

**MACOM Technology Solutions Holdings (MTSI)**

May 2016

# Forward-Looking Statement Safe Harbor and Use of Non-GAAP Financial Measures

This presentation contains forward-looking statements based on management's beliefs and assumptions and on information currently available to our management. Forward-looking statements include, among others, statements concerning our acquisition, divestment and debt and equity financing transactions and litigation matters, including those regarding any potential benefits and synergies, strategic plans, divestitures, restructuring, cost savings, accretion, and financial and business expectations associated with such transactions and litigations, as well as any other statements regarding our plans, beliefs or expectations or our future business or financial results. Forward-looking statements include all statements that are not historical facts and generally may be identified by terms such as "anticipates," "believes," "could," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "seeks," "should," "will," "would" or similar expressions and the negatives of those terms.

Our forward-looking statements are subject to assumptions, risks and uncertainties, and are not guarantees of future results. Actual results may differ materially from the outcomes stated or implied by our forward-looking statements based on any assumptions and risk factors we may mention today or otherwise, or in our Annual Report on Form 10-K filed with the SEC on November 24, 2015, Quarterly Report on Form 10-Q filed with the SEC on April 27, 2016 or other filings we have made with the SEC, which are publicly-available on the SEC's EDGAR database located at [www.sec.gov](http://www.sec.gov). All financial guidance projections referenced in this presentation were made as of April 26, 2016 or another historical date noted herein, and any references to such projections herein are not intended to reaffirm them as of any later date. MACOM undertakes no obligation to update any forward-looking statement or projection at any future date. This presentation includes information and projections derived from third-party sources concerning addressable market size and growth rates and similar general economic or industry data. MACOM has not independently verified any information and projections from third party sources incorporated herein.

We make references in this presentation to certain financial information calculated on a basis other than in accordance with accounting principles generally accepted in the United States (GAAP). These non-GAAP measures are provided as additional insight into on-going financial performance. These non-GAAP measures are provided in addition to, and not as a substitute for, or superior to, measures of financial performance prepared in accordance with GAAP. See our reconciliation of MACOM non-GAAP results to the nearest GAAP measure in the appendix provided at the end of this presentation. We are unable to provide a quantitative reconciliation for certain non-GAAP measures presented herein to the most directly comparable GAAP measure because we cannot reliably forecast acquisition, integration and other costs related to our acquisitions, which are difficult to predict and estimate. Our fiscal year end is the Friday closest to September 30th. Fiscal year 2016 will include 52 weeks.

This presentation also contains market statistics and industry data that are subject to uncertainty and are not necessarily reflective of market conditions. Although MACOM believes that these statistics and data are reasonable, they have been derived from third party sources and have not been independently verified by MACOM.

A stylized radar chart or sonar scan is visible in the background of the slide. It features concentric circles and radial lines on a grid. Labels like '001', '002', and '003' are visible within the chart area, along with numbers like 100, 200, 300, 400, and 500. The overall color scheme is teal and blue.

# Company Highlights

- **Pure play leader** in high performance analog RF, microwave, millimeterwave and photonic semiconductors
- **Growth and richer product mix** driving gross and operating margin expansion
- **Focused R&D investments** in high-growth, high-margin applications
- **Broad catalog business of long lifecycle products** serving large and diverse end markets
- **Disciplined consolidator and proven integrator**
- **Scalable “fab-lite” manufacturing model** with differentiated domestic manufacturing
- **Increasing profitability** supported by strong balance sheet
- **Experienced management** team supported by best in class operating professionals

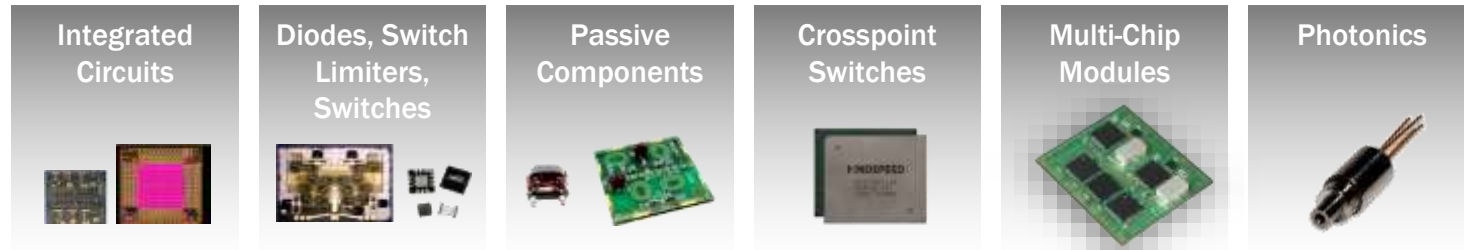
# Serving Large and Diverse End Markets



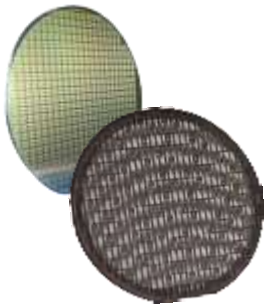
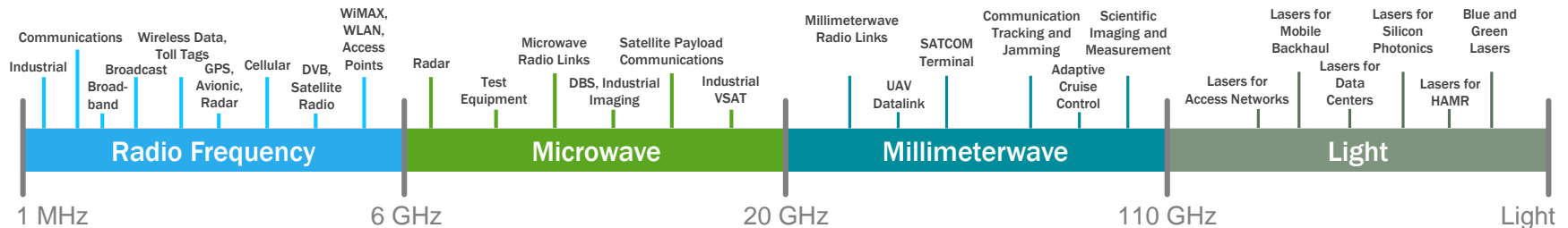
Growth driven by the **Cloud Connected Apps Economy** and the **Modern Networked Battlefield**

# Broad Catalog of Highly Specialized Products

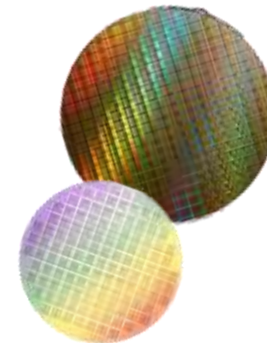
## Diverse Array of Products and Form Factors



## Serving a Broad Frequency Spectrum



- Sticky, value-added technologies
- High speed analog RF,  $\mu$ W, mmW and photonic engineering competencies
- Long product lifecycles



» » » ...from RF to Light



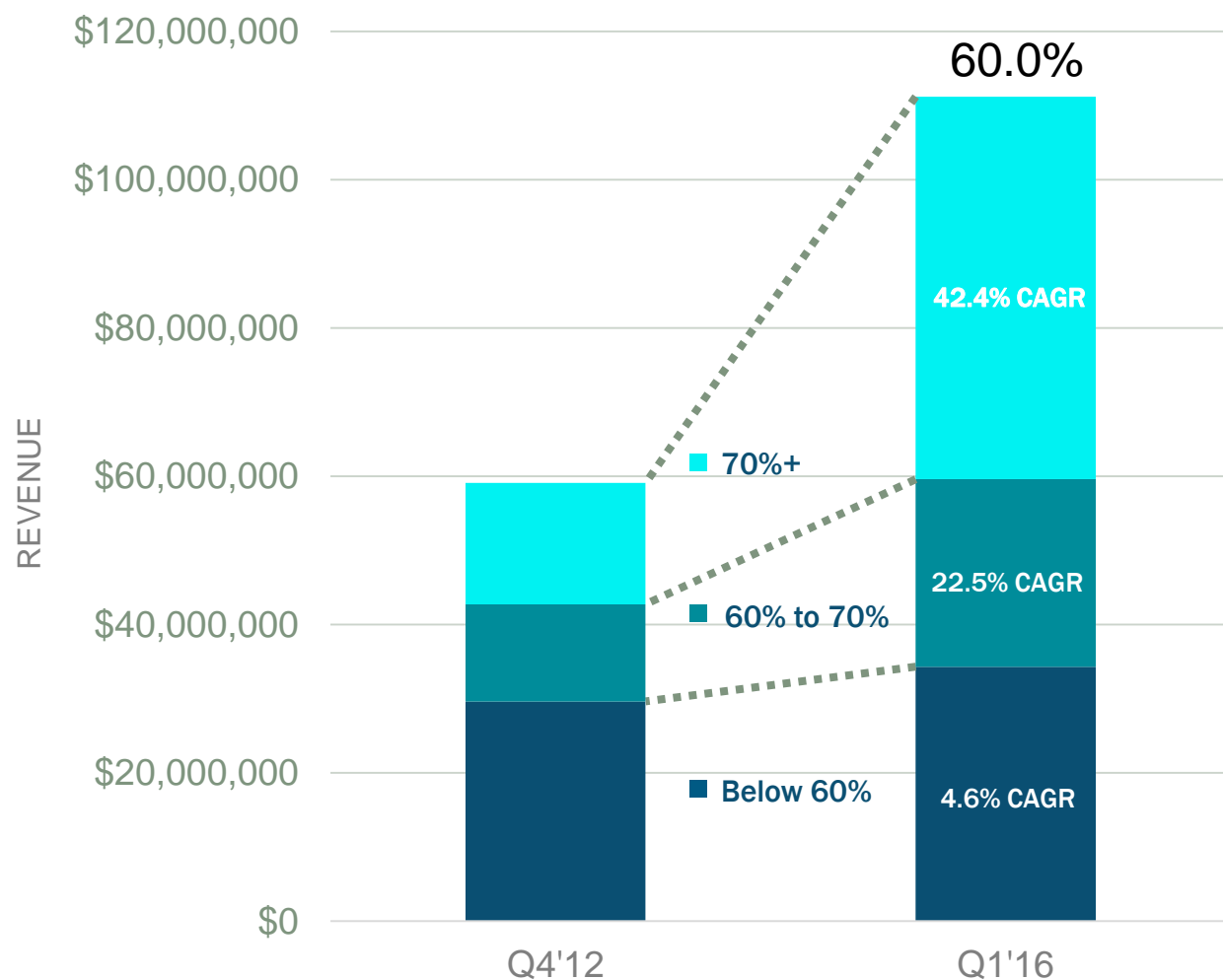
# Focused R&D Investments



Building on 60 years of engineering expertise, **MACOM** is a trusted partner to industry leaders worldwide

# Growth and Richer Product Mix

## Quarterly Revenue by Adjusted GM<sup>(1)</sup>



**Significant gross margin expansion** due to product mix shift

**Organic investment** in high margin, high performance products

**Focused acquisition efforts** on high margin, high value-add businesses

(1) Adjusted Gross Margin is a Non-GAAP measure and has been adjusted for the automotive business now reflected as discontinued operations and other items. Please see the appendix for reconciliation to GAAP. Q1'16 excludes FiBest and Metelics/Aeroflex acquisitions

# Disciplined Consolidator and Proven Integrator

Our M&A strategy is designed to:

- **Acquire companies that expand MACOM's footprint** in adjacent markets (>\$50 million purchase price)
- **Acquire smaller product companies that accelerate MACOM's growth strategies** with products, people and intellectual property (<\$30 million purchase price)
- **Investments in exchange for licensed Patents and Intellectual Property** to design new products that MACOM will bring to market in a specific field of use
- **Target neutral to accretive** in year 1

**MINDSPEED**

**BINOPTICS**



**OPTOMAI**

**Mimix**  
BROADBAND™

**NITRONEX**  
CORPORATION

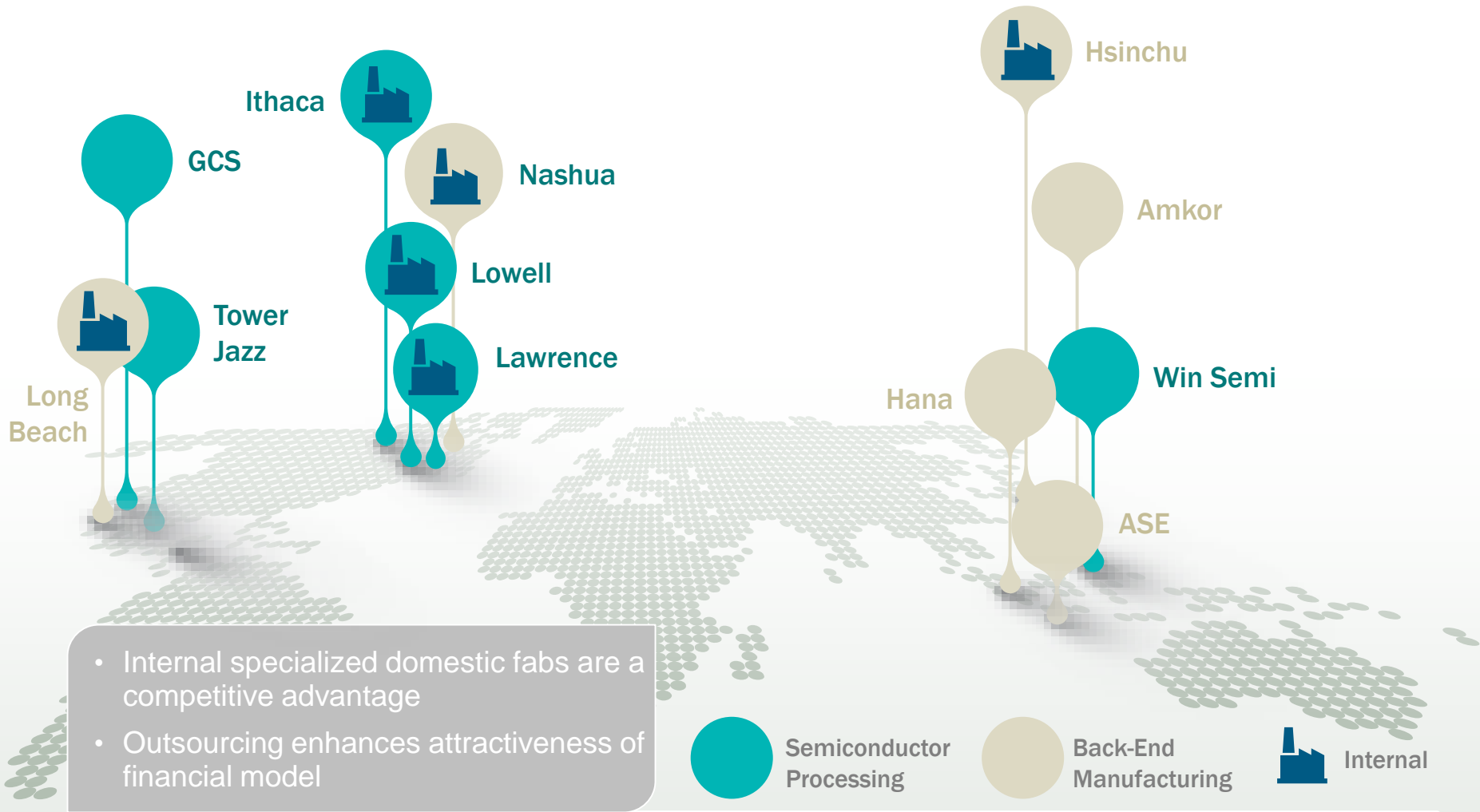
**KE**  
IKE Micro

**F•Best**

**AEROFLEX**  
METELICS



# Scalable, Fab-lite Manufacturing Strategy



Flexible manufacturing model provides **competitive advantage**

# Experienced and Proven Management Team



**John Croteau**  
President & CEO



**Robert McMullan**  
SVP & CFO



**Preet Virk**  
SVP & GM,  
Networks



**Michael Murphy**  
SVP, Engineering



**Jack Kennedy**  
SVP & GM, Aerospace and  
Defense



**Robert Dennehy**  
SVP, Operations



**Greg Baker**  
SVP & GM, RF  
and Microwave



**Thomas Hwang**  
SVP, Global Sales



**Alex Behfar**  
Chief Scientist, SVP &  
GM,  
Photonic Solutions



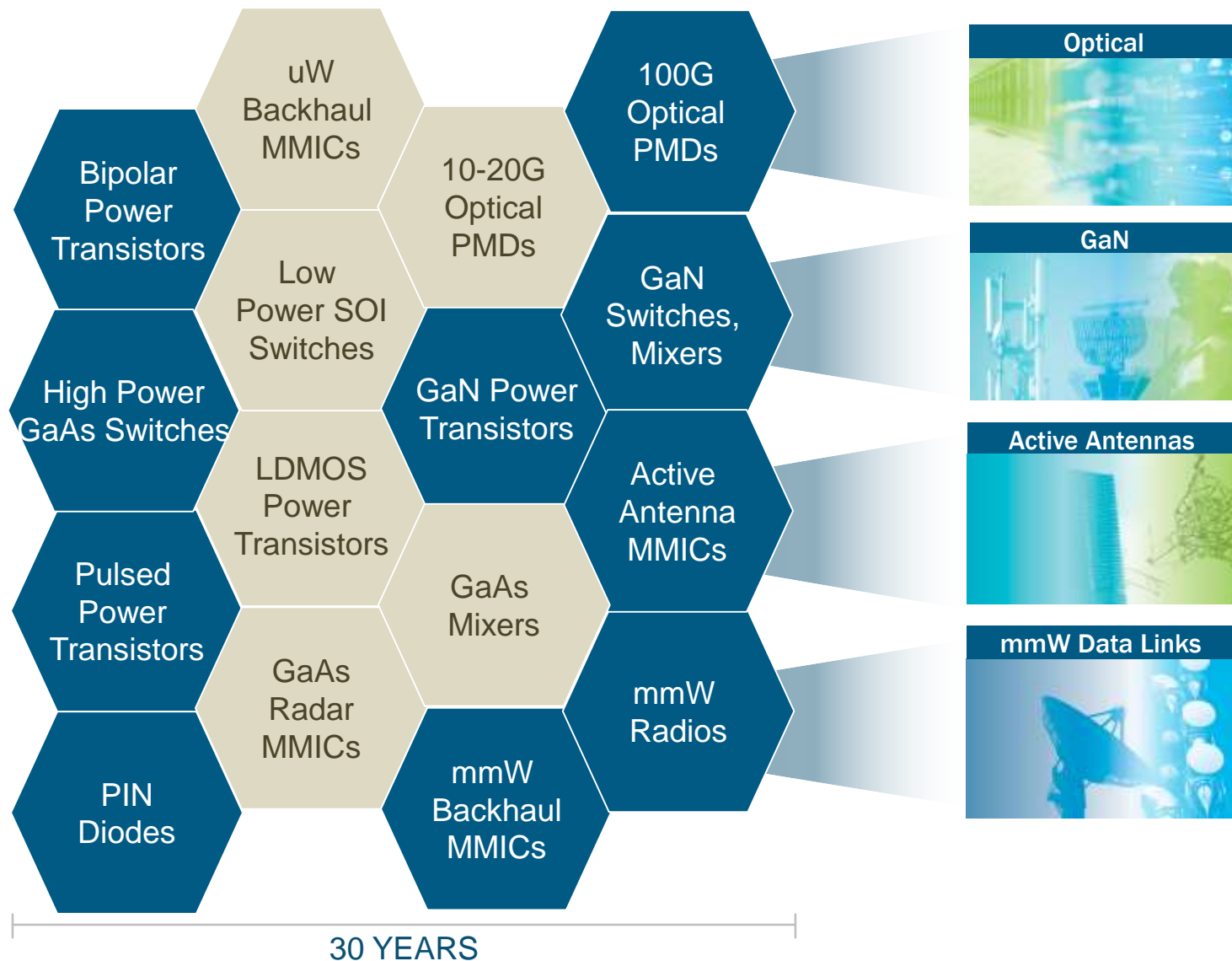
**Toshihiro Takada**  
SVP & President, MACOM  
K.K.





## Recipe for Growth & Profitability

# Secular Growth Drivers





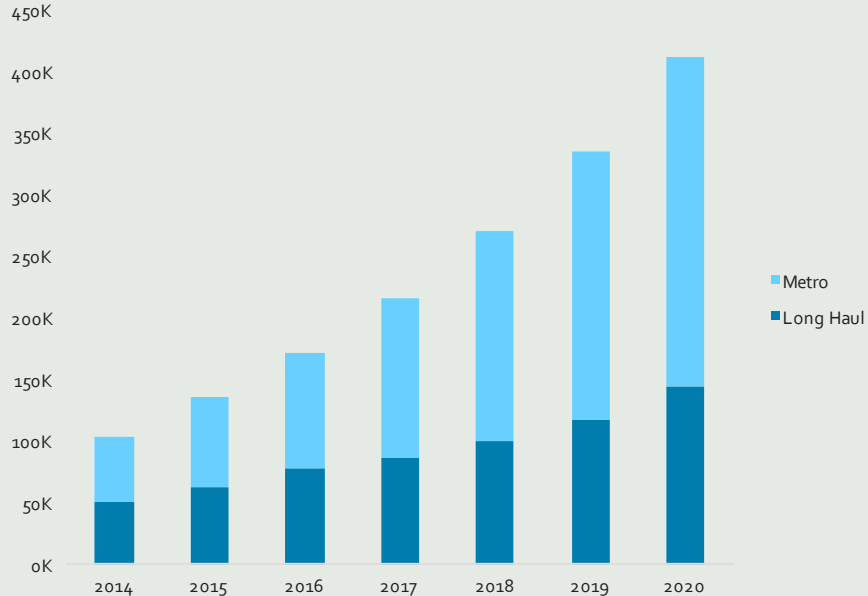


# OPTICAL

# Optical Networking Drives MACOM Growth

## OPTICAL

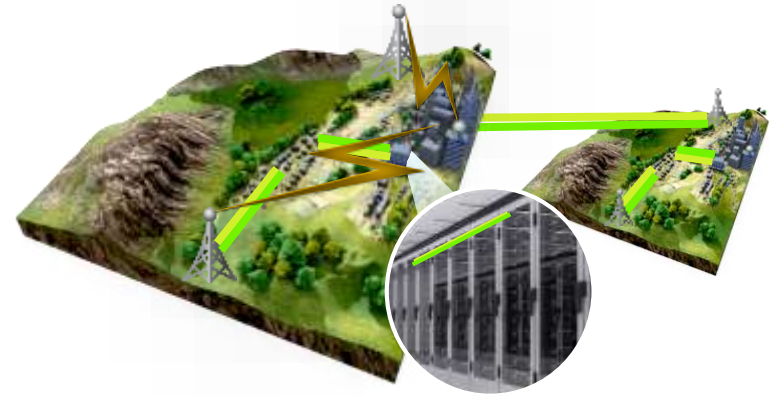
100G Coherent Port Count



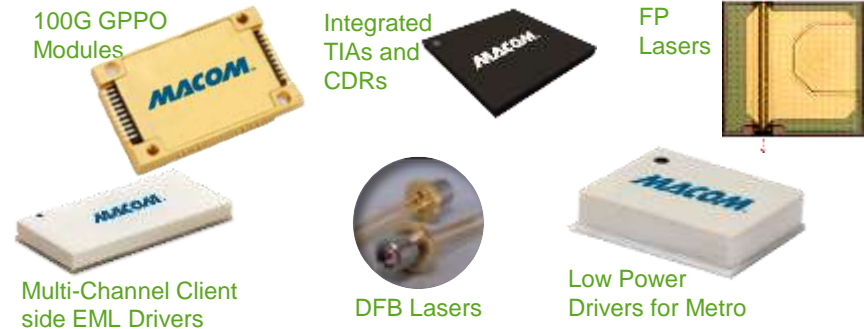
Well positioned to take advantage  
of the 100G metro build out

Source: MACOM estimates based on internal and external (Infonetics) sources.

## APPLICATIONS



## PRODUCTS & TECHNOLOGY



## KEY CUSTOMERS





# Long-haul and Metro 100G Optical Market

## Components

**MACOM**  
Partners from RF to Light

NeoPhotonics

**Inphi**  
Think fast.

**SEMTECH**

**Qorvo**

## Transceivers

**JDSU**

**FUJITSU**

*Finisar*

OCLARO

## Systems

**FUJITSU**

**CISCO**

**HUAWEI**

**ciena**

Alcatel-Lucent

**infinera**

**Coriant**

## Carriers

**BT**

**verizon**



中国移动通信  
CHINA MOBILE

**at&t**

**NTT**

**comcast**

**T** Deutsche  
Telekom

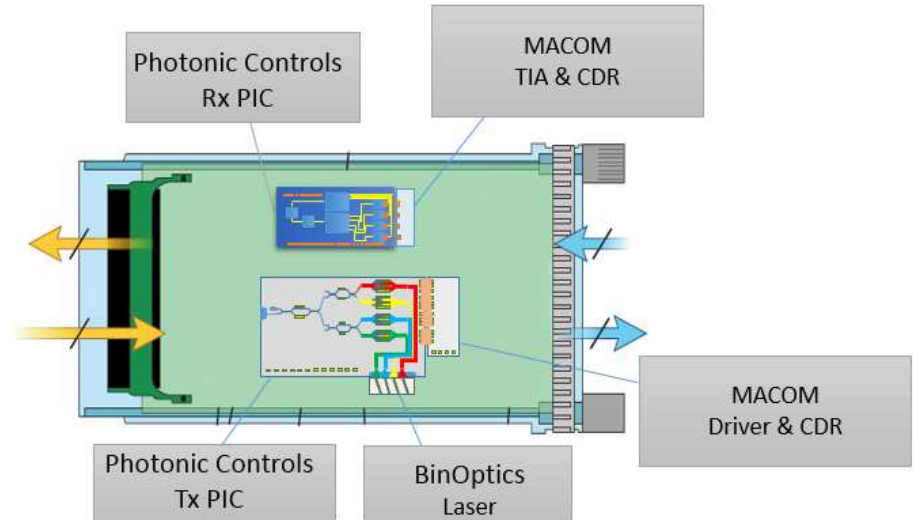
# Preeminent Supplier of 100G Optical Components

- **Leader** in long haul line drivers for 100G
- **Only company** providing both laser + PMD ICs
- We deliver all high speed **photonic and optoelectronic** semiconductor content in 100G/400G transceivers
- We have **filled a gap in the merchant supply** of photonic chips, especially lasers
- **Serves system companies** that are integrating optical modules at the component/chip level
- **Optimized chips** provide highly differentiated performance, power, size and cost solutions for next generation Data Center links
- We are the **#1 supplier for FTTH**



**Broad line supplier for 100G transceiver components**

## 100G TRANSCEIVER






# GaN

# GaN Technology Drives MACOM Growth

	LDMOS	MACOM GaN	GaN on SiC
Power Amp Efficiency ">2GHz"		>10% Improvement	>10% Improvement
Higher Frequency Bands	1.8 GHz	Up to >3.8 GHz	Up to >3.8 GHz
Wider Bandwidths	100 MHz	200 MHz	200 MHz
Power Density	1-1.5 W/mm	4-6 W/mm	4-8 W/mm
Linearity	DPD Friendly	DPD Friendly	Charge Trapping
Supply Chain	8"	Up to 8"	4" → 6"
Cost	Silicon	Silicon	SiC


**GaN Performance at LDMOS Cost Structures**

## APPLICATIONS

Base stations



RF Energy



## PRODUCTS & TECHNOLOGY

GaN in Plastic and Ceramic



GaN Modules

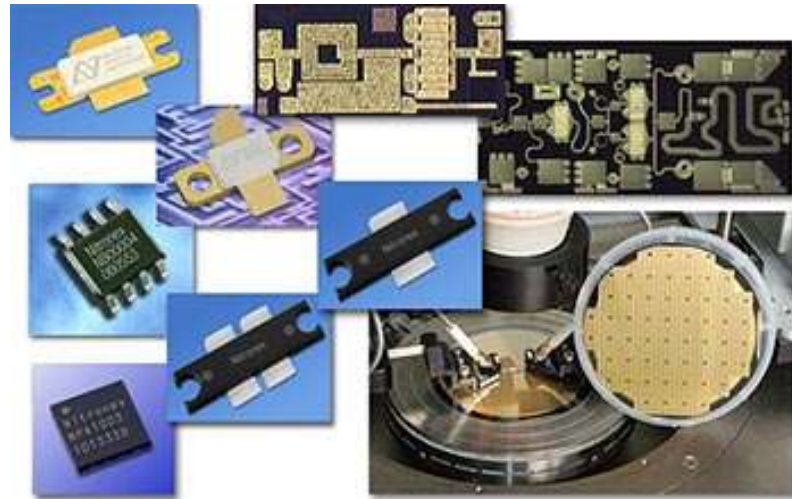


## KEY CUSTOMERS



# MACOM Innovation is Leading Commercial GaN Adoption

## FUNDAMENTAL IP POSITION

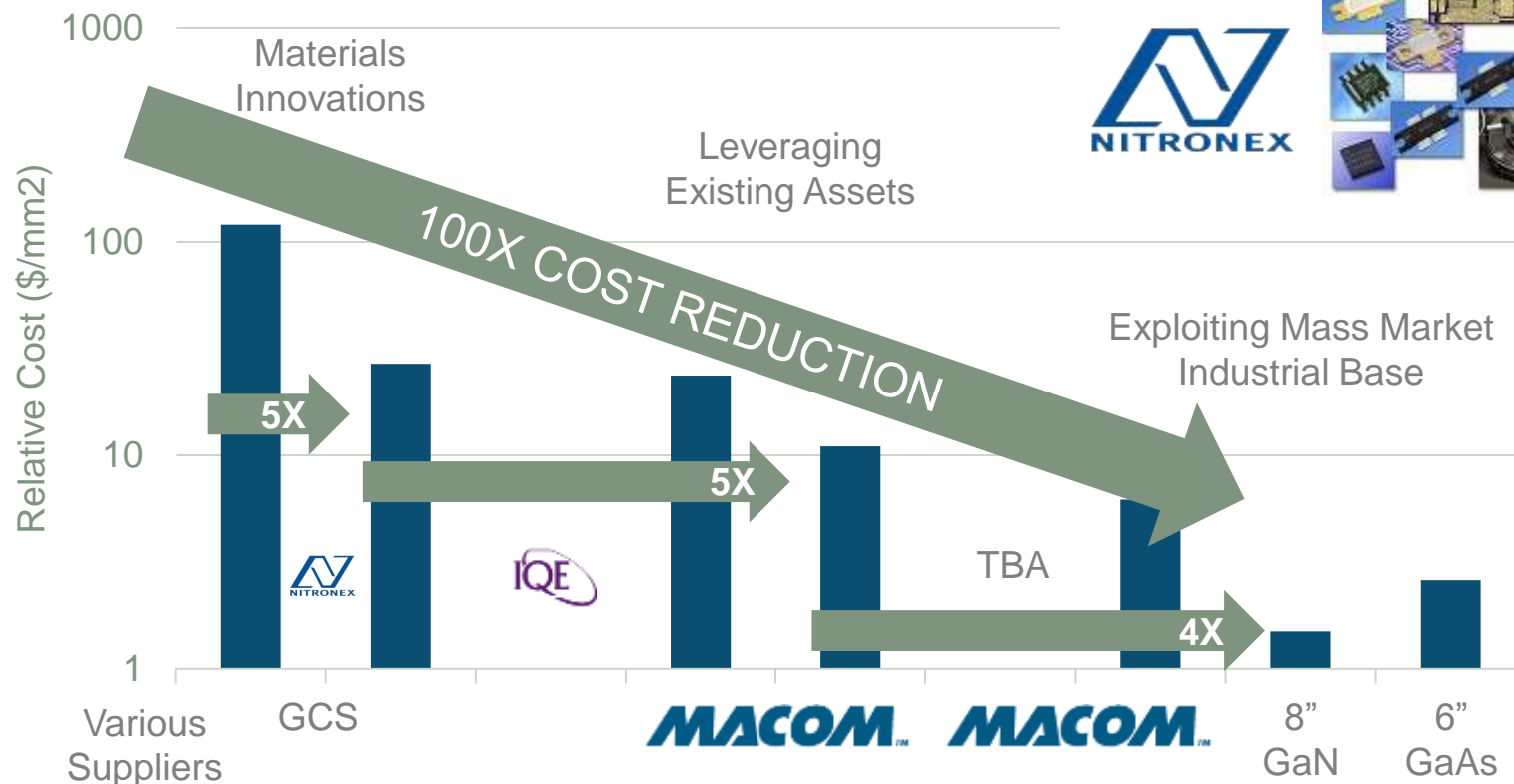


Source: Internal MTSI

»»» MACOM is poised to enable GaN performance at silicon cost structures

# MACOM Innovation is Leading Commercial GaN Adoption

## FUNDAMENTAL IP POSITION



Source: Internal MTSI Estimates



MACOM is poised to enable GaN performance at silicon cost structures

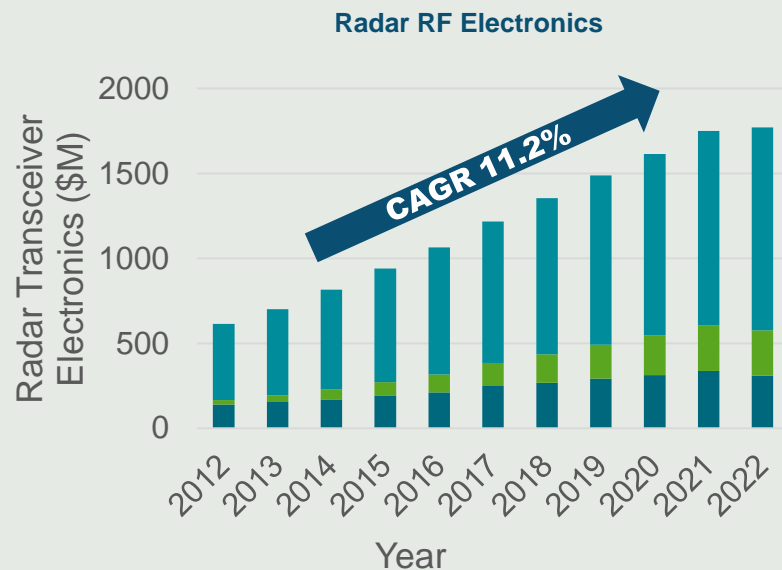




# ACTIVE ANTENNAS

# Active Antennas for Radar and Communications Drives MACOM Growth

## Radar



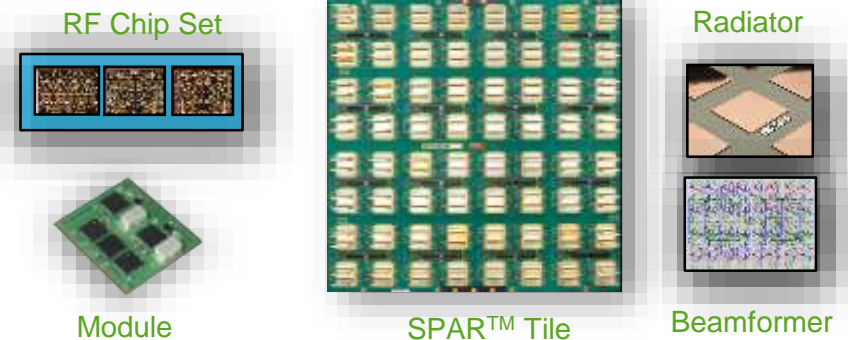
Source: Strategy Analytics

Well positioned to take advantage of the shift from Mechanically Scanned Arrays to Active Antenna Arrays.

## APPLICATIONS



## PRODUCTS & TECHNOLOGY



## TARGET CUSTOMERS



# MACOM Innovation Drives Active Antennas in Civil and Military Radar Applications

## Terminal Area Aircraft



ASR-8



ASR-9



ASR-11

## Long Range Aircraft



ARSR-1/2



ARSR-3



ARSR-4

## Long Range Terminal Area Weather

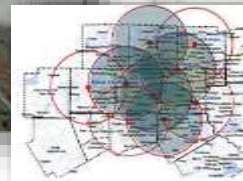


NEXRAD



TDWR

## Successful Field Tests in Oklahoma



MACOM has demonstrated the commercial and functional viability that can support large scale civil and military deployments in the field

# MACOM Innovation Drives Active Antennas in Defense Radar Applications

Air Traffic Control



Shipborne



Airborne



Ground Based



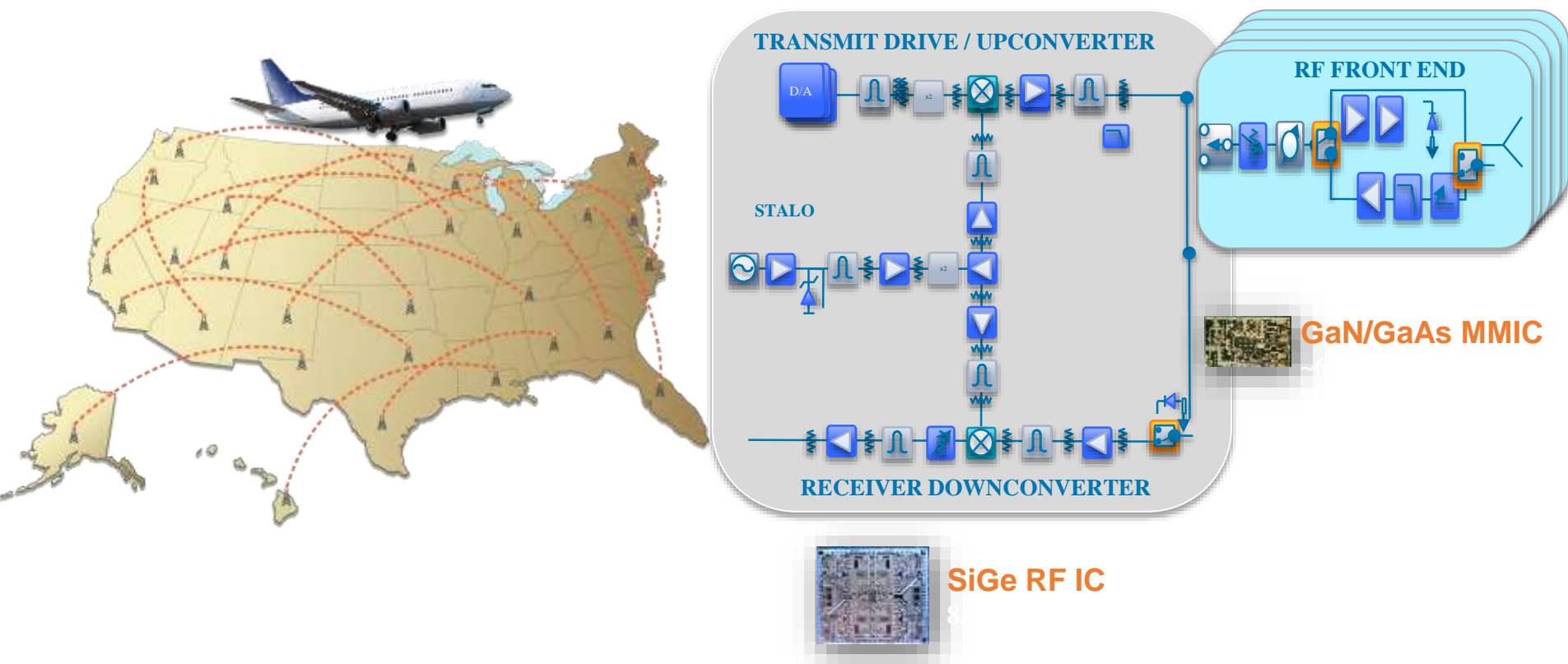
**1,000 – 10,000X  
More RF Content**



Expected order of magnitude increase in RF content due to the transition from Mechanically Scanned Arrays to Active Electronically Scanned Arrays



# MACOM Innovation Drives Active Antennas in Communications Applications



MACOM's broad array of process technologies and proven track record in **phased array radar** will enable next generation **microwave and millimeterwave wireless solutions**.

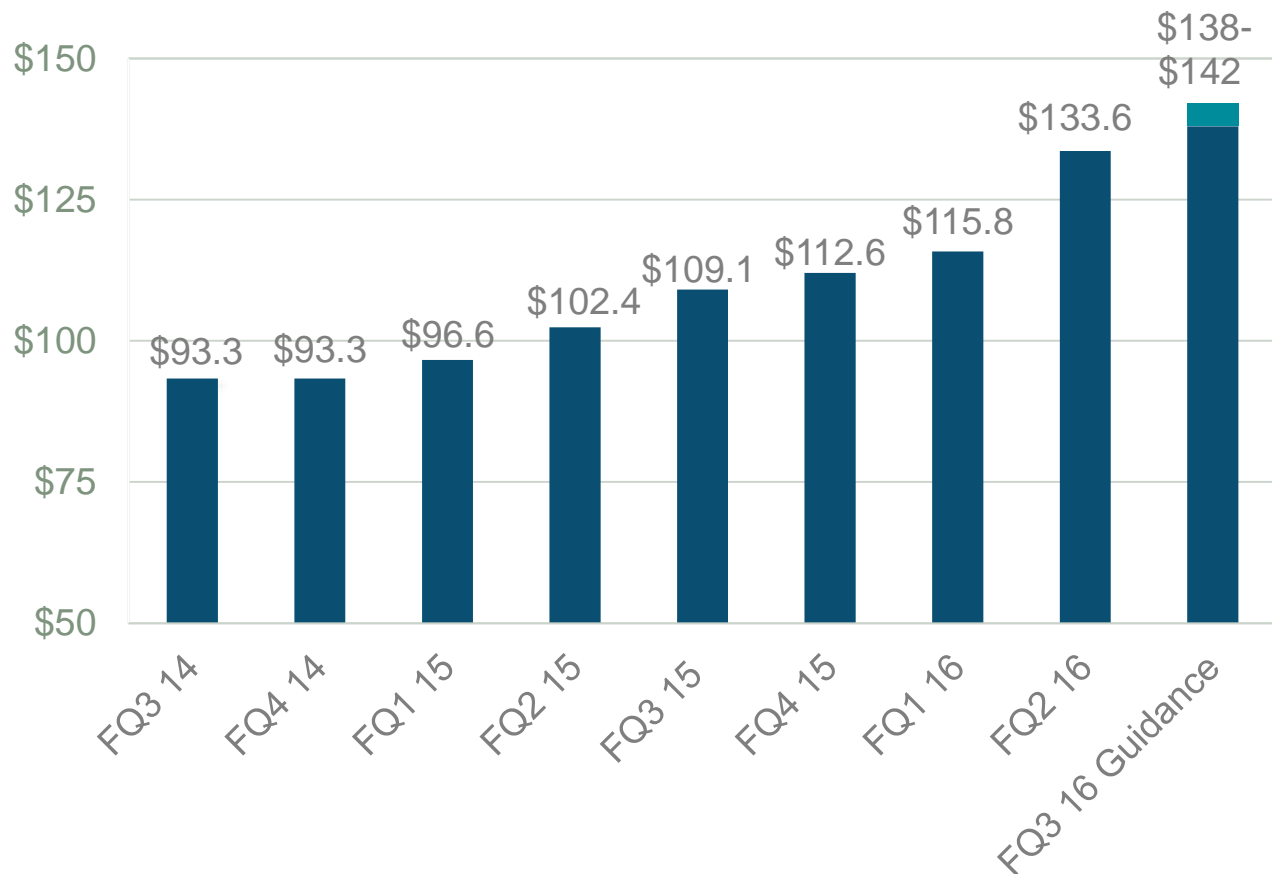


# FINANCIAL OVERVIEW



# Revenue Performance

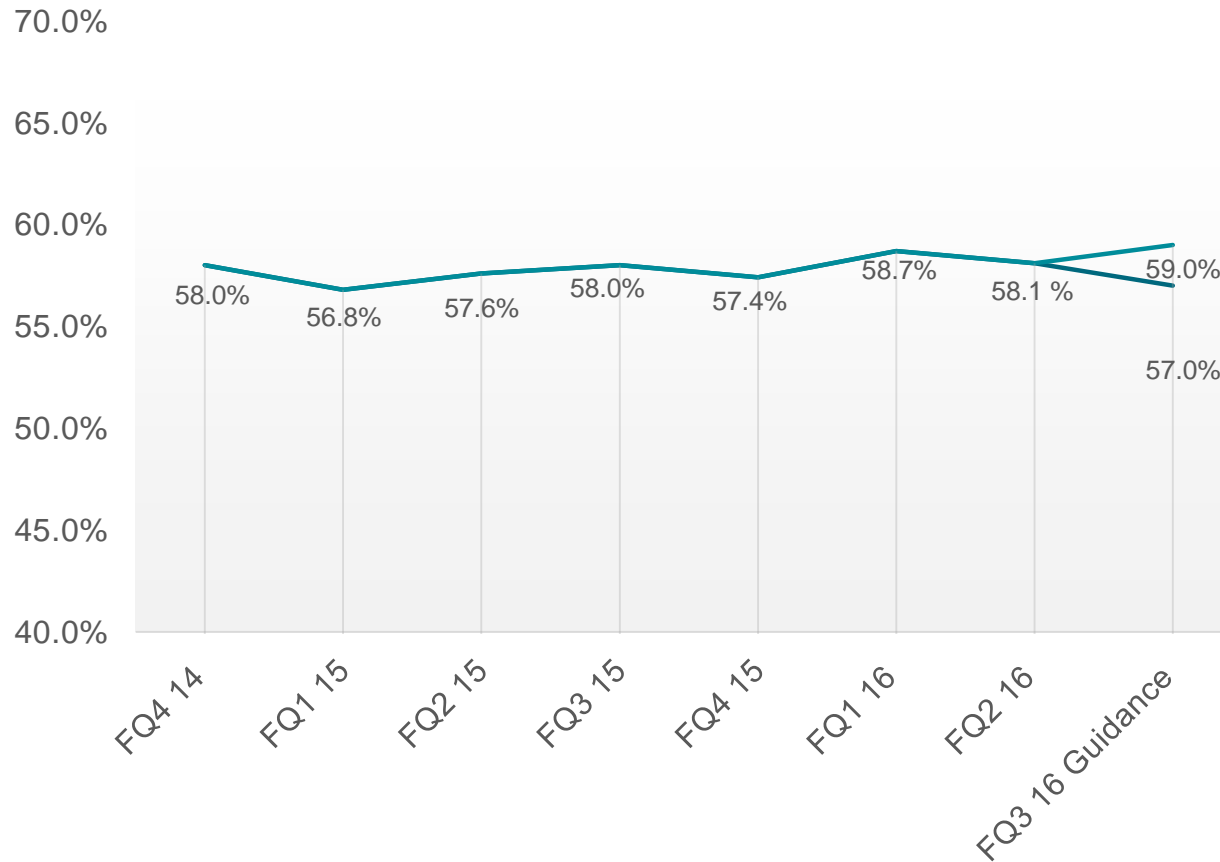
## Adjusted Revenue



<sup>1</sup>Non-GAAP financial measure and excludes revenue from our automotive business discontinued operations and other items. Please see the appendix for a reconciliation to GAAP. Guidance is as of April, 26, 2016 and is not updated or reaffirmed hereby

# Adjusted Gross Margin Performance

## Adjusted Gross Margin<sup>1</sup>



**Improving  
product mix**

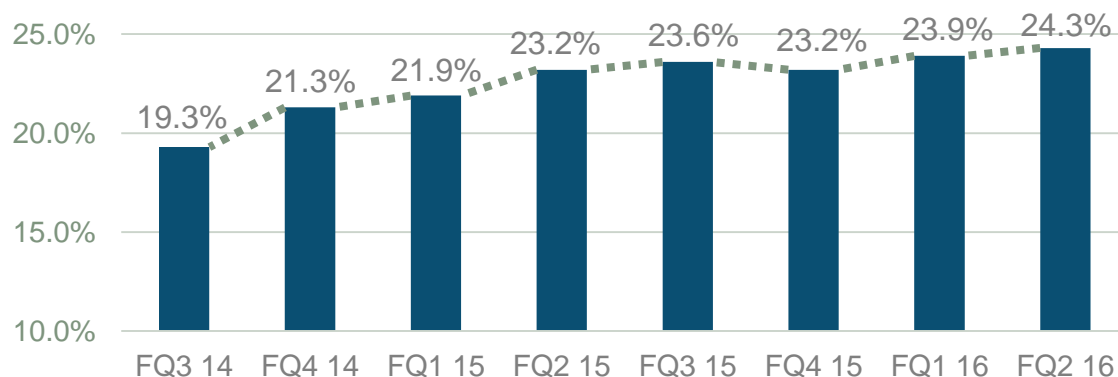
**Continued focus  
manufacturing  
cost reductions**

<sup>1</sup> Non-GAAP financial measure. Please see the appendix for reconciliation to GAAP. Guidance is as of April, 26, 2016 and is not updated or reaffirmed hereby. For the three months ended January 2, 2015, reflects a Non-GAAP gross margin increase of 2.1% relating to a change in revenue recognition estimates made during the quarter.

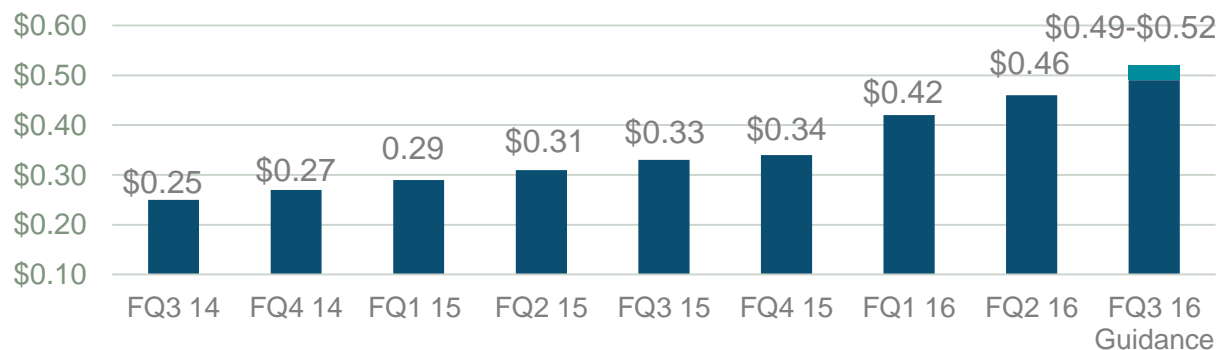
# Operating Performance

## Increased Profitability and Adjusted EPS Growth

### Adjusted Operating Margin <sup>(1)</sup>



### Adjusted EPS <sup>(1)</sup>



**Delivering  
profits**  
while continuing  
to invest

<sup>1</sup> Adjusted Operating Margin and Adjusted EPS Revenue are Non-GAAP measures, and have been adjusted for the automotive business now reflected as discontinued operations and other items. Please see the appendix for reconciliation to GAAP. Guidance is as of April 26, 2016 and is not updated or reaffirmed hereby.

# Balance Sheet

	April 1, 2016	October 2, 2015
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 58,187	\$ 122,312
Short Term Investments	23,632	39,557
Accounts receivable, net	91,604	83,950
Inventories	106,972	79,943
Deferred income taxes	-	31,431
Income tax receivable	16,077	15,854
Prepays and other current assets	11,553	11,172
Total current assets	308,025	384,219
Property and equipment, net	99,637	83,759
Goodwill & intangible assets	397,370	337,012
Deferred income taxes	83,909	48,239
Other long term assets	11,457	13,023
Total assets	<u>\$ 900,398</u>	<u>\$ 866,251</u>

	April 1, 2016	October 2, 2015
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Current portion of debt obligations	\$ 4,499	\$ 4,058
Accounts payable, accrued liabilities and other	78,335	67,418
Total current liabilities	82,834	71,476
Long-term debt obligations, less current portion	341,396	340,504
Common stock warrant liability	40,901	21,822
Deferred income taxes	13,920	-
Other long-term liabilities	7,338	7,916
Total liabilities	486,390	441,718
Total stockholders' equity	414,008	424,533
Total liabilities and stockholders' equity	<u>\$ 900,398</u>	<u>\$ 866,251</u>



# Our Strategy

- **Drive revenue growth** through market share gains and leadership in high growth segments of our markets
- **Accelerate growth** through targeted acquisitions and investments in high growth, defensible markets
- **Expand margins** to drive strong EPS growth and increase shareholder value

# Appendix



# Non-GAAP Financial Measures

*This non-GAAP information excludes non-consulting agreement related discontinued operations, the impact of fair value accounting in merger and acquisitions (M&A) of businesses, M&A costs, including acquisition and related integration costs, certain cost savings from synergies expected from M&A activities, income and expenses from transition services related to M&A activities, expected amortization of acquisition-related intangibles, share-based and other non-cash compensation expense, certain cash compensation, restructuring charges, impairment charges, litigation settlement and costs, changes in the carrying values of assets and liabilities measured at fair value, contingent consideration, amortization of debt discounts and issuance costs, debt settlement costs, other non-cash expenses, earn-out costs, restructuring costs and certain income tax items. The non-GAAP information includes consulting agreement related revenue associated with the Automotive business divestiture. Management does not believe that the adjusted items are reflective of MACOM's underlying performance. The adjustment of these and other similar items from MACOM's non-GAAP presentation should not be interpreted as implying that these items are non-recurring, infrequent or unusual. These and other similar items are also excluded from Adjusted EBITDA, which is non-GAAP earnings before interest, income taxes, depreciation and amortization. MACOM believes this adjusted non-GAAP financial information provides additional insight into these items and MACOM's performance and has, therefore, chosen to provide this information to investors for a consistent basis of comparison and to help them evaluate the results of MACOM's operations and enable more meaningful period to period comparisons. These adjusted non-GAAP measures may be different than similar measures used by other companies and should be considered in addition to, not as a substitute for, or superior to, measures of financial performance prepared in accordance with GAAP. A reconciliation between GAAP and adjusted non-GAAP financial data used in this presentation is included in the supplemental financial data attached to this presentation*

# Reconciliation of GAAP to Non-GAAP Results

Reconciliation of GAAP to Non-GAAP Results (in thousands)	Three Months Ended												Fiscal Year		
	Q3'15			Q3'16			Q3'17			Q3'18			2015		
	Q3'15	Q3'16	Q3'17	Q3'16	Q3'17	Q3'18	Q3'17	Q3'18	Q3'19	Q3'19	Q3'20	Q3'21	2015	2016	2017
Revenue - GAAP	\$12,147	\$15,779	\$13,384	\$13,640	\$14,585	\$14,584	\$14,137	\$13,294	\$12,507	\$16,164	\$14,075	\$12,459	\$14,045	\$14,816	\$15,086
Revenue prior to acquisition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Revenue - non-GAAP	\$12,147	\$15,779	\$13,384	\$13,640	\$14,585	\$14,584	\$14,137	\$13,294	\$12,507	\$16,164	\$14,075	\$12,459	\$14,045	\$14,816	\$15,086
Gross Profit - GAAP	\$6,525	\$8,919	\$6,954	\$6,794	\$6,947	\$6,794	\$6,159	\$5,214	\$4,600	\$7,000	\$5,304	\$4,600	\$5,304	\$5,304	\$5,304
Gross Profit prior to acquisition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-cash & equity based compensation expense	642	747	787	787	787	787	787	787	787	787	787	787	787	787	787
Liquidity and settlement costs	691	542	588	538	538	538	538	538	538	538	538	538	538	538	538
Impairment charges	1,049	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition FVW step-up	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044
Third party engineering costs	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Integration costs and synergy savings	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132
Gross Profit - non-GAAP	\$7,148	\$9,708	\$8,684	\$8,272	\$8,684	\$8,684	\$7,947	\$6,744	\$5,944	\$8,359	\$6,661	\$5,944	\$6,661	\$6,661	\$6,661
Gross Margin - non-GAAP	58.8%	61.7%	64.6%	60.0%	59.6%	59.6%	56.2%	50.8%	47.5%	51.4%	47.5%	47.5%	47.5%	45.0%	44.2%
Research and Development - GAAP	\$5,183	\$5,183	\$5,183	\$5,183	\$5,183	\$5,183	\$5,183	\$5,183	\$5,183	\$5,183	\$5,183	\$5,183	\$5,183	\$5,183	\$5,183
Research prior to acquisition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-cash & equity based compensation expense	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044
Liquidity and settlement costs	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049
Impairment charges	1,049	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition FVW step-up	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044
Third party engineering costs	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Integration costs and synergy savings	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132
Research and Development - non-GAAP	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148
% of Revenue - non-GAAP	17.3%	13.6%	16.1%	15.8%	14.8%	14.8%	15.2%	16.1%	17.1%	13.3%	15.2%	17.3%	15.2%	14.6%	14.2%
Selling, General and Administrative - GAAP	\$3,447	\$3,447	\$3,447	\$3,447	\$3,447	\$3,447	\$3,447	\$3,447	\$3,447	\$3,447	\$3,447	\$3,447	\$3,447	\$3,447	\$3,447
Selling prior to acquisition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-cash & equity based compensation expense	642	747	787	787	787	787	787	787	787	787	787	787	787	787	787
Liquidity and settlement costs	691	542	588	538	538	538	538	538	538	538	538	538	538	538	538
Impairment charges	1,049	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition FVW step-up	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044
Third party engineering costs	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Integration costs and synergy savings	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132
Selling, General and Administrative - non-GAAP	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148	\$2,148
% of Revenue - non-GAAP	17.3%	13.6%	16.1%	15.8%	14.8%	14.8%	15.2%	16.1%	17.1%	13.3%	15.2%	17.3%	15.2%	14.6%	14.2%
Total Operating Expenses - GAAP	\$7,630	\$7,630	\$7,630	\$7,630	\$7,630	\$7,630	\$7,630	\$7,630	\$7,630	\$7,630	\$7,630	\$7,630	\$7,630	\$7,630	\$7,630
Total Operating prior to acquisition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-cash & equity based compensation expense	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044
Liquidity and settlement costs	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049
Impairment charges	1,049	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition FVW step-up	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044
Third party engineering costs	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Integration costs and synergy savings	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132
Total Operating Expenses - non-GAAP	\$4,148	\$4,148	\$4,148	\$4,148	\$4,148	\$4,148	\$4,148	\$4,148	\$4,148	\$4,148	\$4,148	\$4,148	\$4,148	\$4,148	\$4,148
% of Revenue - non-GAAP	33.8%	26.3%	30.9%	30.4%	28.4%	28.4%	29.3%	31.2%	33.1%	25.7%	29.5%	33.8%	29.5%	27.9%	27.5%
Income Before Operations - GAAP	\$4,517	\$8,149	\$5,734	\$5,950	\$7,652	\$7,891	\$6,740	\$8,081	\$7,907	\$9,164	\$8,892	\$7,816	\$8,902	\$9,469	\$9,782
Income prior to acquisition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-cash & equity based compensation expense	642	747	787	787	787	787	787	787	787	787	787	787	787	787	787
Liquidity and settlement costs	691	542	588	538	538	538	538	538	538	538	538	538	538	538	538
Impairment charges	1,049	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition FVW step-up	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044
Third party engineering costs	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Integration costs and synergy savings	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132
Income Before Operations - non-GAAP	\$3,447	\$6,302	\$4,946	\$5,162	\$6,869	\$7,109	\$5,952	\$7,294	\$7,110	\$8,377	\$8,105	\$7,078	\$8,105	\$8,692	\$9,000
% of Revenue - non-GAAP	28.4%	40.0%	37.0%	37.9%	47.4%	48.7%	42.5%	54.5%	56.7%	51.8%	57.5%	56.8%	57.7%	58.6%	59.7%
Goodwill Impairment - GAAP	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049
Goodwill prior to acquisition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-cash & equity based compensation expense	642	747	787	787	787	787	787	787	787	787	787	787	787	787	787
Liquidity and settlement costs	691	542	588	538	538	538	538	538	538	538	538	538	538	538	538
Impairment charges	1,049	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition FVW step-up	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044
Third party engineering costs	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Integration costs and synergy savings	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132
Goodwill Impairment - non-GAAP	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049
% of Revenue - non-GAAP	8.6%	6.6%	8.0%	7.7%	7.3%	7.3%	7.5%	8.0%	8.5%	6.5%	7.3%	8.6%	7.3%	7.1%	7.1%
Goodwill Impairment - GAAP	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049
Goodwill prior to acquisition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-cash & equity based compensation expense	642	747	787	787	787	787	787	787	787	787	787	787	787	787	787
Liquidity and settlement costs	691	542	588	538	538	538	538	538	538	538	538	538	538	538	538
Impairment charges	1,049	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acquisition FVW step-up	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044	2,044
Third party engineering costs	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Integration costs and synergy savings	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132
Goodwill Impairment - non-GAAP	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049
% of Revenue - non-GAAP	8.6%	6.6%	8.0%	7.7%	7.3%	7.3%	7.5%	8.0%	8.5%	6.5%	7.3%	8.6%	7.3%	7.1%	7.1%
Goodwill Impairment - GAAP	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049	\$1,049
Goodwill prior to acquisition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-