution:

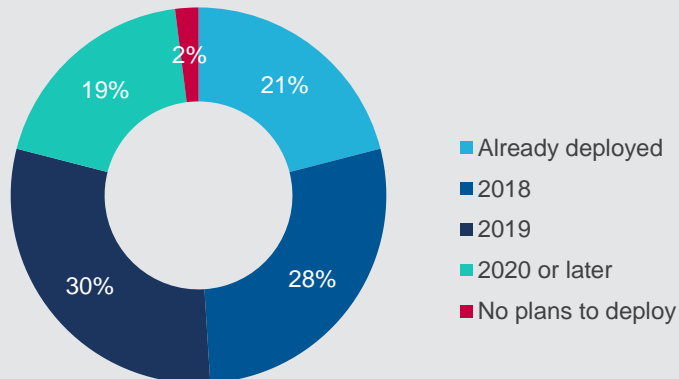
Virtualized access platform with distributed edge

2017 Survey – Expectations of DAA Deployment



Source: SNL Kagan, 2017: survey of 35 cable operators spanning 82 million broadband subscribers in response to "When do you expect to deploy distributed access architectures (DAA)?"

2018 Survey – Expectations of DAA Deployment



Source: SNL Kagan, 2018: survey of 57 cable operators spanning 107 million broadband subscribers in response to "When do you expect to deploy distributed access architectures (DAA)?"



CableOS Momentum Building

- Over 25 commercial deployments and field trials
 - Announced Buckeye Broadband deployment, serving over 120,000 modems
 - Over 480,000 cable modems served globally, up 20% sequentially
 - Live consumers and enterprises receiving broadband service via CableOS
 - Ramping volume shipments of DAA nodes, up 174% sequentially
-



Positive Financial Trajectory*

- Revenue \$28.1 million, up 153% year over year and 39% sequentially
- Operating profit 1.4%, profitable for second consecutive quarter
- Project pipeline supports \$100 million 2018 revenue target

* Non-GAAP financial results

2018 Strategic Priorities



CABLE ACCESS

1. Scale first wave of CableOS deployments
2. Secure new CableOS design wins
3. Establish market-leading DAA footprint



VIDEO

1. Drive OTT sales growth
2. Expand addressable market via SaaS
3. Deliver consistent segment profitability

Focused on growth, profitability
and
shareholder value creation



FINANCIAL OVERVIEW

Q3 2018 Financial Highlights*



\$ Millions (except EPS)	Q3 2018	Q2 2018	Q3 2017	Q3/Q2 Change	Q3 Y/Y Change
Total Net Revenue	\$101.4	\$99.4	\$91.6	2.0%	11.0%
Gross Margin %	52.1%	54.0%	53.4%	(1.9)%	(1.3)%
Operating Expense	\$47.2	\$47.0	\$47.7	0.4%	(1.1)%
Operating Income (Loss)	\$5.7	\$6.8	\$1.3	(\$1.1)	\$4.4
EPS	\$0.04	\$0.05	(\$0.01)	(\$0.01)	\$0.05
Bookings	\$79.5	\$107.9	\$96.0	(26.3)%	(17.2)%

* Non-GAAP financial highlights

Q3 2018 Balance Sheet & Cash Flow Highlights



\$ Millions	Q3 2018	Q2 2018	Q3 2017
Cash	\$61.7	\$54.1	\$50.0
Cash Provided by (Used in) Operations	\$2.4	\$9.9	(\$8.6)
Accounts Receivable	\$78.0	\$82.6	\$71.6
DSO	70	75	70
Inventories	\$23.3	\$23.0	\$31.8
Inventory Days	43	45	67
Backlog and Deferred	\$207.6	\$230.4	\$200.9

Q4 2018 Financial Guidance*



\$ Millions (except EPS)	Q4 2018
Total Revenue	\$105 - \$118
Video Segment	\$80 - \$83
Cable Access Segment	\$25 - \$35
Gross Margin	49% - 50%
Operating Expenses	\$49 - \$50
Operating Income / (Loss)	\$2.2 - \$9.6
EPS	\$0.01 - \$0.07
Tax Rate	16%
Shares, millions (basic)	89.2
Cash	\$55 - \$65

* Non-GAAP

Full Year 2018 Financial Guidance*



\$ Millions (except EPS)	Revised Guidance	Original Guidance
Total Revenue	\$396 - \$409	\$388 - \$411
Video Segment	\$304 - \$307	\$296 - \$309
Cable Access Segment	\$92 - \$102	\$92 - \$102
Gross Margin	52.5% - 53.0%	52.0% - 53.0%
Operating Expenses	\$192.5 - \$193.5	\$195 - \$197
Operating Income (Loss)	\$15.1 - \$22.5	\$6 - \$24
EPS	\$0.09 - \$0.16	(\$0.01) - \$0.16
Shares, millions (basic, diluted)	86.9	85.7, 86.6
Cash	\$55 - \$65	\$50 - \$60

**Narrowed Video Revenue range.
Improved Operating Expense, EPS and Cash ranges.**

* Non-GAAP

APPENDIX

Use of Non-GAAP Financial Measures



In establishing operating budgets, managing its business performance, and setting internal measurement targets, the Company excludes a number of items required by GAAP. Management believes that these accounting charges and credits, most of which are non-cash or non-recurring in nature, are not useful in managing its operations and business. Historically, the Company has also publicly presented these supplemental non-GAAP measures in order to assist the investment community to see the Company “through the eyes of management,” and thereby enhance understanding of its operating performance. The non-GAAP measures presented here are revenue, segment revenue, gross profit, operating expenses, income (loss) from operations, non-operating expense, net, net income (loss) and net income (loss) per diluted share. The presentation of non-GAAP information is not intended to be considered in isolation or as a substitute for results prepared in accordance with GAAP, and is not necessarily comparable to non-GAAP results published by other companies. A reconciliation of the historical and forward looking non-GAAP financial measures discussed in this presentation to the most directly comparable historical and forward looking GAAP financial measures is included with the financial information contained in this presentation. The non-GAAP adjustments described below have historically been excluded from our GAAP financial measures. These adjustments are acquisition accounting impacts to TVN deferred revenue, TVN acquisition and integration related costs, restructuring and related charges, Cable Access inventory charge, Avid litigation settlement and associated legal fees and non-cash items, such as warrant amortization, impairment of long-term investment, stock-based compensation expense, amortization of intangibles, non-cash interest expenses on convertible debt, gain (loss) on equity investments and adjustments that normalize the tax rate.

Q3 2018 GAAP to Non-GAAP Reconciliations (in thousands, except EPS and percentages)



Three months ended September 28, 2018

	Revenue	Gross Profit	Total Operating Expense	Income from Operations	Total Non-operating Expense, net	Net Income (Loss)
GAAP	\$ 100,616	\$ 50,102	\$ 53,753	\$ (3,651)	\$ (3,237)	\$ (7,758)
Accounting impact related to warrant amortization	790	790	—	790	—	790
Stock-based compensation	—	614	(4,819)	5,433	—	5,433
Amortization of intangibles	—	1,295	(792)	2,087	—	2,087
Restructuring and related charges	—	7	(987)	994	—	994
Loss on equity investments	—	—	—	—	72	72
Non-cash interest expenses related to convertible notes	—	—	—	—	1,528	1,528
Discrete tax items and tax effect of non-GAAP adjustments	—	—	—	—	—	227
Total adjustments	790	2,706	(6,598)	9,304	1,600	11,131
Non-GAAP	\$ 101,406	\$ 52,808	\$ 47,155	\$ 5,653	\$ (1,637)	\$ 3,373
<i>As a % of revenue (GAAP)</i>		49.8%	53.4%	(3.6)%	(3.2)%	(7.7)%
<i>As a % of revenue (Non-GAAP)</i>		52.1%	46.5%	5.6 %	(1.6)%	3.3 %
Diluted net income (loss) per share:						
Diluted net loss per share-GAAP						\$ (0.09)
Diluted net income per share-Non-GAAP						\$ 0.04
Shares used to compute diluted net income (loss) per share:						
GAAP						86,321
Non-GAAP						87,770

Q2 2018 GAAP to Non-GAAP Reconciliations (in thousands, except EPS and percentages)



Three months ended June 29, 2018

	Revenue	Gross Profit	Total Operating Expense	Income from Operations	Total Non-operating Expense, net	Net Income (Loss)
GAAP	\$ 99,160	\$ 51,603	\$ 50,961	\$ 642	\$ (2,664)	\$ (2,913)
Accounting impact related to warrant amortization	284	284	—	284	—	284
Stock-based compensation	—	448	(2,564)	3,012	—	3,012
Amortization of intangibles	—	1,295	(800)	2,095	—	2,095
Restructuring and related charges	—	115	(631)	746	—	746
Gain on equity investments	—	—	—	—	(183)	(183)
Non-cash interest expenses related to convertible notes	—	—	—	—	1,501	1,501
Discrete tax items and tax effect of non-GAAP adjustments	—	—	—	—	—	22
Total adjustments	284	2,142	(3,995)	6,137	1,318	7,477
Non-GAAP	\$ 99,444	\$ 53,745	\$ 46,966	\$ 6,779	\$ (1,346)	\$ 4,564
<i>As a % of revenue (GAAP)</i>		52.0%	51.4%	0.6 %	(2.7)%	(2.9)%
<i>As a % of revenue (Non-GAAP)</i>		54.0%	47.2%	6.8 %	(1.4)%	4.6 %
Diluted net income (loss) per share:						
Diluted net loss per share-GAAP						\$ (0.03)
Diluted net income per share-Non-GAAP						\$ 0.05
Shares used to compute diluted net income (loss) per share:						
GAAP						85,304
Non-GAAP						85,758

Q3 2017 GAAP to Non-GAAP Reconciliations (in thousands, except EPS and percentages)



Three months ended September 29, 2017

	Revenue	Gross Profit	Total Operating Expense	Income (Loss) from Operations	Total Non-operating Expense, net	Net Loss
GAAP	\$ 92,014	\$ 47,025	\$ 61,231	\$ (14,206)	\$ (3,292)	\$ (15,583)
Accounting impact related to warrant amortization	(378)	(378)	—	(378)	—	(378)
Stock-based compensation	—	478	(3,242)	3,720	—	3,720
Amortization of intangibles	—	1,295	(793)	2,088	—	2,088
Restructuring and related charges	—	549	(2,028)	2,577	—	2,577
TVN acquisition-and integration-related costs	—	—	(117)	117	—	117
Avoid litigation settlement and associated legal fees	—	—	(7,356)	7,356	—	7,356
Non-cash interest expenses related to convertible notes	—	—	—	—	1,384	1,384
Discrete tax items and tax effect of non-GAAP adjustments	—	—	—	—	—	(1,820)
Total adjustments	\$ (378)	\$ 1,944	\$ (13,536)	\$ 15,480	\$ 1,384	\$ 15,044
Non-GAAP	\$ 91,636	\$ 48,969	\$ 47,695	\$ 1,274	\$ (1,908)	\$ (539)
<i>As a % of revenue (GAAP)</i>		<i>51.1%</i>	<i>66.5%</i>	<i>(15.4)%</i>	<i>(3.6)%</i>	<i>(16.9)%</i>
<i>As a % of revenue (Non-GAAP)</i>		<i>53.4%</i>	<i>52.0%</i>	<i>1.4 %</i>	<i>(2.1)%</i>	<i>(0.6)%</i>
Diluted net loss per share:						
Diluted net loss per share-GAAP						\$ (0.19)
Diluted net loss per share-Non-GAAP						\$ (0.01)
Shares used to compute diluted net loss per share:						
GAAP and Non-GAAP						81,445

YTD Q3 2018 GAAP to Non-GAAP Reconciliations (in thousands, except EPS and percentages)



Nine months ended September 28, 2018

	Revenue	Gross Profit	Total Operating Expense	Income (Loss) from Operations	Total Non-operating Expense, net	Net Income (Loss)
GAAP	\$ 289,903	\$ 148,888	\$ 161,224	\$ (12,336)	\$ (9,190)	\$ (24,365)
Accounting impact related to warrant amortization	1,185	1,185	—	1,185	—	1,185
Stock-based compensation	—	1,577	(12,625)	14,202	—	14,202
Amortization of intangibles	—	3,885	(2,396)	6,281	—	6,281
Restructuring and related charges	—	884	(2,704)	3,588	—	3,588
Gain on equity investments	—	—	—	—	(111)	(111)
Non-cash interest expenses related to convertible notes	—	—	—	—	4,483	4,483
Avoid litigation settlement and associated legal fees	—	—	6	(6)	—	(6)
Discrete tax items and tax effect of non-GAAP adjustments	—	—	—	—	—	1,543
Total adjustments	\$ 1,185	\$ 7,531	\$ (17,719)	\$ 25,250	\$ 4,372	\$ 31,165
Non-GAAP	\$ 291,088	\$ 156,419	\$ 143,505	\$ 12,914	\$ (4,818)	\$ 6,800
<i>As a % of revenue (GAAP)</i>		<i>51.4%</i>	<i>55.6%</i>	<i>(4.3)%</i>	<i>(3.2)%</i>	<i>(8.4)%</i>
<i>As a % of revenue (Non-GAAP)</i>		<i>53.7%</i>	<i>49.3%</i>	<i>4.4 %</i>	<i>(1.7)%</i>	<i>2.3 %</i>
Diluted net income (loss) per share:						
Diluted net loss per share-GAAP						\$ (0.29)
Diluted net income per share-Non-GAAP						\$ 0.08
Shares used to compute diluted net income (loss) per share:						
GAAP						85,188
Non-GAAP						85,962

YTD Q3 2017 GAAP to Non-GAAP Reconciliations (in thousands, except EPS and percentages)



Nine months ended September 29, 2017

	Revenue	Gross Profit	Total Operating Expense	Loss from Operations	Total Non-operating Expense, net	Net Loss
GAAP	\$ 257,272	\$ 121,248	\$ 184,034	\$ (62,786)	\$ (9,892)	\$ (71,110)
Cable Edge inventory charge	—	3,316	—	3,316	—	3,316
Acquisition accounting impacts related to TVN deferred revenue	111	111	—	111	—	111
Accounting impact related to warrant amortization	38	38	—	38	—	38
Stock-based compensation	—	1,623	(9,484)	11,107	—	11,107
Amortization of intangibles	—	3,885	(2,347)	6,232	—	6,232
Restructuring and related charges	—	1,335	(4,084)	5,419	—	5,419
TVN acquisition-and integration-related costs	—	342	(2,392)	2,734	—	2,734
Avoid litigation settlement and associated legal fees	—	—	(7,356)	7,356	—	7,356
Non-cash interest expenses related to convertible notes	—	—	—	—	4,060	4,060
Discrete tax items and tax effect of non-GAAP adjustments	—	—	—	—	—	3,278
Total adjustments	149	10,650	(25,663)	36,313	4,060	43,651
Non-GAAP	\$ 257,421	\$ 131,898	\$ 158,371	\$ (26,473)	\$ (5,832)	\$ (27,459)
<i>As a % of revenue (GAAP)</i>		47.1%	71.5%	(24.4)%	(3.8)%	(27.6)%
<i>As a % of revenue (Non-GAAP)</i>		51.2%	61.5%	(10.3)%	(2.3)%	(10.7)%
Diluted net loss per share:						
Diluted net loss per share-GAAP						\$ (0.88)
Diluted net loss per share-Non-GAAP						\$ (0.34)
Shares used to compute diluted net loss per share:						
GAAP and Non-GAAP						80,618

Q4 2018 Guidance GAAP to Non-GAAP Reconciliations (in millions, except EPS and percentages)



Q4 2018 Financial Guidance						
	Revenue	Gross Profit	Total Operating Expense	Income (Loss) from Operations	Total Non-operating Expense, net	Net Income (Loss)
GAAP	\$104.7 to \$117.7	\$50.3 to \$56.7	\$52.5 to \$53.5	\$(3.2) to \$4.2	\$(3.2)	\$(6.9) to \$0.5
Accounting impact related to warrant amortization	0.3	0.3	—	0.3	—	0.3
Stock-based compensation	—	0.3	(2.7)	3.0	—	3.0
Amortization of intangibles	—	1.3	(0.8)	2.1	—	2.1
Non-cash interest expense related to convertible notes	—	—	—	—	1.6	1.6
Tax effect of non-GAAP adjustments	—	—	—	—	—	\$(0.8) to 0.4
Total adjustments	0.3	1.9	(3.5)	5.4	1.6	\$6.2 to \$7.4
Non-GAAP	\$105.0 to \$118.0	\$52.2 to \$58.6	\$49.0 to \$50.0	\$2.2 to \$9.6	\$(1.6)	\$0.5 to \$6.7
<i>As a % of revenue (GAAP)</i>		48.0% to 48.5%	44.6% to 51.1%	(3.1)% to 3.6%	(3.0)%	(6.6)% to 0.4%
<i>As a % of revenue (Non-GAAP)</i>		49.0% to 50.0%	41.5% to 47.6%	2.1% to 8.1%	(1.5)%	0.5% to 5.7%
Diluted net income (loss) per share:						
Diluted net loss per share-GAAP						\$(0.08) to \$0.01
Diluted net income per share-Non-GAAP						\$0.01 to \$0.07
Shares used to compute diluted net loss per share:						
GAAP						86.8
Shares used to compute diluted net income per share:						
GAAP and Non-GAAP						89.2

2018 Guidance GAAP to Non-GAAP Reconciliations (in millions, except EPS and percentages)



	2018 Financial Guidance					
	Revenue	Gross Profit	Total Operating Expense	Income (Loss) from Operations	Total Non-operating Expense, net	Net Income (Loss)
GAAP	\$394.5 to \$407.5	\$199.1 to \$205.5	\$213.7 to \$214.7	\$(15.6) to \$(8.2)	\$(12.3)	\$(31.2) to \$(23.8)
Accounting impact related to warrant amortization	1.5	1.5	—	1.5	—	1.5
Stock-based compensation	—	1.9	(15.3)	17.2	—	17.2
Amortization of intangibles	—	5.2	(3.2)	8.4	—	8.4
Restructuring and related charges	—	0.9	(2.7)	3.6	—	3.6
Non-cash interest expense related to convertible notes	—	—	—	—	6.1	6.1
Gain on equity investment	—	—	—	—	(0.1)	(0.1)
Tax effect of non-GAAP adjustments	—	—	—	—	—	\$0.7 to 1.9
Total adjustments	1.5	9.5	(21.2)	30.7	6.0	\$37.4 to \$38.6
Non-GAAP	\$396.0 to \$409.0	\$208.6 to \$215.0	\$192.5 to \$193.5	\$15.1 to \$22.5	\$(6.3)	\$7.4 to \$13.6
<i>As a % of revenue (GAAP)</i>		50.0% to 50.5%	52.4% to 54.4%	(4.0)% to (2.0)%	(3.0)%	(7.9)% to (5.8)%
<i>As a % of revenue (Non-GAAP)</i>		52.5% to 53.0%	47.1% to 48.9%	3.8% to 5.5%	(1.5)%	1.9% to 3.3%
Diluted net income (loss) per share:						
Diluted net loss per share-GAAP						\$(0.36) to \$(0.28)
Diluted net income per share-Non-GAAP						\$0.09 to \$0.16
Shares used to compute diluted net loss per share:						
GAAP						85.7
Shares used to compute diluted net income per share:						
Non-GAAP						86.9

harmonic



THANK YOU

