



# Corporate Overview

June 2019

harmonic<sup>®</sup>



# 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 2019 and beyond, and our Q2 guidance and full year 2019 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](http://www.harmonicinc.com).



# Harmonic-at-a-Glance



**\$404M**

2018  
Revenue

Two market-leading  
business units:

**CABLE  
ACCESS &  
VIDEO**

**SILICON  
VALLEY**

Headquarters

**>5,000**

Media & Service  
Provider Global  
Customers

**~\$90M**

R&D Spend



# Two Market-Leading Business Segments



## CABLE ACCESS

- **\$1.6B** 2019 Target Market
- 2019 Revenue Guidance Range: **\$100M - \$130M**

### 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

- **\$1.5B** 2019 Target Market
- 2019 Revenue Guidance Range: **\$285M - \$300M**

### 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



COM HEM



J:COM



MEGACABLE



COMCAST



CNN

Singtel



T..

sky



dish



FOX



turner

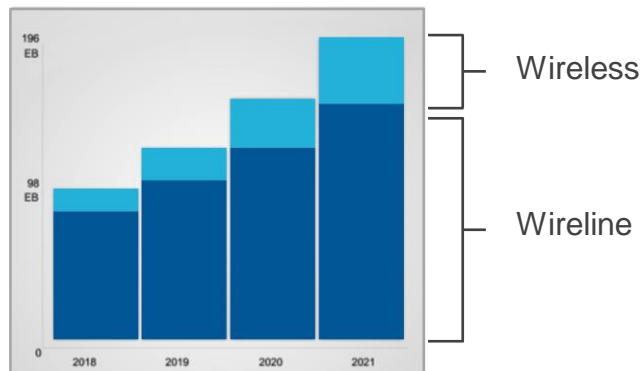


## Cable Access Business Overview

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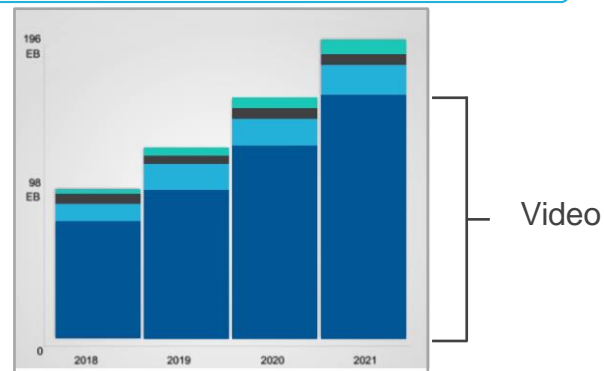
# A Coming Global Mega-Upgrade to Gigabit Networks

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



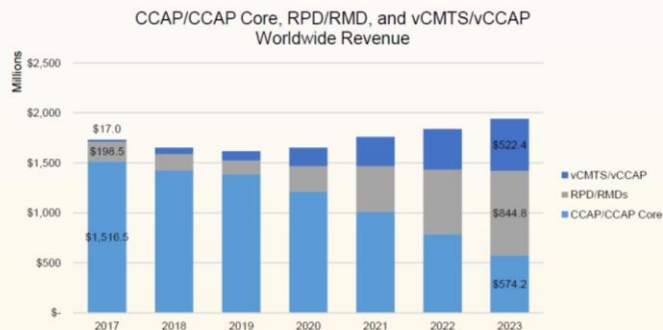
## Key Cable Operator Challenges:

5G and FTTH competition, power, space, time to launch, CAPEX growth

## Solution:

Virtualized access platform with distributed access

## DAA Transition Underway



- **RPD/RMD units expected to grow 51% in CY19, 31% in CY20**
  - More gradual growth expected, due to permitting, testing, labor, etc.
- **vCMTS platforms being used for both R-PHY and CCAP cap and grow applications**
- **Total market expected to reach \$1.94B in 2023**



## CableOS Momentum

- 32 commercial deployments and field trials
  - 4 of top 8 North American and European cable operators
  - NCTC deal to address hundreds of smaller operators
- 670,000 cable modems served globally, up 24% sequentially
- 8 new patent filings since January 1



## Outlook Positive

- Tier 1 DAA roll-outs commencing in Q2
  - Forecasting significant volume ramp through Q3 & Q4
- Latest market research\* projects >\$1.9 billion market size in 2023
- Full year financial outlook reconfirmed

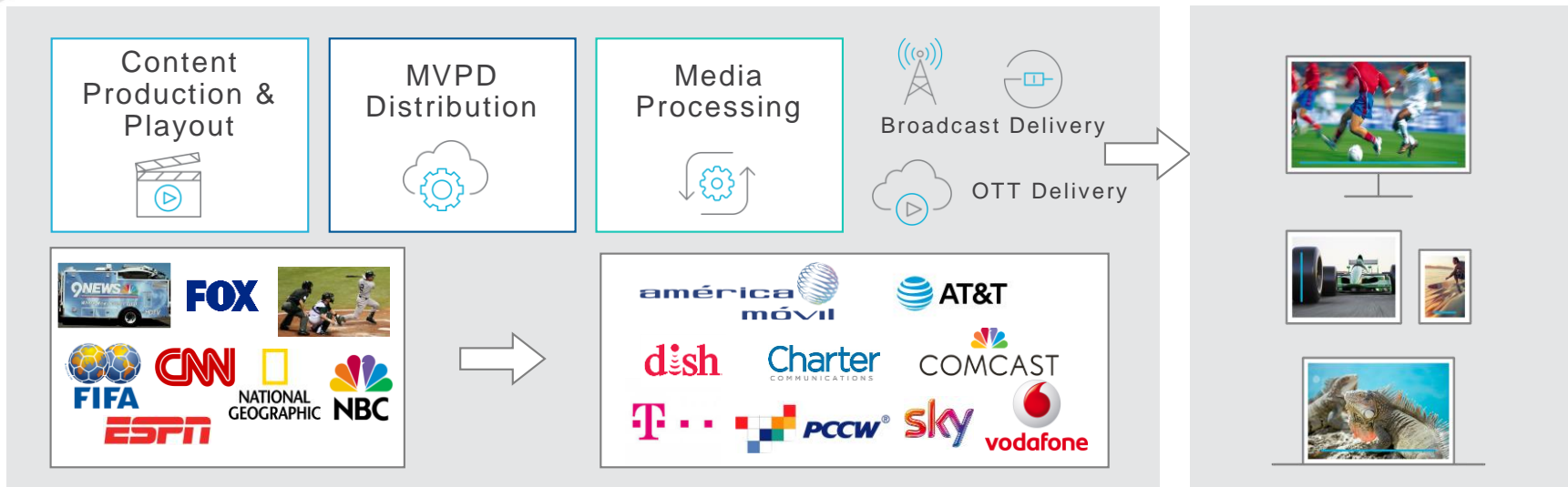
\* “DAA Transition Underway”, Dell’Oro Group, March 2019



## 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 market
- Bridge traditional customers to simpler, more profitable SaaS
- Leverage SaaS to address new customers and markets

# Harmonic is Leading the Live OTT Charge



> 38,000

OTT Channels  
Deployed Globally

> 6.5 million

Subscribers managed by VOS  
Video SaaS

> 32%

sequentially increase of Video  
SaaS customer base of 25

Harmonic # 1 Video SaaS Platform for Live OTT Services

# TAM Expansion Business Cases

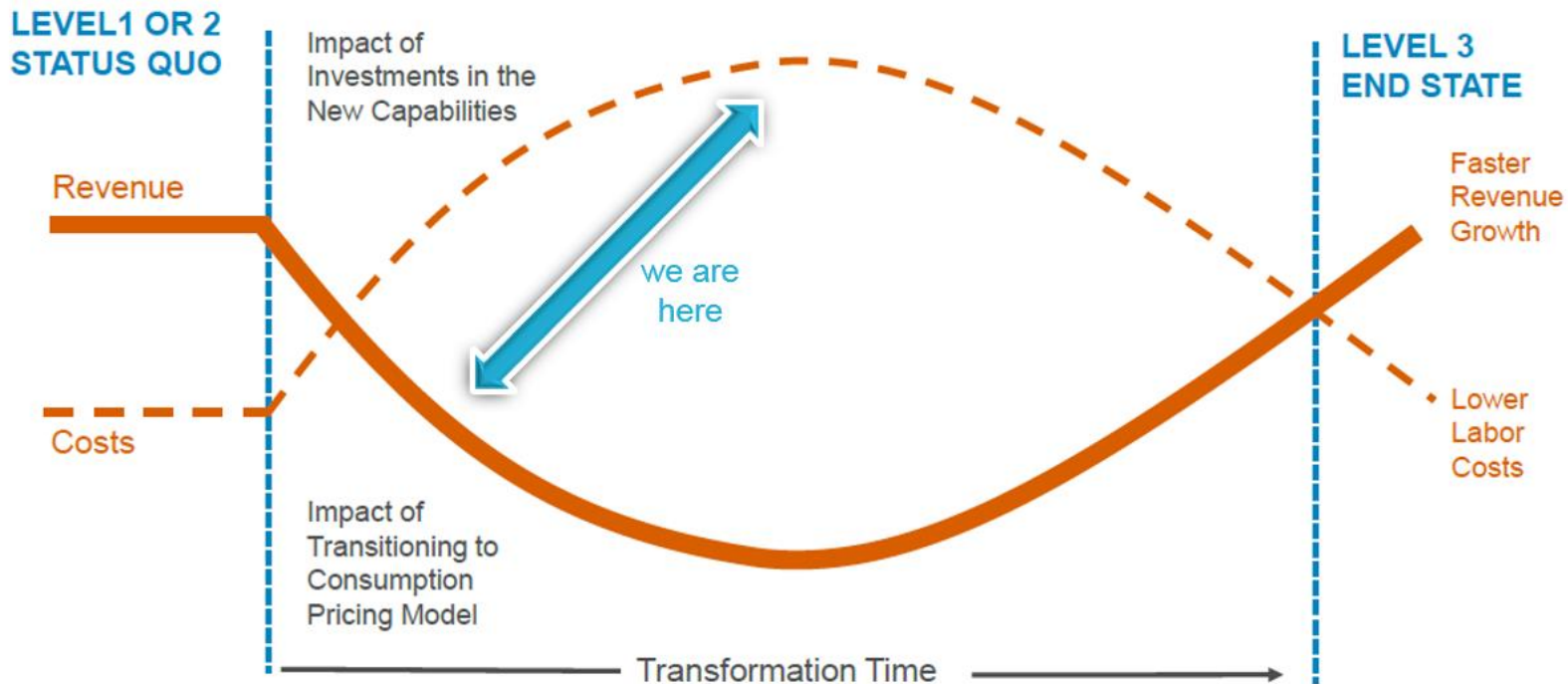


*"It took less than five weeks to design, set up, test and deploy VOS360 SaaS for live streaming of NTT IndyCar Series races, which is incredibly fast compared with the industry norm for OTT deployments."*

**Brad Lee**

Director of business solutions at Hulman & Company, the parent company of INDYCAR

# The Fish Model





## SaaS Transformation Accelerating

- Over 6.5 million consumers served daily by VOS SaaS, up 70% year over year
- Video SaaS customer base of 25, up 32% sequentially
- New Microsoft Azure and Akamai partnership
- Growing SaaS pipeline creates near-term revenue headwind



## Financial Performance Solid\*

- SaaS and Service revenue \$24.1 million, 36% of total segment revenue
- Gross margin 57.5% unchanged, sequentially and year over year
- 7<sup>th</sup> consecutive profitable quarter

\* Non-GAAP financial results

# 2019 Strategic Priorities



## Cable Access

1. Scale first wave of CableOS deployments
2. Secure new CableOS design wins
3. Execute Tier 1 DAA roll-outs



## Video

1. Extend live OTT market share
2. Expand addressable market via SaaS
3. Deliver consistent segment profitability

Focused on growth, profitability  
and  
shareholder value creation





## Financial Overview

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# Q1 2019 Financial Highlights\*



\$ Millions (except EPS)	Q1 2019	Q4 2018	Q1 2018	Q1/Q4 Change	Q1 Y/Y Change
Total Net Revenue	\$80.1	\$113.6	\$90.2	(29.5)%	(11.2)%
Cable Revenue	\$12.9	\$24.1	\$18.5	(46.3)%	(29.9)%
Video Revenue	\$67.2	\$89.5	\$71.7	(25.0)%	(6.4)%
Gross Margin %	54.5%	54.5%	55.3%	-	(0.8)%
Cable Gross Margin%	39.3%	43.6%	46.7%	(4.3)%	(7.4)%
Video Gross Margin%	57.5%	57.5%	57.5%	-	-
Total Net Revenue	\$80.1	\$113.6	\$90.2	(29.5)%	(11.2)%
Appliance and integration	\$52.4	\$83.1	\$64.1	(37.0)%	(18.3)%
SaaS and service	\$27.7	\$30.5	\$26.1	(9.0)%	6.1%
SaaS and service revenue as a % of total revenue	34.6%	26.8%	29.0%	7.8%	5.6%
SaaS and service gross margin %	61.3%	64.5%	56.3%	(3.2)%	5.0%
SaaS customers	25	19	13	32.0%	92.0%

\* Non-GAAP financial highlights

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# Q1 2019 Financial Highlights (Cont.)\*



\$ Millions (except EPS)	Q1 2019	Q4 2018	Q1 2018	Q1/Q4 Change	Q1 Y/Y Change
Operating Expenses	\$47.5	\$49.3	\$49.4	(3.6)%	(3.8)%
Operating Income (loss)	\$(3.8)	\$12.7	\$0.5	\$(16.5)	\$(4.3)
Diluted Share Count	88.2	89.0	83.9	(0.8)	4.3
EPS	\$(0.05)	\$0.11	\$(0.01)	\$(0.16)	\$(0.04)
Bookings	\$81.0	\$92.8	\$102.6	(12.7)%	(21.0)%

\* Non-GAAP financial highlights

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# Q1 2019 Balance Sheet & Cash Flow Highlights

\$ Millions	Q1 2019	Q4 2018	Q1 2018
Cash	\$69.9	\$66.0	\$52.0
Cash Provided by (Used in) Operations	\$4.2	\$6.6	\$(6.6)
Accounts Receivable	\$58.9	\$81.8	\$74.8
DSO	66	65	75
Inventories	\$29.3	\$25.6	\$25.1
Inventory Days	72	45	56
Backlog and Deferred Revenue	\$187.2	\$186.4	\$224.4

## Q2-2019 Financial Guidance\*



\$ Millions (except EPS)	Q2-2019
Total Revenue	\$80 - \$90
Video Segment	\$70 - \$75
Cable Access Segment	\$10 - \$15
Gross Margin	52.5% - 53.5%
Operating Expenses	\$51 - \$52
Operating Loss	\$(10.0) - \$(3.0)
EPS	\$(0.11) - \$(0.05)
Tax Rate	12%
Shares, millions	88.9
Cash	\$60 - \$70

\* Non-GAAP

# Full Year 2019 Financial Guidance\*



\$ Millions (except EPS)	Full Year 2019
Total Revenue	\$385 - \$430
Video Segment	\$285 - \$300
Cable Access Segment	\$100 - \$130
Gross Margin	50.0% - 53.5%
Operating Expenses	\$195 - \$205
Operating Income (Loss)	\$(12.5) - \$34.6
EPS	\$(0.19) - \$0.27
Tax Rate	12%
Shares, millions (basic, diluted)	89.3 – 91.0
Cash	\$65 - \$85

\* Non-GAAP



## Appendix

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# 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.

# Q1 2019 GAAP to Non-GAAP Reconciliations (in thousands, except EPS and percentages)



Three months ended March 29, 2019

	Revenue	Gross Profit	Total Operating Expense	Loss from Operations	Total Non-operating Expense, net	Net Loss
<b>GAAP</b>	\$ 80,106	\$ 41,849	\$ 50,257	\$ (8,408)	\$ (3,217)	\$ (11,306)
Accounting impact related to warrant amortization	25	25	—	25	—	25
Stock-based compensation	—	225	(1,888)	2,113	—	2,113
Amortization of intangibles	—	1,295	(788)	2,083	—	2,083
Restructuring and related charges	—	301	(57)	358	—	358
Non-cash interest expenses related to convertible notes	—	—	—	—	1,606	1,606
Discrete tax items and tax effect of non-GAAP adjustments	—	—	—	—	—	334
<b>Total adjustments</b>	25	1,846	(2,733)	4,579	1,606	6,519
<b>Non-GAAP</b>	\$ 80,131	\$ 43,695	\$ 47,524	\$ (3,829)	\$ (1,611)	\$ (4,787)
<i>As a % of revenue (GAAP)</i>		52.2%	62.7%	(10.5)%	(4.0)%	(14.1)%
<i>As a % of revenue (Non-GAAP)</i>		54.5%	59.3%	(4.8)%	(2.0)%	(6.0)%

## Diluted net loss per share:

Diluted net loss per share-GAAP	\$ (0.13)
Diluted net loss per share-Non-GAAP	\$ (0.05)

## Shares used to compute diluted net loss per share:

GAAP and Non-GAAP	88,165
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# Q4 2018 GAAP to Non-GAAP Reconciliations (in thousands, except EPS and percentages)



Three months ended December 31, 2018

	Revenue	Gross Profit	Total Operating Expense	Income from Operations	Total Non-operating Expense, net	Net Income
<b>GAAP</b>	\$ 113,655	\$ 60,321	\$ 52,996	\$ 7,325	\$ (2,747)	\$ 3,330
Accounting impact related to warrant amortization	(7)	(7)	—	(7)	—	(7)
Stock-based compensation	—	376	(2,711)	3,087	—	3,087
Amortization of intangibles	—	1,295	(791)	2,086	—	2,086
Restructuring and related charges	—	(27)	(214)	187	—	187
Non-cash interest expenses related to convertible notes	—	—	—	—	1,577	1,577
Discrete tax items and tax effect of non-GAAP adjustments	—	—	—	—	—	(593)
<b>Total adjustments</b>	(7)	1,637	(3,716)	5,353	1,577	6,337
<b>Non-GAAP</b>	\$ 113,648	\$ 61,958	\$ 49,280	\$ 12,678	\$ (1,170)	\$ 9,667
<i>As a % of revenue (GAAP)</i>		53.1 %	46.6 %	6.4 %	(2.4) %	2.9 %
<i>As a % of revenue (Non-GAAP)</i>		54.5 %	43.4 %	11.2 %	(1.0) %	8.5 %
<b>Diluted net income per share:</b>						
Diluted net income per share-GAAP						\$ 0.04
Diluted net income per share-Non-GAAP						\$ 0.11
<b>Shares used to compute diluted net income per share:</b>						
GAAP and Non-GAAP						89,028

# Q1 2018 GAAP to Non-GAAP Reconciliations (in thousands, except EPS and percentages)



Three months ended March 30, 2018

	Revenue	Gross Profit	Total Operating Expense	Income (Loss) from Operations	Total Non-operating Expense, net	Net Loss
<b>GAAP</b>	\$ 90,127	\$ 47,183	\$ 56,510	\$ (9,327)	\$ (3,289)	\$ (13,694)
Accounting impact related to warrant amortization	111	111	—	111	—	111
Stock-based compensation	—	515	(5,242)	5,757	—	5,757
Amortization of intangibles	—	1,295	(804)	2,099	—	2,099
Restructuring and related charges	—	762	(1,086)	1,848	—	1,848
Avoid litigation settlement and associated legal fees	—	—	6	(6)	—	(6)
Non-cash interest expenses related to convertible notes	—	—	—	—	1,454	1,454
Discrete tax items and tax effect of non-GAAP adjustments	—	—	—	—	—	1,294
<b>Total adjustments</b>	<b>\$ 111</b>	<b>\$ 2,683</b>	<b>\$ (7,126)</b>	<b>\$ 9,809</b>	<b>\$ 1,454</b>	<b>\$ 12,557</b>
<b>Non-GAAP</b>	<b>\$ 90,238</b>	<b>\$ 49,866</b>	<b>\$ 49,384</b>	<b>\$ 482</b>	<b>\$ (1,835)</b>	<b>\$ (1,137)</b>
<i>As a % of revenue (GAAP)</i>		52.4%	62.7%	(10.3)%	(3.6)%	(15.2)%
<i>As a % of revenue (Non-GAAP)</i>		55.3%	54.7%	0.5 %	(2.0)%	(1.3)%
<b>Diluted net loss per share:</b>						
Diluted net loss per share-GAAP						\$ (0.16)
Diluted net loss per share-Non-GAAP						\$ (0.01)
<b>Shares used to compute diluted net loss per share:</b>						
GAAP and Non-GAAP						83,912

## Q2 2019 Guidance GAAP to Non-GAAP Reconciliations (in millions, except EPS and percentages)



### Q2 2019 Financial Guidance

	Revenue	Gross Profit	Total Operating Expense	Loss from Operations	Total Non-operating Expense, net	Net Loss
<b>GAAP</b>	\$80.0 to \$90.0	\$40.4 to \$46.4	\$54.5 to \$55.5	\$(15.1) to \$(8.1)	\$(3.3)	\$(19.1) to \$(12.1)
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	—	—	—	—	1.7	1.7
Tax effect of non-GAAP adjustments	—	—	—	—	—	\$1.3 to \$2.1
<b>Total adjustments</b>	—	1.6	(3.5)	5.1	1.7	\$8.1 to \$8.9
<b>Non-GAAP</b>	\$80.0 to \$90.0	\$42.0 to \$48.0	\$51.0 to \$52.0	\$(10.0) to \$(3.0)	\$(1.6)	\$(10.2) to \$(4.0)
<i>As a % of revenue (GAAP)</i>		50.5% to 51.5%	60.6% to 69.4%	(18.9)% to (9.0)%	(4.0)%	(23.9)% to (13.5)%
<i>As a % of revenue (Non-GAAP)</i>		52.5% to 53.5%	56.7% to 65.0%	(12.5)% to (3.4)%	(2.0)%	(12.8)% to (4.5)%
<b>Diluted net loss per share:</b>						
Diluted net loss per share-GAAP						\$(0.21) to \$(0.14)
Diluted net loss per share-Non-GAAP						\$(0.11) to \$(0.05)
<b>Shares used to compute diluted net loss per share:</b>						
GAAP and Non-GAAP						88.9

# 2019 Guidance GAAP to Non-GAAP Reconciliations (in millions, except EPS and percentages)



## 2019 Financial Guidance

	Revenue	Gross Profit	Total Operating Expense	Income (Loss) from Operations	Total Non-operating Expense, net	Net Income (Loss)
<b>GAAP</b>	\$385.0 to \$430.0	\$185.6 to \$222.7	\$210.5 to \$220.5	\$(34.9) to \$12.2	\$(13.1)	\$(50.3) to \$(3.2)
Stock-based compensation	—	1.4	(12.3)	13.7	—	13.7
Amortization of intangibles	—	5.2	(3.1)	8.3	—	8.3
Restructuring and related charges	—	0.3	(0.1)	0.4	—	0.4
Non-cash interest expense related to convertible notes	—	—	—	—	6.7	6.7
Tax effect of non-GAAP adjustments	—	—	—	—	—	\$(1.1) to \$4.6
<b>Total adjustments</b>	—	6.9	(15.5)	22.4	6.7	\$28.0 to \$33.7
<b>Non-GAAP</b>	\$385.0 to \$430.0	\$192.5 to \$229.6	\$195.0 to \$205.0	\$(12.5) to \$34.6	\$(6.4)	\$(16.6) to \$24.8
<i>As a % of revenue (GAAP)</i>		48.2% to 51.8%	48.9% to 57.3%	(9.1)% to 2.8%	(3.0)%	(13.1)% to (0.7)%
<i>As a % of revenue (Non-GAAP)</i>		50.0% to 53.5%	45.3% to 53.2%	(3.2)% to 8.0%	(1.5)%	(4.3)% to 5.8%
<b>Diluted net income (loss) per share:</b>						
Diluted net loss per share-GAAP						\$(0.56) to \$(0.04)
Diluted net income (loss) per share-Non-GAAP						\$(0.19) to \$0.27
<b>Shares used to compute diluted net loss per share:</b>						
GAAP and Non-GAAP						89.3
<b>Shares used to compute diluted net income per share:</b>						
Non-GAAP						91.0



**Thank You**

harmonic<sup>®</sup>

