



empower with light

**Jeffrey Rittichier**  
Chief Executive Officer

**Jikun Kim**  
Chief Financial Officer

# “Safe Harbor” Statement

## Forward-Looking Statements:

This presentation contains forward-looking statements within the meaning of the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995. Statements concerning future matters such as demand for our products, industry and market conditions, the development of new products, enhancements or technologies, sales levels, expense levels and other statements regarding matters that are not historical are forward-looking statements. These statements are based on management’s current expectations and beliefs and are subject to a number of factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements, including without limitation, the following: (a) the rapidly evolving markets for the Company's products and uncertainty regarding the development of these markets; (b) the Company's historical dependence on sales to a limited number of customers and fluctuations in the mix of products and customers in any period; (c) delays and other difficulties in commercializing new products; (d) the failure of new products: (i) to perform as expected without material defects, (ii) to be manufactured at acceptable volumes, yields, and cost, (iii) to be qualified and accepted by our customers, and, (iv) to successfully compete with products offered by our competitors; (e) uncertainties concerning the availability and cost of commodity materials and specialized product components that we do not make internally; (f) actions by competitors; and (g) other risks and uncertainties discussed under Item 1A - Risk Factors in our Annual Report on Form 10-K for the fiscal year ended September 30, 2015, as updated by our subsequent periodic reports. All forward-looking statements are made as of the date hereof, based on information available to us as of the date hereof, and subsequent facts or circumstances may contradict, obviate, undermine, or otherwise fail to support or substantiate such statements. We assume no obligation to update any forward-looking statement to reflect subsequent events or circumstances, except as required by law.

## Generally Accepted Accounting Principles:

This presentation includes non-GAAP financial measures where indicated. The Company reports its financial results in accordance with GAAP. Additionally, the Company supplements reported GAAP financials with non-GAAP measures which are included in related press releases and reports furnished to the SEC, copies of which are available at the Company’s website: <http://www.EMCORE.com> or the SEC’s website at: <http://www.sec.gov>. These non-GAAP financial measures complement the Company’s consolidated financial statements presented in accordance with GAAP. However, these non-GAAP financial measures are not intended to supersede or replace the Company’s US GAAP results. These non-GAAP measures are presented in part to enhance the understanding of the Company’s historical financial performance and comparability between reporting periods. The Company believes the non-GAAP presentation, when shown in conjunction with the corresponding GAAP measures, provide relevant and useful information to analysts, investors, management and other interested parties. These non-GAAP measures are not in accordance with, or an alternative for measures prepared in accordance with GAAP, and may be different from non-GAAP measures used by other companies. In addition, these non-GAAP measures are not based on any comprehensive set of accounting rules or principles. The Company believes that non-GAAP measures have limitations in that they do not reflect all of the amounts associated with the Company’s results of operations as determined in accordance with GAAP. These measures should only be used to evaluate the Company’s results of operations in conjunction with the corresponding GAAP measures.

# Who we are....

EMCORE is a leading provider of mixed signal optical components for the communications and sensor markets



## Centers of Excellence

Alhambra, CA – R&D, InP Fab, Headquarters, Broadband

Warminster, PA – Specialty Photonics

Beijing, China – Product Assembly

## Corporate Overview

**TTM Revenue Est.: \$110.7mm**

**Target 15% non-GAAP  
Operating Income: FY18 Exit**

**New Leadership Team and  
Board of Directors**

**Strong Balance Sheet:  
\$68.6mm Cash as of Mar '17**

**NASDAQ Ticker: EMKR**

# New BOD and New Leadership Team

**Returned \$85M to Shareholders since January '15**

**Driven by a strong Board of Directors**

- Chairman: Gerald Fine Ph. D., Corning Photonics, Schott NA, December 2013
- Stephen Domenik, Sevin Rosen, Intel, December 2013
- Rex S. Jackson, JDSU, December 2015
- Ed Coringrato, Cyoptics, Lucent Microelectronics, June 2016

**Led by an upgraded Leadership Team**

- President & CEO: Jeffrey Rittichier, Appointed December 2014
- CFO: Jikun Kim, Appointed June 2016
- 80% of VP level personnel have changed since FY14

**With Improved Governance Policies: Clawback, Stock Ownership, Performance Based RSUs and more**

# EMCORE: The Leader in Mixed Signal Optics

“**Mixed Signal** devices bridge the *analog* physical world with *digital* computing and communications”



**Fiber Gyro:** Analog chips enable a special fiber coil to sense rotation. Sensitive electronics decode the complex signal and feed it into a signal processor used in navigation.

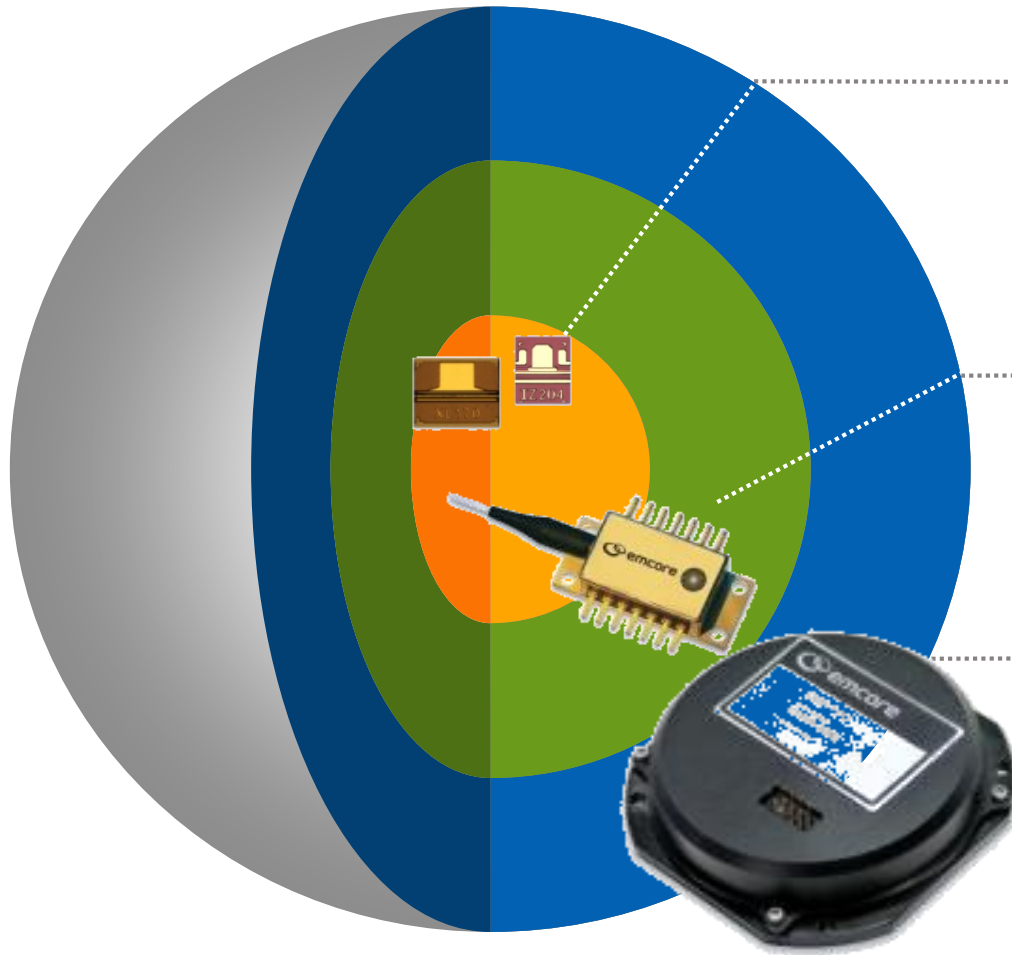


**DOCSIS CATV** transmission uses a pair of analog optical “radio carriers” to transmit 100% digital data over a network originally built to share a satellite dish.



**Wireless DAS** keeps 5G signals in native analog “radio” form as they go up to, and down from the antenna, reducing costs and damage.

# Mixed Signal Optics: Core Competencies



**Indium Phosphide and Lithium Niobate wafer fab**  
produces a large portfolio of linear and some digital devices

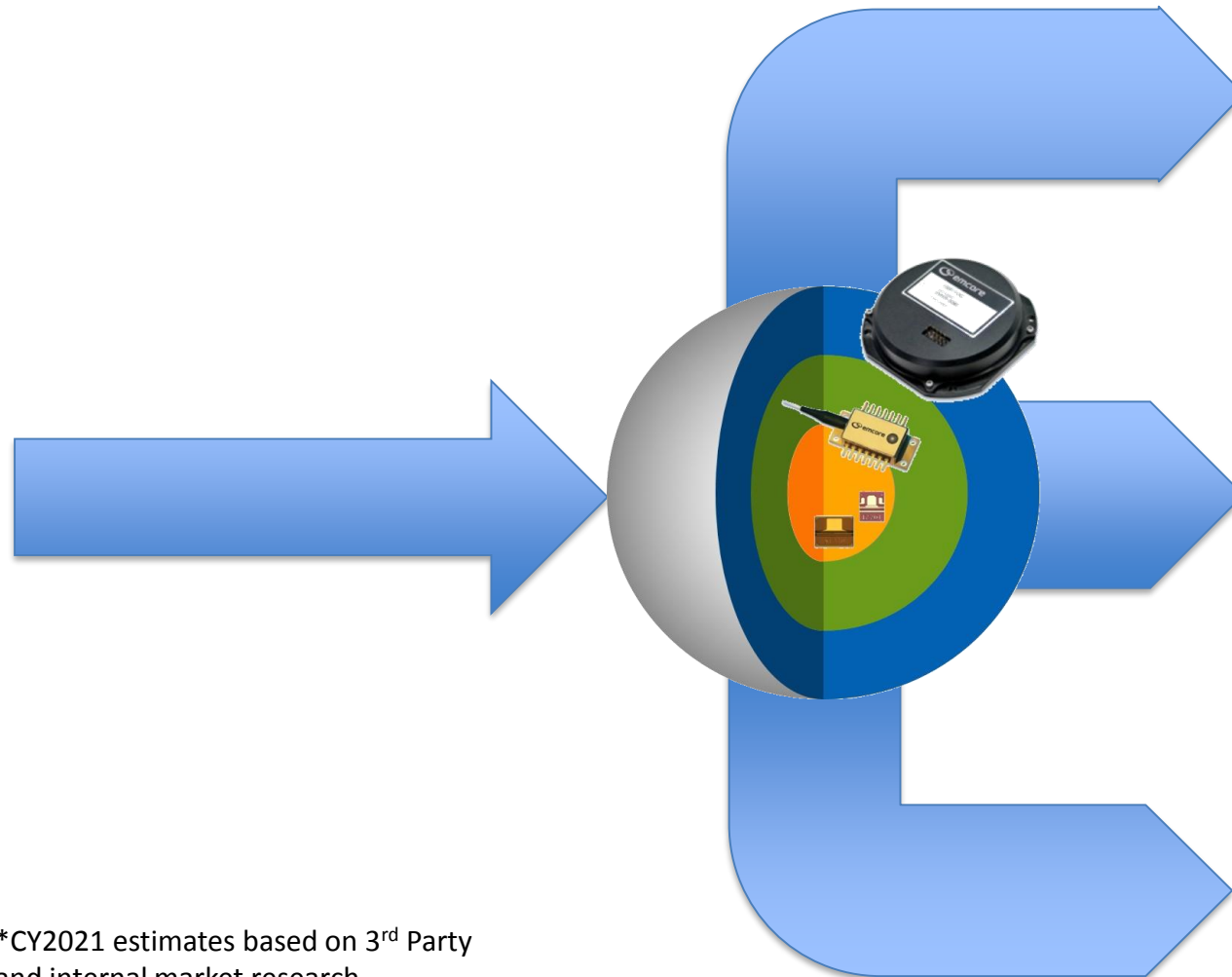
**Optical packages**  
High coupling efficiency and wide temperature range

**Digital/Small Signal Analog**  
pulling information out of demanding, noisy environments

# Market Expansion with Mixed Signal Optics



*Moving from \$150M CATV to \$2.5B SAM*



## **Broadband: \$600M SAM\***

CATV, Satcom, Wireless, Other

DOCSIS 3.1 Fiber Deep, 5G

**Tier 1 Customers:** Arris, Cisco, Teleste, WISI, Kathrein, PBN

## **Navigation: \$1.8B SAM\***

Emerging Leader in FOG/IMU products.

Patent protected, vertically integrated

**Tier 1 Customers:** Raytheon, Lockheed Martin, United Technologies, BAE

## **Telecom Chips: \$500M SAM\***

Developing Merchant Chip business

Leveraging Disaggregation: “White box” designs

**Tier 1 customers:** NPTN, CIG, YSOD

\*CY2021 estimates based on 3<sup>rd</sup> Party and internal market research

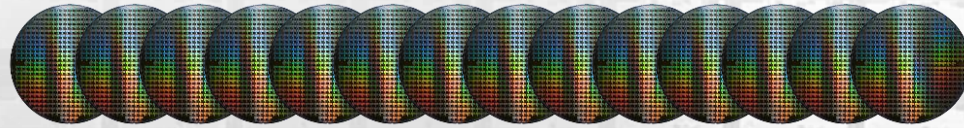
# EMCORE's Operating Strategy

## InP Fab Serves as the Foundation for Core Technologies and Products

■ Core

■ In-House/Outsource

Wafer



Chip/Laser



Component



Module



Subsystem



CATV

SatCom

Gyro/IMU

Chip

### Key Initiatives

Leverage Mixed Signal Technology

- Analog/Digital Chip design
- High Efficiency Packaging
- Digital/Analog Signals

Driving Superior Asset Utilization

- Improves wafer fab operating leverage
- Common packaging automation
- Automatic tuning and calibration

Identify & Outsource Non-Core,  
Commodity Manufacturing Processes

Convert Fixed Costs to Variable Costs

# CATV Opportunity: Expanded SAM to \$225M with CPE\*

## End Use Drivers

Over-the-Top Services: Netflix, Hulu  
Competition from Telcos and GOOG  
4K Transmission

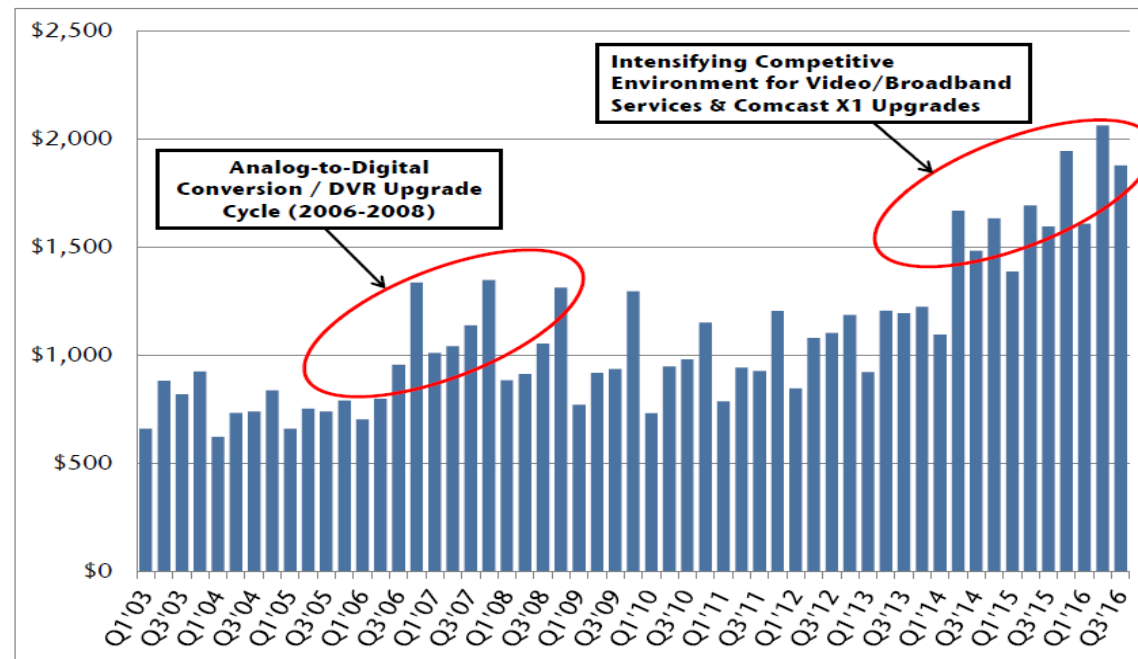
## Opportunities

Downstream DOCSIS 3.1  
Fiber Deep (N+0, N+1)  
RF over Glass (RfOG) Micro nodes

## EMCORE Advantage

Leading Chip and Device Technology  
Cost Leadership in Manufacturing

**Chart 4: Quarterly Network Infrastructure Capex by North American Cable MSOs (Q1'2003 – Q3'2016), (\$ in millions)**



\*Cable MSOs Included: Comcast, Charter/TWC/Bright House, Cablevision, Suddenlink, Shaw

## CATV Products



# Chip Growth Opportunity: \$500M SAM\*

## End Use Drivers

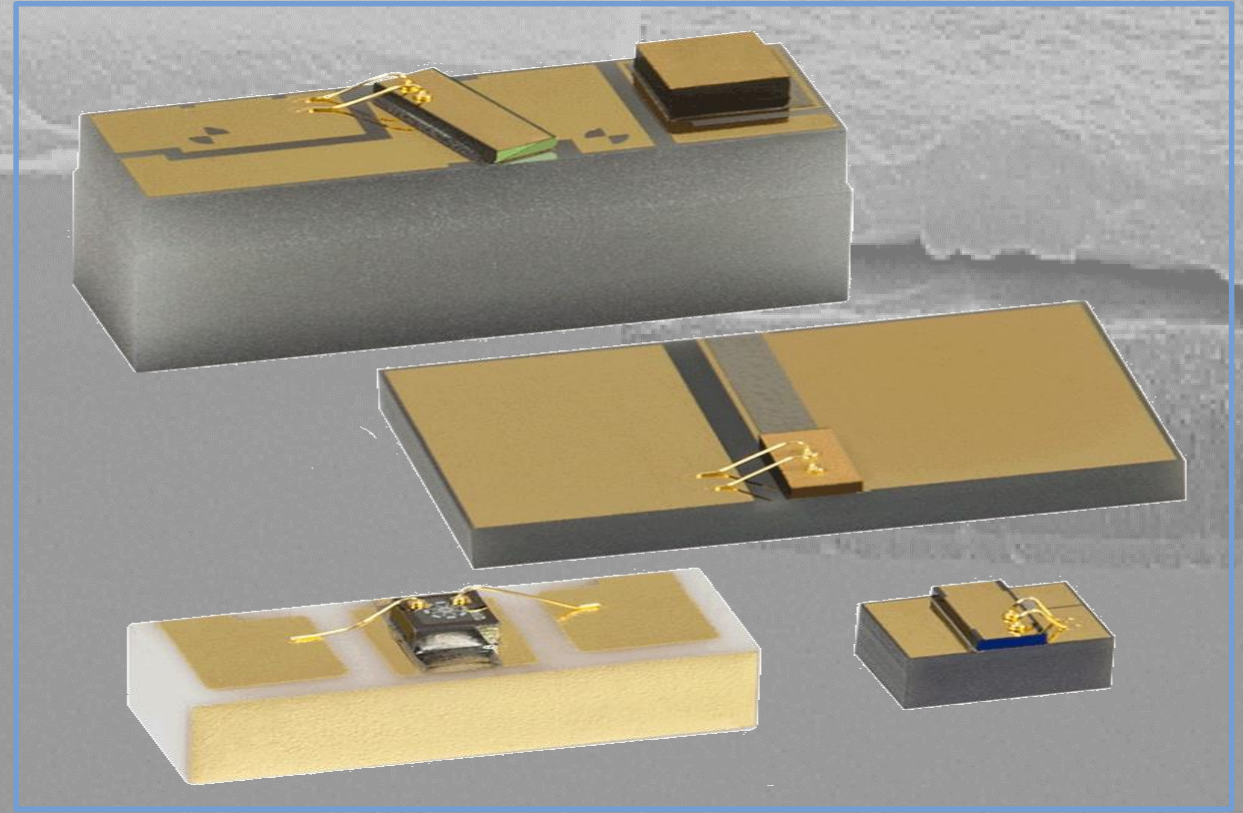
Communications: Private and Public  
Sensor Applications  
“White Box” Designs and Disaggregation

## Opportunities

10 GPON  
OLT RFoG  
NG-PON2  
EMLs, ASEs, SOAs and sensor devices

## EMCORE Advantage

Leading Chip and Device Technology  
Cost Leadership in Manufacturing



# Fiber Optic Gyro Opportunity: \$1,800M\*

## End Use Drivers

GPS Doesn't Work on the Battlefield  
Drones Require Inertial Navigation  
Self-Aligning Targeting Systems

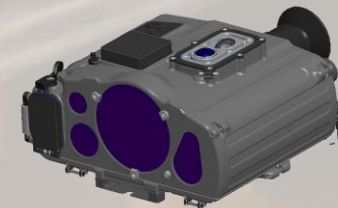
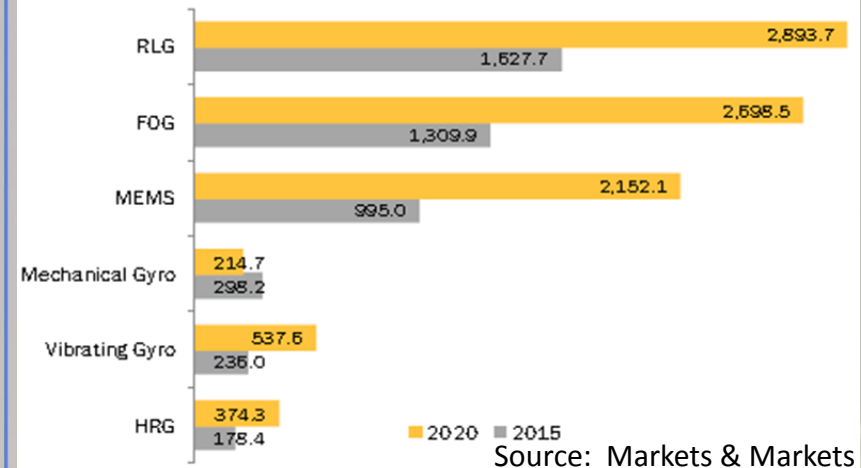
## Opportunities

Navigation and Strategic Grade Gyros/IMUs  
Tactical Grade Gyros

## EMCORE Advantage

SWaP – Size, Weight and Power  
Patented Gyro Optics  
Superior operating leverage with CATV, Wireless, etc

GLOBAL INERTIAL NAVIGATION SYSTEM MARKET, BY TECHNOLOGY, 2015 VS. 2020 (USD MN)



\* Coming various sources: FY2021 estimates based on Markets and Markets, Yole, Mordor, and EMCORE Internal

# Operational Transformation

## Embrace 6 Sigma Disciplines

- Most of EMCORE's professionals are 6 Sigma White Belts
- 30% of our professionals have completed Green Belt training
- 15% will be Black Belts or Master Black Belts by June '18

## EMCORE Performance Management: Top to Bottom Alignment and Weekly Accountability

- All goals and objectives are linked from CEO's to Supervisors
- Nearly 2,000 metrics are tracked and monitored at all levels in the company on a weekly basis

## Manufacturing Transformation

- Wafer Fab: Asset Light with Operating Leverage on "chip fab" Operations
- Dramatically transformed Assembly operations: reduction of US footprint by 30%, China by 60%
- "Dual Use" automation: projects developed in China are exported to the US and integrated

## FY16 Results

- Over \$2.5M in Savings from FY15 Green Belt Projects in FY16

# Serving Market Leading Companies World-wide

COMMSCOPE®



TELESTE



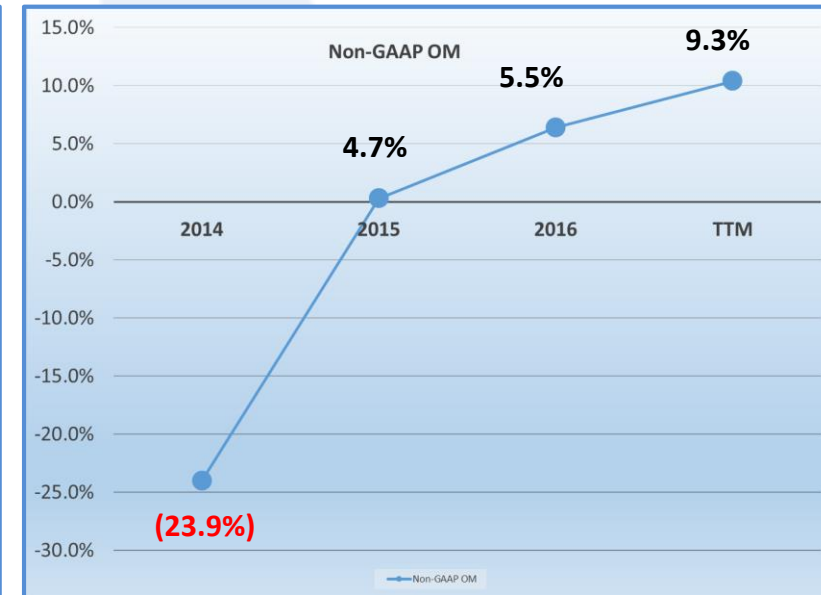
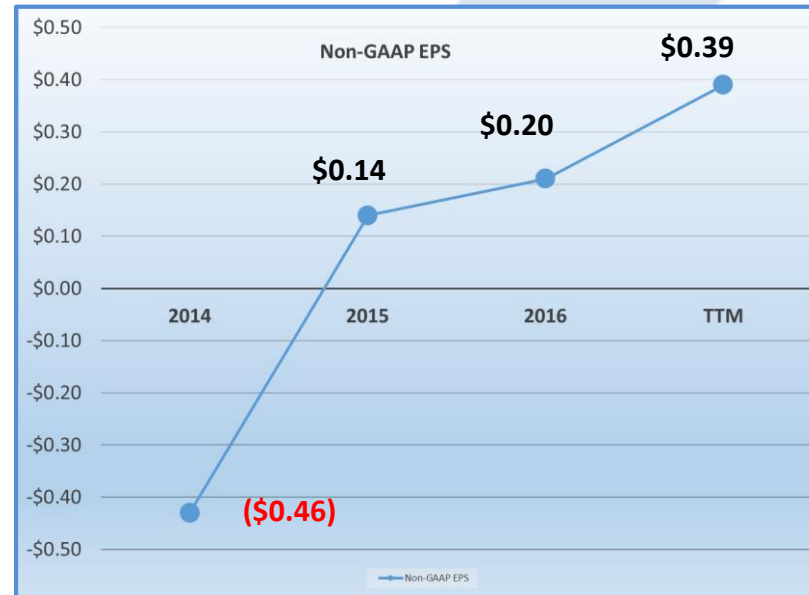
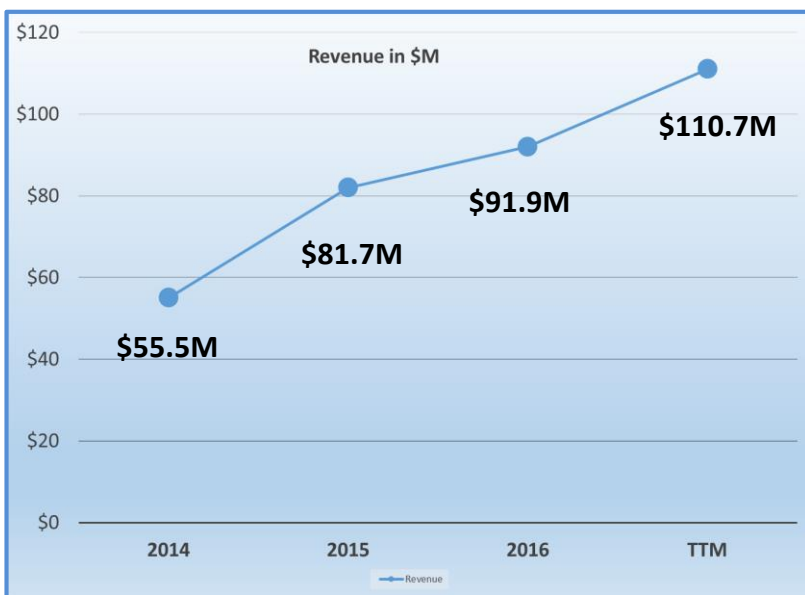
Raytheon



NeoPhotonics  
Innovation through Integration



# Financial Trends FY2014 – YTD TTM



# Investment Highlights

Strong core market growth in CATV driven by DOCSIS 3.1 buildout

Mixed Signal Optics Strategy expands EMCORE's addressable markets ~10X

New hybrid EMS manufacturing strategy improves efficiency and lowers headcount

Organization-wide adoption of Six Sigma and Lean Manufacturing Disciplines for improved performance

Accelerating Operating Leverage from automation in operations

Robust Balance Sheet

Strong, Operationally Focused Management Team





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# Non GAAP Reconciliation

<u>All \$ in Thousands</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>TTM</u>
<b>US GAAP net income</b>	<b>4,852</b>	<b>63,100</b>	<b>8,266</b>	<b>6,904</b>
<u>US GAAP net loss (income) from discontinued operations</u>	<u>(724)</u>	<u>(65,372)</u>	<u>(5,647)</u>	<u>(369)</u>
<b>US GAAP net income (loss) from Continuing Operations</b>	<b>4,128</b>	<b>(2,272)</b>	<b>2,619</b>	<b>6,535</b>
Income Tax Expense (Benefit)	(24,596)	(2,194)	14	279
Sale of Assets Loss (Gain)	(100)	230	(41)	(41)
Change in FV of financial instruments	(34)	(122)	0	0
OCI Gain	(307)	0	0	0
<u>Currency exchange losses (gain)</u>	<u>(10)</u>	<u>138</u>	<u>393</u>	<u>642</u>
<b>Total Other Income &amp; Tax Related Adjustments</b>	<b>(25,047)</b>	<b>(1,948)</b>	<b>366</b>	<b>879</b>
Stock based compensation expense - R&D	459	379	372	406
Stock based compensation expense - SG&A	2,240	3,020	1,445	1,971
Compensation related to divestitures	0	2,471	0	0
Litigation related expenses	0	1,856	(815)	(1,679)
Amortization	25	82	0	0
Transaction Compensation Adjustments	1,782	0	0	0
Severance Charges	1,776	1,083	678	1,387
<u>Impairments</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>468</u>
<b>Total Operating Expense Adjustments</b>	<b>6,282</b>	<b>8,892</b>	<b>1,680</b>	<b>2,552</b>
ARO accretion	171	110	66	70
Gain on ARO liability	0	(845)	0	0
Inventory OH Adjustments	306	0	0	0
<u>Stock based compensation expense - COGS</u>	<u>283</u>	<u>214</u>	<u>345</u>	<u>403</u>
<b>Total COGS Adjustments</b>	<b>760</b>	<b>(521)</b>	<b>411</b>	<b>473</b>
<b>Non GAAP pre-tax income from Continuing Operations</b>	<b>(13,877)</b>	<b>4,150</b>	<b>5,076</b>	<b>10,440</b>

# Non GAAP Reconciliation

<u>All \$ in Thousands</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>TTM</u>
GAAP EPS from Continuing Operations - per diluted share	\$ 0.16	\$ 2.10	\$ 0.31	\$ 0.25
Other income & tax related adjustments	\$ (0.85)	\$ (2.24)	\$ (0.20)	\$ 0.02
Operating expense adjustments	\$ 0.21	\$ 0.30	\$ 0.06	\$ 0.09
COGS adjustments	\$ 0.02	\$ (0.02)	\$ 0.02	\$ 0.02
Non GAAP pre-tax EPS from Continuing Operations per diluted share	\$ (0.46)	\$ 0.14	\$ 0.20	\$ 0.39
Share Count	30,453	30,012	25,979	26,892
GAAP Gross Margins	21.8%	35.1%	33.6%	34.0%
Non GAAP Gross Margins	23.2%	34.5%	34.1%	34.4%
GAAP Operating Margins	-36.6%	-5.5%	3.2%	6.6%
Non GAAP Operating Margins	-23.9%	4.7%	5.5%	9.3%