



New York Westin Grand Central Tuesday, May 17 2016



# Agenda

- 10:00am Tom Edman, CEO
- 10:30am Doug Soder, Communications and Computing
- 10:50am Tony Princiotta, Electro-Mechanical Solutions
- 11:10am Break
- 11:30am Phil Titterton, Aerospace & Defense
- 11:50am Jon Pereira, Auto, Industrial, Medical & Instrument
- 12:10pm Todd Schull, CFO
- 12:30pm Q&A
- 1:00pm Lunch
- 2:00pm Analyst Day Concludes





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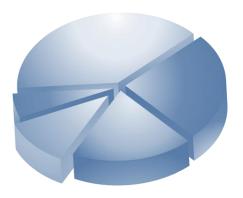




# Diversified, Differentiated and Disciplined Tom Edman

# **Key Messages**

#### Diversification



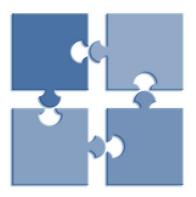
- Diversified
- Near term Auto,
   Aerospace & Defense

#### Differentiation



- Technology breadth
- One stop solutions

### Discipline



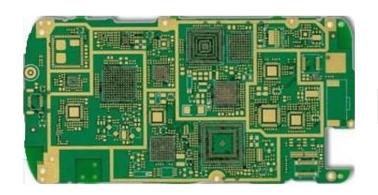
- Disciplined integration
- Cash flow generation



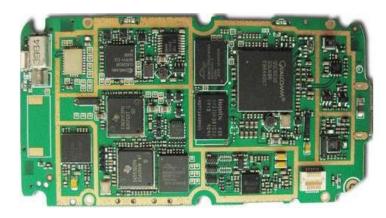


### What is a PCB?

- Building blocks for electronics
- Connects electronic components
- Customized for each end application



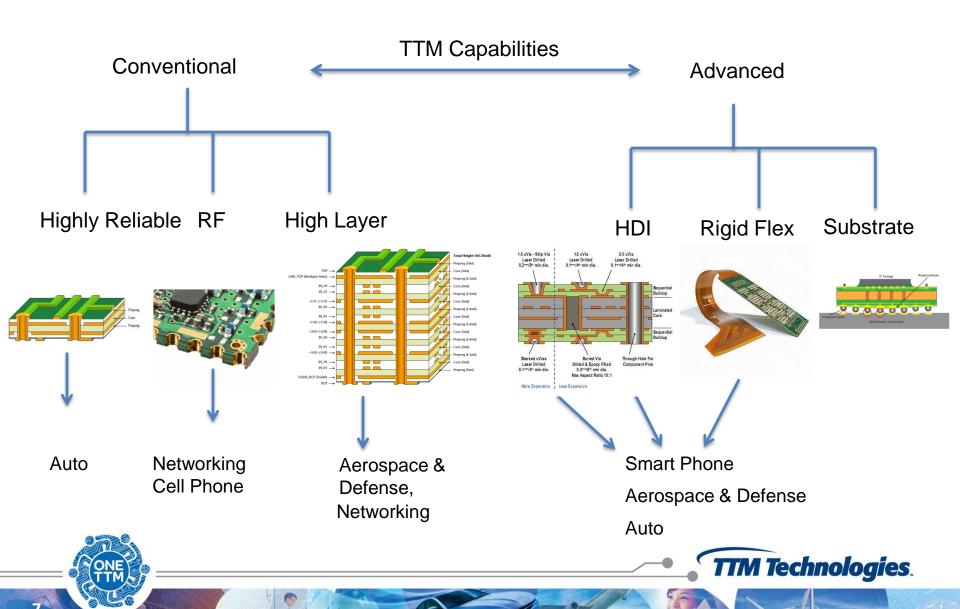




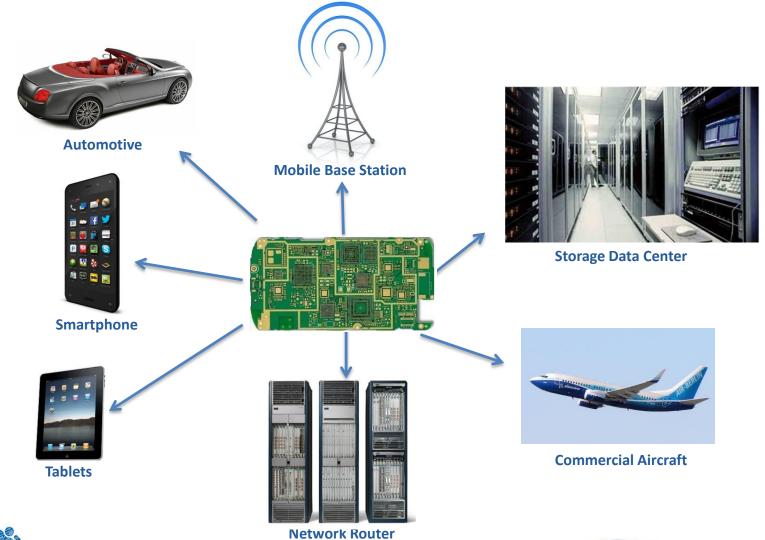




### Different PCBs for Different Markets



### PCBs: Foundation of all Electronics





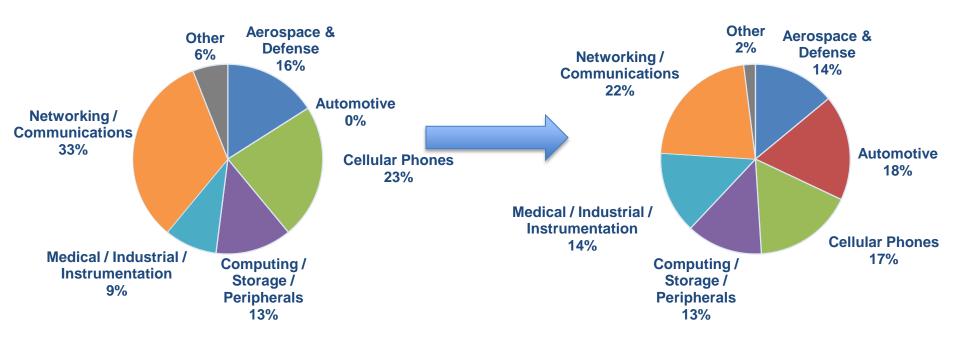


Message #1 – Diversification and Growth

# Increasing End Market Diversification

2014 Revenue \$1,325 mm

2015 Pro Forma Revenue \$2,602 mm







# **Top Tier Customers**





























### **End Market Growth Drivers**

#### Aerospace & Defense

- Increased Commercial Air Traffic
- Increased Military Equipment Builds



#### Automotive

- Electric Vehicle
- Safety/ADAS/Infotainment



#### Cell Phone

- New Phone Functionality
- Emerging Markets



#### Computing

- Data Center Build
- IoT



#### Networking/Telecom

- 4G/5G Infrastructure Spend
- Video Traffic



#### Medical / Industrial/Instrumentation

- Patient Monitoring
- ATE Upgrades

Sources: Prismark Partners May 2015, BPA March 2015, Electronic Outlook Corporation Q3 2015, Company estimates



2-4%

6-8%

5-8%

5-8%

3-6%

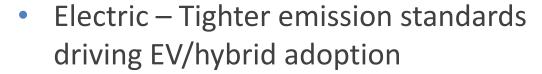
4-6%



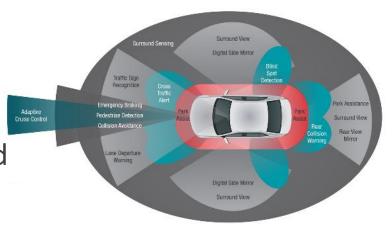


### **Automotive Opportunities**

Safety – Advanced Driver Assist
 (ADAS) driving adoption of new technologies like Radar, IR, Ultrasound



 Infotainment – Video/Audio entertainment, internet access, connectivity





### Key growth driver - Increasing electronic content





### Aerospace & Defense Opportunities

- Aerospace seeing strong traffic growth
  - Continued rollout of Boeing 737 and 787 programs
- 2016 Defense budget up 5.8%
  - Missile Defense Agency awards New Long Range Discrimination Radar contract to Lockheed (\$784 M)
  - Navy awards Air and Missile Defense Radar to Raytheon
  - Joint Strike Fighter (JSF F35) DoD's largest planned procurement





Key growth drivers – Increasing traffic and procurements

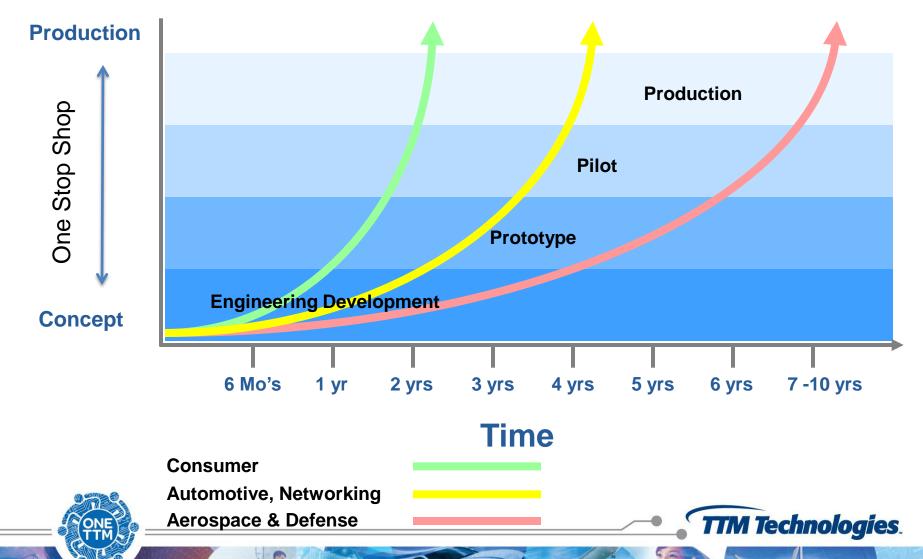






Message #2 – Differentiated through "One Stop Shop"

# **Customer Engagement Model**



### **Global Footprint**





A&D

Aerospace & Defense Specialty

1 Santa Ana - SA

2 San Diego - SD

3 Stafford - ST

5 Sterling - STE

6 Anaheim - ANA

7 Denver - DEN

8 Forest Grove - FG

4 Stafford Springs - SS 9 North Jackson - NJ

10 Santa Clara, SC

**AMI&I** 

Automotive

11 Zhongshan - ZS

12 Huiyang - HY

Medical, Ind, Inst

13 Logan - LG

14 San Jose - SJ

15 Toronto - TOR

**Mobility** 

16 Guangzhou - GME

17 Shanghai – SME Shanghai - SKE

18 Shanghai - SP

19 Guangzhou - FPC

C&C

**Communications** 

20 Hong Kong - OPCM

21 Chippewa Falls

22 Dongguan - DMC

23 Guangzhou - GZ

E-MS

**E-M Solutions** 

24 Shanghai – SH BPA

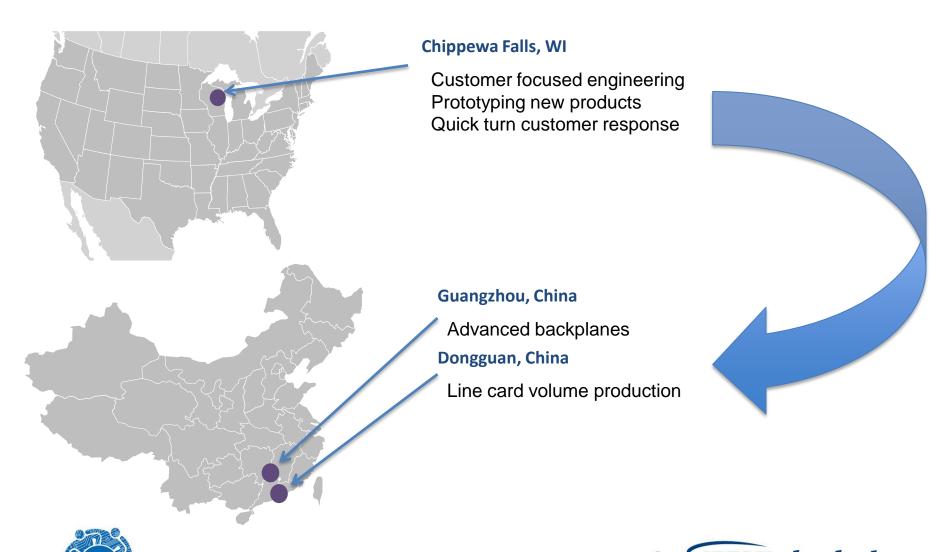
25 Shanghai – SH E-MS

26 Shenzhen - SZ





# Global Footprint Meets Product Life Cycle Needs





# Aligned with Technology Trends

#### **End Device Trends**

- Increasing complexity
- Decreasing size
- Increasing signal speed
- Increasing performance

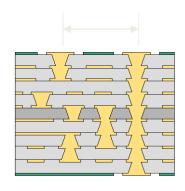


Increasingly Crowded PCBs

#### **PCB Features**

- Higher layer count
- Microvias
- Thin cores
- Material/Laminate innovations

- TTM Capabilities
  - HDI
  - Rigid Flex
  - **RF Radar**



Microvias



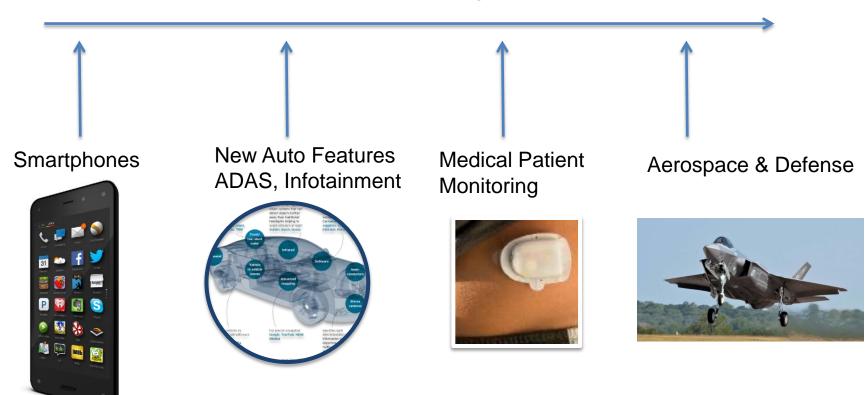
Laser Drills





# Leveraging New Technology in Smart Phones

#### Adoption of HDI and Rigid Flex



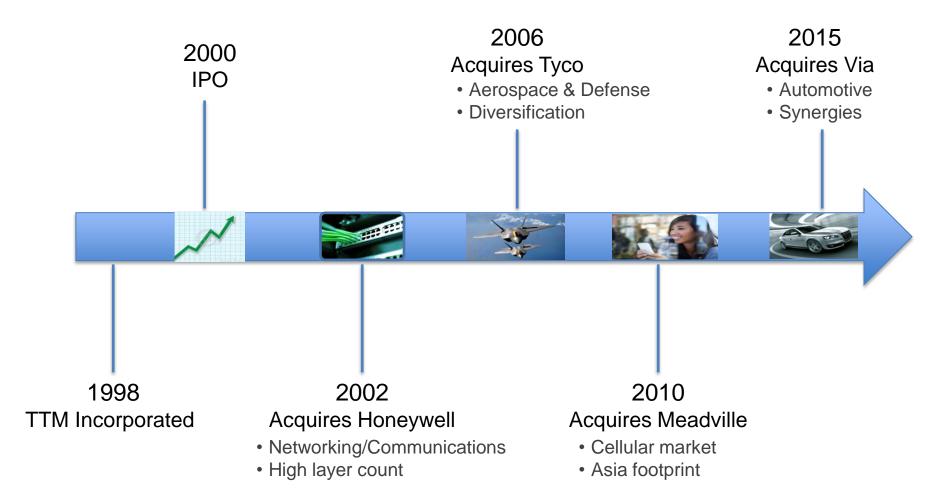






Message #3 – Disciplined Integration & Deleveraging

# Track Record of M&A Integration







### **Business Units and Leadership**



Aerospace & Defense/Specialty

(A&D) Business Unit

Phil Titterton



Automotive & Medical, Industrial & Instrumentation

(AMI&I) Business Unit

Jon Pereira



Communications & Computing

(C&C) Business Unit

Doug Soder



Electro-Mechanical Solutions

(E-MS) Business Unit

Tony Princiotta

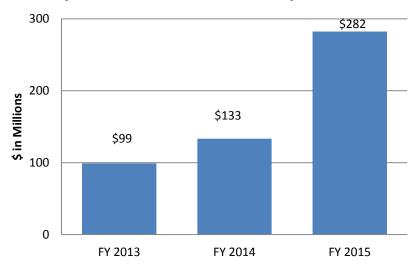




### Conclusions

- Diversified, near term opportunities in Auto, Aerospace & Defense
- Differentiated through "one stop shop"
- Disciplined M&A,
   Delivering solid cash flow

#### **Adjusted Cash Flows from Operations**









# Communications and Computing Doug Soder

### Value Proposition





#### **Preferred Supplier**

- Acknowledged Technology & Industry Leadership
- Proven customer track records



#### **Advanced Technology**

- High Layer Count Line Cards & Backplanes
- Advanced HDI
- Flex & Rigid-Flex circuits & assemblies
- Substrates



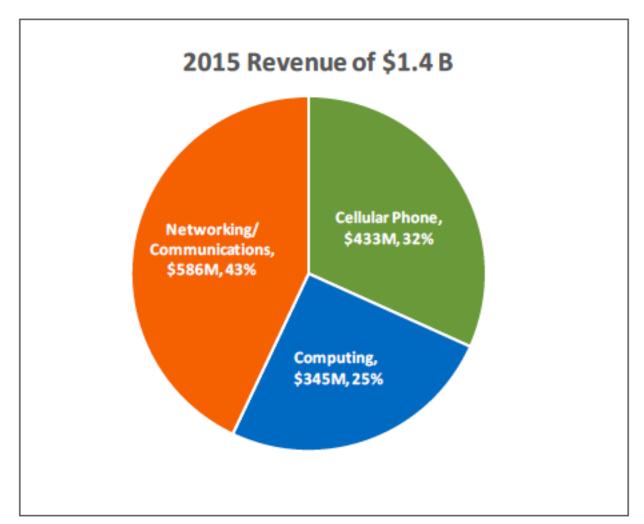
#### Full Product Life Cycle Solutions

- Engineering services for product concept & development
- Quick-turn & volume production
- Multi-plant global coordination





### **Balanced Markets & Diversification**







# **Top Tier Networking & Communications Customers**



#### **Top Customers**

Nokia Networks













# **Top Tier Cellular Phone Customers**



**Top Customers** 

Chengrui



**SAMSUNG** 





# **Top Tier Computing Customers**



**Top Customers** 





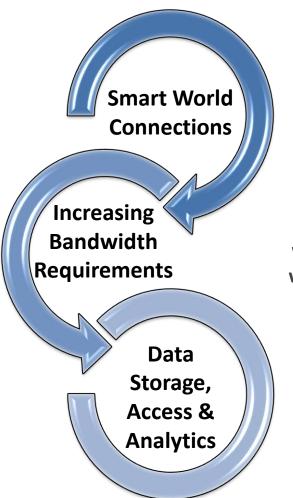








# Mega Trends Drive Exciting Change & Opportunities



"By 2020, there will be 5.5B global mobile users & 11.6B mobile-ready devices & connections!"

"By 2020, average mobile connection speed will increase 3.2-fold & global mobile IP traffic will reach an annual run rate of 367 exabytes!"

"Big Data is growing at 40% annually!
By 2025, Global Data Traffic is said to cross
100 zettabytes (trillion GBs)!"

**Dramatic Increases in Mobile Connections & Data Management!** 





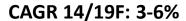
**Networking & Communications** 

# Growth Outlook – Networking & Communications





Market Overview2015 Total PCB: \$6.0B





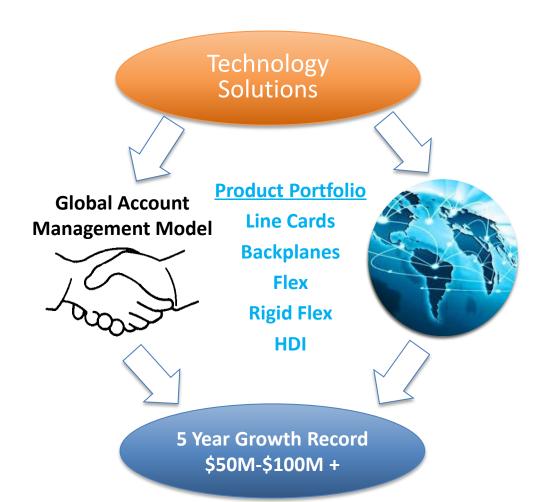


- TTM Focus
  - 4G-5G Base Stations & Radios
  - Core & Edge Routing
  - Optical Networking
  - Cloud Architecture Infrastructure

Sources: Prismark Partners May 2015, BPA March 2015, Electronic Outlook Corporation Q3 2015, Company estimates



# Success Story – Major Networking Customer



#### Why WE Win:

- Broad-based Customer Engagement
- Technology Roadmap
   Collaboration
- Advanced Materials
   Expertise
- Multi-plant Global Solutions
- Operations Excellence







**Cellular Phones** 

### Growth Outlook - Cellular Phone +



Overall market

2015 Total PCB Market

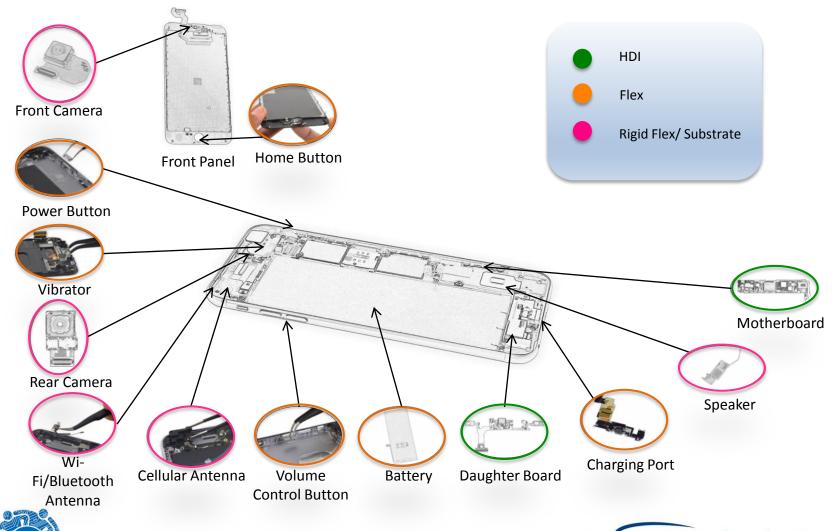
- Mobile Phones: \$9.6B
- Consumer \$5.0B
- Product focus areas
  - High end smartphones
    - Main boards
    - Battery modules
    - Camera modules
    - Wifi modules
    - Audio modules
  - Wearables



Sources: Prismark Partners May 2015, BPA March 2015, Electronic Outlook Corporation Q3 2015, Company estimates



## Growth Opportunities from Increasing Functionality

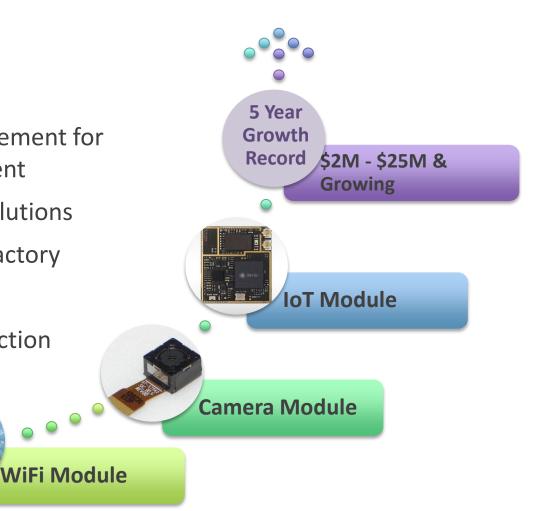




# Success Story – Top Tier Smartphone OEM

## Why WE Win

- Industry Reputation
- Close Engineering Engagement for New Product Development
- Multiple Product Line Solutions
- Integrated Rigid & Flex factory
  - speed & flexibility
- NPI through Mass Production Capability







## Communications & Computing Business Unit

#### **Growth Opportunities**

- Increasing Smartphone Functionality
- IoT / Wearables
- Cloud Infrastructure
- Service Provider Infrastructure

#### Why WE Win?



- Industry Leadership Reputation
- Technology Leadership
- Global Scale & Flexibility







# **Electro-Mechanical Solutions Tony Princiotta**

## Value Proposition





#### PCB Pull Through

- E-MS help to sell higher margin PCBs
- More touch points increases program retention
- Cross selling possibilities



#### **Customer Accountability**

- One "Back to pat" or "Throat to choke"
- Long cycle programs



#### **Boutique Player**

- High mix, low to mid volume
- Large enough to be responsible, small enough to be responsive





# TTM Technologies Advantage

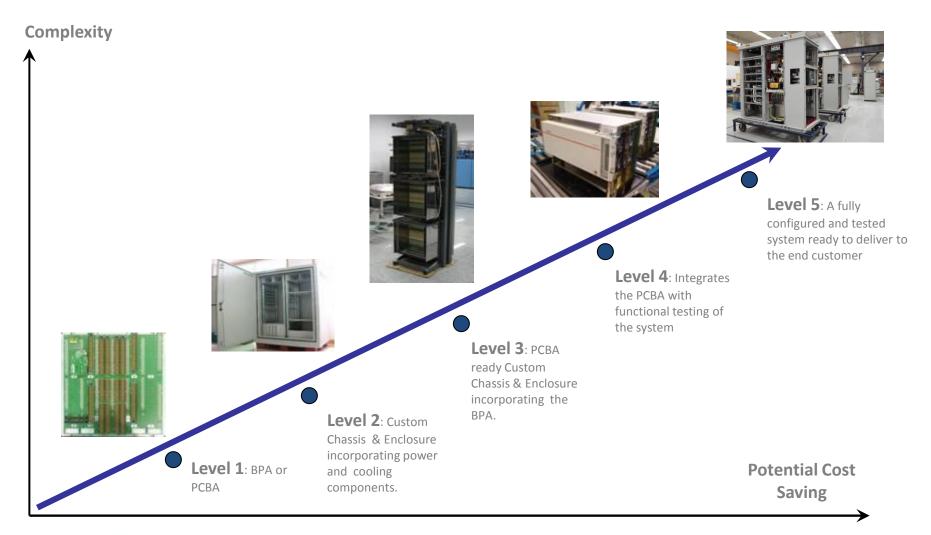








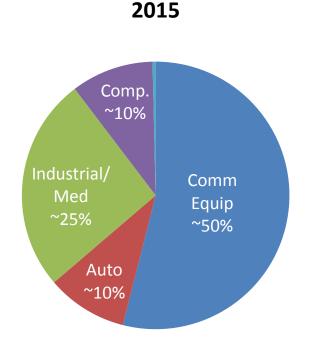
## **End to End Customer Solutions**







## Diversified with Increased Auto Focus in China

















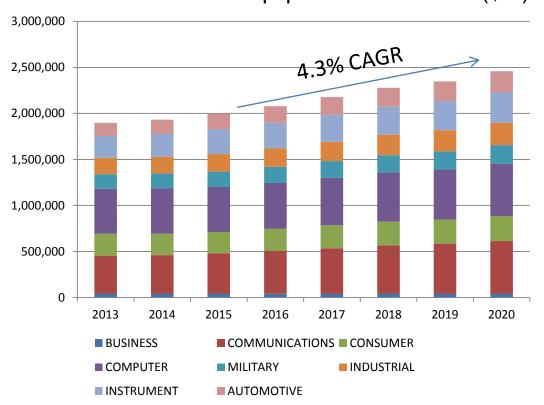
**Top Tier Customers** 





# **Growth Opportunities**

#### WW Electronic Equipment Production (\$M)



#### **TTM Opportunities**

- Asian Communication
   Infrastructure build out
- Electric Vehicles/ EnergyStorage
- Industrial, Medical and Instrumentation segments

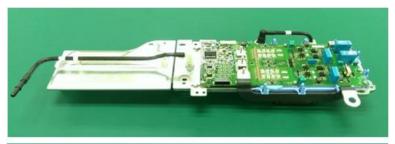
Source: Henderson Q1 2016





## Success Story – Battery Management

- Major EV Automotive Manufacturer
- Why We Won
  - Existing PCB position
  - Customized process development
  - Industrial product built to Automotive Specifications
- Successful volume launch led to additional opportunities







Includes PCB, PCBA, Bus Bars, Custom Metal, Integration & Test





# Success Story - Industrial

- 1.6 Megawatt Converter
- Why we won
  - Crisp manufacturing transition to China
  - Effective localization of the supply chain
  - Redesigned three separate enclosures to a single unit
- Success:
  - Delivered in excess of 10,000 units







## **Success Story - Transportation**

- Locomotive Console
- Why We Won
  - Positive PCB reputation with parent company
  - Customer's desire to outsource console manufacturing to China
  - Strong vertical manufacturing competencies
  - Ability to work with incomplete documentation
- Success:
  - Prototypes delivered Q4, 2015
     Currently in production







TTM Technologies.



## Conclusions

- E-M Solutions helps drive customer adoption of PCB products
- One stop shop that provides complete solutions increases "stickiness" to the customer and helps the PCB business retain core programs
- Growth opportunities in electric vehicles, optical transmission networks, industrial products







# Aerospace & Defense / Specialty Phil Titterton

## **Value Proposition**



Superior reliability for mission critical applications



Multi-site solution to the military/aerospace community
All necessary certifications



One stop shop offering technology breadth and depth





## Leading Player Alignment with Top Tier Customers



Raytheon

Markets We Serve

LOCKHEED MARTIN

NORTHROP GRUMMAN

Honeywell

**BAE SYSTEMS** 

Rockwell Collins





Commercial
Aerospace
35%



• #1 A&D PCB Manufacturer with 2015 Revenue ~\$350 million

Defense 65%

> Leading Player

TTM Technologies.



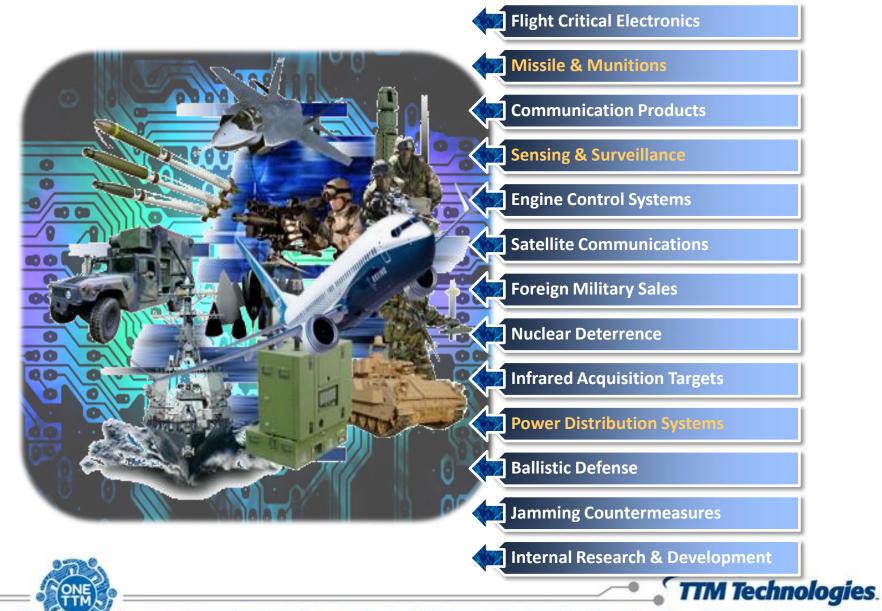
# Strategic Partnerships Strengthen Position

Customer	Years Partnered	Partnered Industry Sector(s)	
BAE SYSTEMS	25	Comm Aero & Defense	
DRS	17	Defense & Space	
HARRIS	18	Defense & Space	
Honeywell	29	Comm Aero, Defense & Space	
communications	16	Comm Aero, Defense & Space	
LOCKHEED MARTIN	31	Defense & Space	
NORTHROP GRUMMAN	34	34 Defense & Space	
Raytheon	28	Defense & Space	
Rockwell Collins	20	Comm Aero, Defense & Space	
UTC Aerospace Systems	33	Comm Aero, Defense & Space	





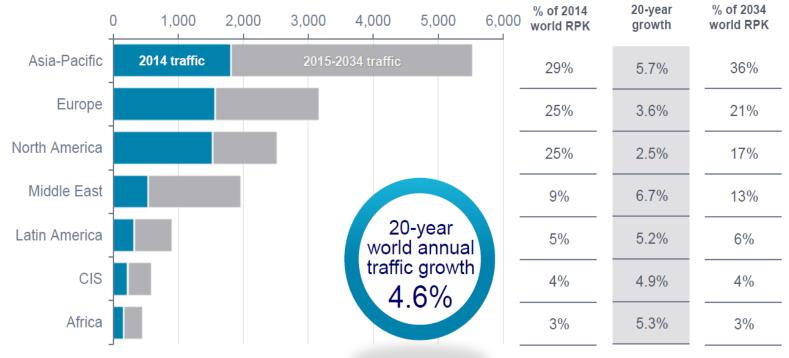
## Aerospace & Defense – Diverse Applications



## Aerospace – Strong Commercial Traffic Driven by Asia

### Asia-Pacific to lead in world traffic by 2034

RPK traffic by airline domicile (billions)



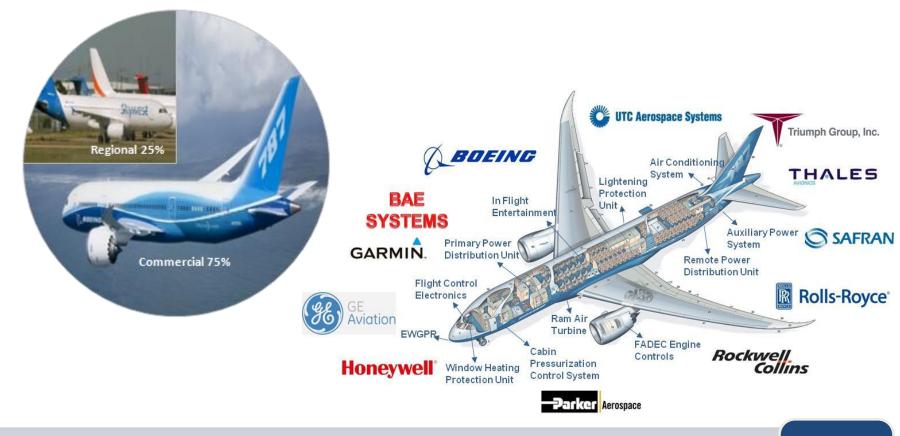
Source: Airbus GMF2015





## Key Opportunities in Commercial Aerospace

Commercial/Regional Airline Growth



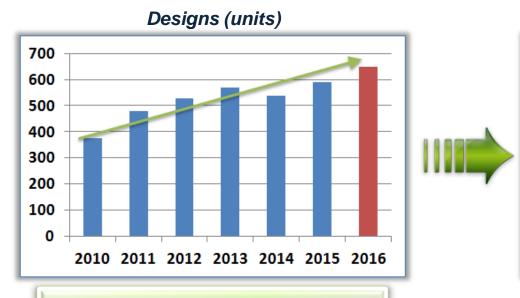
- TTM supports flight critical electronics on 737, 777, 787, A319, A320, A321, A350, A380
- Fly by wire electrical content replacing traditional hydraulic systems



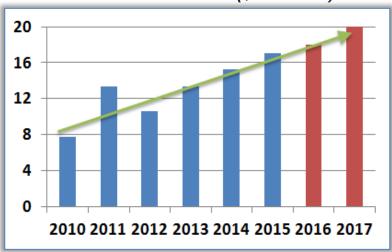




## **Aerospace Success Story**







\$3.1M Engineering Design Orders

• 8% Growth 2015

Design Cycle: 3-7 Years

\$77M Manufacturing Drag

• 12% Growth 2015

Product Life Cycle: 7-20+ Years

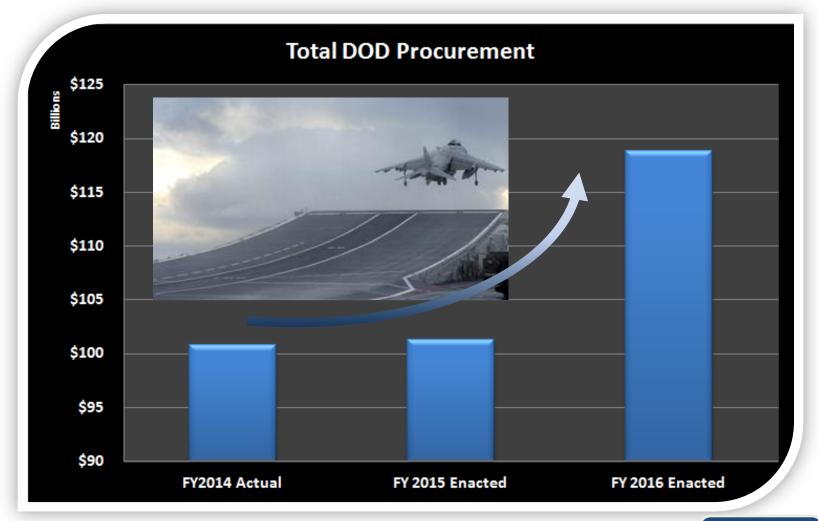
• Design through volume production capability

Why we win





## Defense – Budgets Increasing in 2016



• DOD portfolio of 79 major defense acquisitions with total planned investment of \$1.44 trillion



# Key Opportunities in Defense

#### **Defense Submarket Growth**





• TTM supports mission critical electronics for a majority of DOD Programs including JSF, THADD, Patriot, F16, JDAM & Hellfire

Opportunity





# Defense Success Story 1 – "One Stop Shop"



SUPPORTING FACILITIES	CAPABILITY	
DESIGN ENGINEERING	Digital, RF, Flex	
STAFFORD, CT	RF Structure	
STAFFORD SPRINGS, CT	Flex Assembly	
CHIPPEWA FALLS, WI	Digital PCB	
SANTA CLARA, CA	Flex PCB	
ANAHEIM, CA	HDI Interposer	

- Space Fence 100,000 debris tracking system down to size of baseball
- Radar installation is equivalent to the size of a football field and is located on a South Pacific island
- Ability to meet all of customer's needs with multiple factory engagement capability vs. option of procuring from six different suppliers

Why we win





# Defense Success Story 2 – "Mission Critical"



• Proven mission critical technology provider

Why we win





## Conclusion

 Aerospace & Defense BU offers mission critical, reliable product to industry leaders

- One stop solution that provides enabling technologies and capabilities
- Strategic partnerships with our customers strengthens our leading market position
- Growth opportunities in commercial aerospace and increased defense procurement

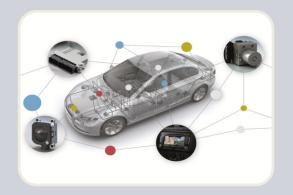




Automotive, Medical, Industrial and Instrumentation

Jon Pereira

# Value Proposition







**ONE-STOP SOLUTION** 

WIDE-RANGE OF CAPABILITIES

TRUSTED HIGH
RELIABILITY SUPPLIER

PROVEN TRACK
RECORD

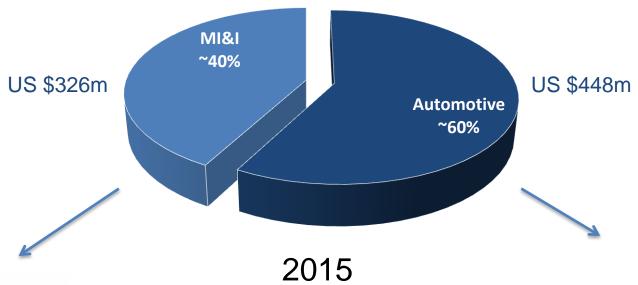
SEAMLESS GLOBAL
TRANSFER

FULL PRODUCT LIFE-CYCLE





# Diverse Markets and Top Tier Customers































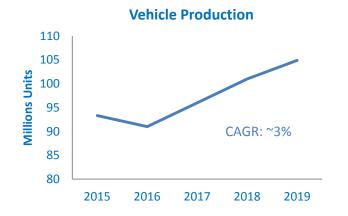






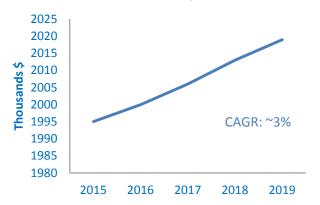
## **Automotive**

## **Automotive Electronic Content Increasing**



- Auto units expected to grow from 90M in 2015 to 110M in 2020
- Government regulations require advanced safety features
- Electric Vehicles growing with much higher PCB content
- China has only 100M cars vs US 300M
- PCB Avg. \$55/car growing to \$65 by 2020

#### **Electronic Content/Vehicle**



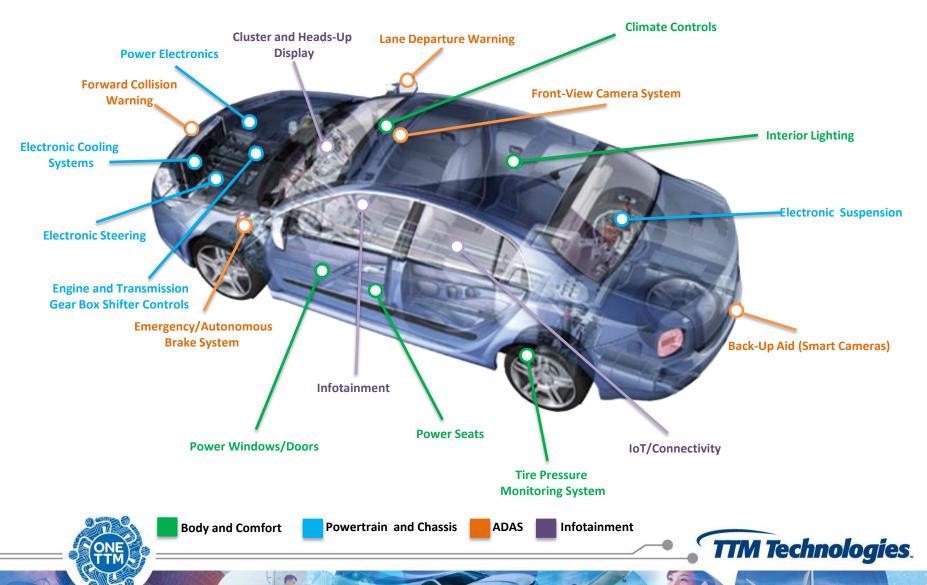
PCB Usage per Car					
Туре	Sq. Meter	USD	Volume		
Compact	0.3 – 0.4	18 – 30	~ 36.4		
Mid-Range	0.5 – 0.7	40 – 60	~ 56.4		
Luxury	2.0 – 3.0	120 - 150	~ 7.2		



Source: NTI Digest, October 2015



# "Electrification" driving PCB Usage



## Well Positioned for Emerging Trends

### **Key Opportunities**

• 27% CAGR (P&S Market Research)

**ADAS** 

#### Connectivity

• 12.2% CAGR (ResearchandMarkets)

## Autonomous Driving

• 33% CAGR (Strategy&/PWC)



## **Key Differentiators**

- Extensive experience with passive safety, powertrain, body control, and chassis electronics
- Technology leader in HDI and rigid flex products
- Expertise in manufacture of Radar products

## **Technology Trends**

Rigid-Flex Adv. HDI RF

21% y/y 10% y/y 32% y/y
Growth Growth Growth

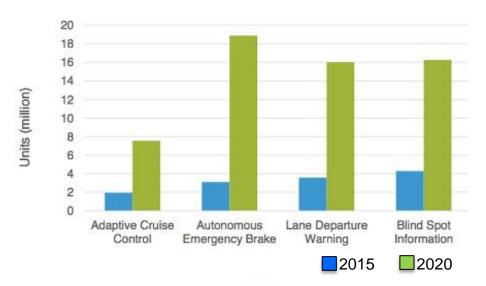




# Emerging Market: Automotive Technology- Radar

Global automotive radar market size is estimated to exceed US \$5Billion by 2023

- Total radar sensor volume:
  - **2015** 19 M units
  - **2020** 70 M units









# **Success Story: Autoliv**

- Multiple products including: Airbag, braking, Radar & camera
- New product launch 2016: 77Ghz (advanced radar detection)
- Major Customers: GM, Hyundai, Honda, VW, Mercedes, & Chrysler
- Designed in North America
  - pre-production in North America;
  - seamless transfer to Asia
     Pacific for production

We won because TTM was able to offer a full-service solution, from concept to completion.









Medical, Industrial and Instrumentation

# Growth Opportunities: Medical, Industrial & Instrumentation



#### Surgical Robotics \$17.9B by 2020

• 12.7% CAGR through 2020 (Grand View Research, Inc.)



#### Home Automation (IoT) \$12.8B by 2020

• 11.4% CAGR through 2020 (MarketsandMarkets)



# Automated Test Equipment \$4.4B by 2020

• 2.5% CAGR through 2020 (Radiant Insights)

- MII PCB Market Growth 4-5% CAGR 2015-2020
- Strength of product offering and technical expertise
- Growth for high reliability medical systems correlates to higher procedure rates and aging populations





#### **Seamless Transition Wins MI&I Business**

- 10.4---

Medical Device Company specializing in ``continuous" glucose monitoring systems

Small wearable device -- smart device compatible

 Development initiated in Sterling and seamlessly migrated to Toronto; FDA approval required

Patient monitoring systems are expected to grow at a CAGR of 5.6% from 2015 – 2020 (markets and markets)

TTM won because we can support the entire product life cycle— in North America.





## **AMI&I Growth Opportunities**

- Increasing Auto PCB content with focus on faster growing Electric Vehicles, ADAS, and Infotainment.
- In Medical, focus on surgical robotics and patient monitoring.
- In industrial, focus on automation, robotics, and home connectivity.



Why AMI&I Wins

- One Stop, Highly Customized, Global Solutions
- Trusted High-ReliabilitySupplier
- Proven Track Record with Top Automotive and Medical OEMs







Diversified, Disciplined and Deleveraging Todd Schull

# Agenda

- Via Integration/Cost Improvement
- P&L Operating Model
- Cash Flow/Deleveraging Model





# Via Integration Review

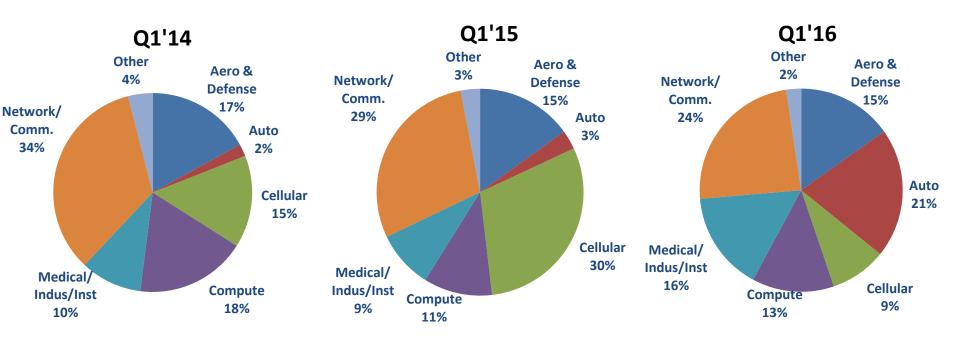
## What we said last year

- ✓ Increased scale
- ✓ Increased auto exposure
- ✓ New BU operating model
- ✓ Expect \$55 million synergies by Q2 16
- ✓ Pay down debt





## **End Market Mix Past Three Years**

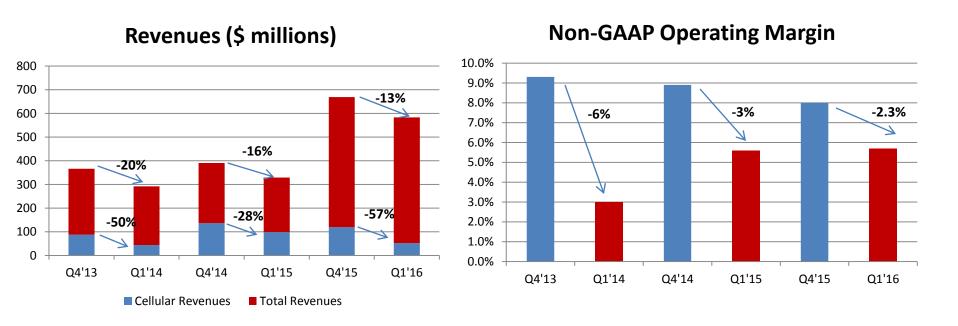


Via reduced cellular, increased auto end market exposure





# **Diversification Reduces Volatility**

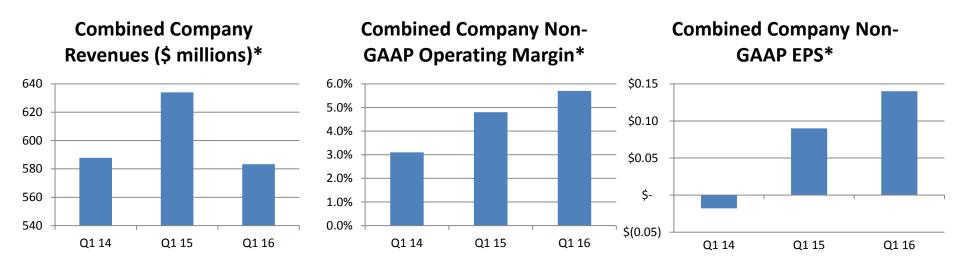


Lower cellular exposure reduces Q1 revenue and OM decline



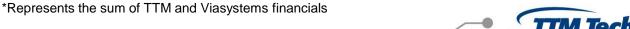


# Disciplined M&A Integration



Improving margins and EPS despite declining revenues





# Timeline of Via Synergies

Quarter	Value of Action	P&L Impact
Q2'15	\$6 million	
Q3'15	\$12 million	\$2.7 million
Q4'15	\$13 million	\$4.5 million
Q1'16	\$12 million	\$8 million
Q2'16E	\$12 million	\$11 million
Q3'16E		\$14 million
		x 4
Total	\$55 million	\$56 million





# Post Via - Continuous Cost Improvement

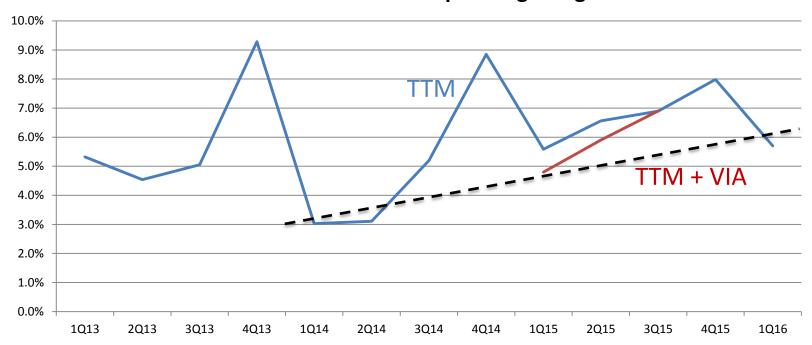
- Supply chain management
  - Alternate suppliers
  - Price reductions
- Best practice sharing
  - Materials usage reduction
  - Process improvement
- Margin improvement
  - Yield/Scrap improvement
  - Productivity improvement
- G&A efficiencies
  - Shared services
  - ERP





## Model

#### **Historical Non-GAAP Operating Margin**



Target 10% Non-GAAP operating margins for combined company





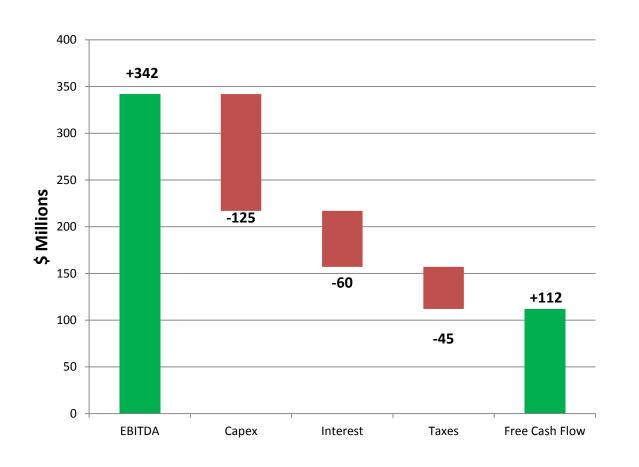
# **Key Outstanding Debt**

- Term loan (\$871 million)
  - Issued (\$950 million) in conjunction with Via acquisition
  - Due May 31, 2021
  - Interest rate: Libor (1% floor) + 5% (6% currently)
  - Primary covenant leverage ratio <3.75</li>
  - No pre-payment penalty
  - Repaid \$76.5 million in Q1'16
- Convertible (\$250 million)
  - Due Dec 15, 2020
  - Interest rate 1.75%
  - Conversion price \$9.64
  - Call spread strategy increases effective conversion price to \$14.26





# Significant Cash Flow Generation Capability



- \$342 million pro-forma adjusted EBITDA in 2015
- Expected capex, interest and taxes
- Capex can be flex'd down
- Expected free cash flow \$100-\$120 million
- Target leverage ratio of 2.0

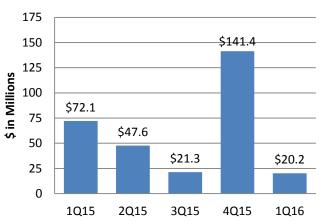
Hypothetical cash flow generation



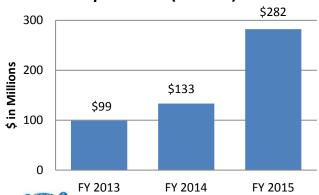


# Reported Cash Flows

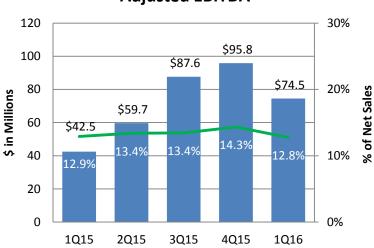
# Adjusted Cash Flows from Operations (Quarterly)



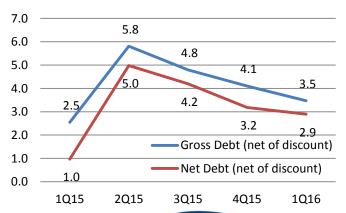
# Adjusted Cash Flows from Operations (Annual)



#### Adjusted EBITDA



#### Leverage (Debt/LTM EBITDA)



TTM Technologies.

## Future Priorities for Cash Flow Generation

- Generate Cash from Operations Grow Earnings
  - Execution
  - Synergies
- Generate Cash through Asset Efficiency
- Deleverage our Balance Sheet More Cash for Shareholders





## **Conclusions**

- Successful Via integration Improved cost structure
- Continuous focus on cost reduction and cash flow generation
- Solid cash flow capability for deleveraging







**Thank You** 

# Reconciliations

\$ Millions (except where noted)	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016
GAAP Gross Profit	\$51.6	\$61.2	\$89.1	\$108.3	\$83.6
Add back items:					
Inventory markup and PP&E step up	-	7.4	8.2	0.6	-
Stock-based compensation	0.2	0.2	0.3	0.3	0.3
Non-GAAP Gross Profit	51.8	68.8	97.7	109.2	83.9
GAAP Operating Income (Loss)	8.3	(7.1)	23.6	36.5	18.9
Add back items:					
Amortization of intangibles	1.9	3.9	6.4	6.7	5.9
Stock-based compensation	2.0	2.3	2.7	2.6	2.2
Gain on sale of assets	(2.5)	-	-	-	-
Acquisition-related costs	8.2	22.6	2.1	1.5	0.7
Inventory markup and PP&E step up	-	7.4	8.2	0.6	-
Impairments and restructuring charges	0.5	0.1	2.0	5.4	5.3
Non-GAAP Operating Income	18.4	29.2	45.0	53.4	33.0
GAAP TTM Technologies Net Income (Loss) Add back items:	3.4	(36.6)	(2.2)	9.5	(7.3)
Amortization of intangibles	1.9	3.9	6.4	6.7	5.9
Stock-based compensation	2.0	2.3	2.7	2.6	2.2
Non-cash interest expense	2.6	3.3	4.8	4.9	6.2
Gain on sale of assets	(2.5)	-	-	-	-
Acquisition-related costs	8.2	22.6	2.1	1.5	0.7
Inventory markup and PP&E step up	-	7.4	8.2	0.6	-
Impairments, restructuring and other infrequent items	0.6	0.9	2.0	5.4	5.3
Income taxes	(5.4)	11.1	(0.1)	0.3	8.0
Non-GAAP TTM Technologies Net Income	10.8	14.9	23.8	31.5	13.9
Non-GAAP EPS (\$ per diluted share)	\$0.13	\$0.17	\$0.24	\$0.31	\$0.14
GAAP Net Income (Loss)	3.4	(36.6)	(2.1)	9.7	(7.2)
Add back items:					
Income tax provision (benefit)	(1.4)	16.6	8.7	10.6	5.5
Interest expense	5.8	12.8	21.0	20.2	21.8
Amortization of intangibles	1.9	3.9	6.4	6.7	5.9
Depreciation expense	24.5	29.8	40.1	39.1	40.2
Stock-based compensation	2.0	2.3	2.7	2.6	2.2
Gain on sale of assets	(2.5)		-	-	
Acquisition-related costs	8.2	22.6	2.1	1.5	0.7
Inventory markup		7.4	6.8		
Impairments, restructuring and other infrequent items	0.6	0.9	2.0	5.4	5.3
Adjusted EBITDA	42.5	59.7	87.6	95.8	74.5
Operating Cash Flow Add back items:	67.4	15.5	14.7	139.8	17.9
Payment of accreted interest on convertible sr. notes	_	8.7	_	_	_
Payment of acquisition-related costs	4.7	23.4	6.6	1.5	2.3
Adjusted Operating Cash Flow	72.1	47.6	21,3	141.4	20.2
Aujusted Operating Cash Flow	72.1	47.0	21.3	141.4	20.2

# Reconciliations

\$ Millions (except where noted)	2012	2013	2014	2015
GAAP Gross Profit	\$225.0	\$217.8	\$194.7	\$310.1
Add back item:				
Inventory markup and PP&E step up	-	-	-	16.2
Stock-based compensation	1.1	1.1	0.9	1.1
Non-GAAP Gross Profit	226.1	218.9	195.6	327.5
GAAP Operating Income (Loss)	(142.0)	69.1	46.5	61.3
Add back items:				
Amortization of intangibles	14.7	9.4	8.4	18.9
Stock-based compensation	10.3	9.0	7.8	9.7
Impairment and restructuring	218.4	14.2	1.9	7.9
Inventory markup and PP&E step up Other infrequent items	-	- (17.9)	6.0	16.2 32.0
Non-GAAP Operating Income	101.4	83.8	70.6	146.0
GAAP TTM Technologies Net Income (Loss) Add back items:	(174.6)	21.9	14.7	(25.9)
Amortization of intangibles	14.7	9.4	8.4	18.9
Stock-based compensation	10.3	9.0	7.8	9.7
Non-cash interest expense	7.9	8.4	10.2	15.6
Impairment and restructuring	218.4	14.2	1.9	8.7
Inventory markup and PP&E step up	-	-	-	16.2
Other infrequent items	5.5	(7.2)	6.5	32.0
Income tax effects	(12.4)	(4.4)	(10.2)	5.9
Non-GAAP TTM Technologies Net Income	69.8	51.3	39.3	81.1
Non-GAAP EPS (\$ per diluted share)	0.85	0.62	0.47	0.87
GAAP Net Income (Loss)	(181.1)	23.9	14.7	(25.6)
Add back items:	12.7	15.9	7.6	34.6
Income tax provision Interest expense	25.8	24.0	23.8	59.8
Amortization of intangibles	14.7	9.4	8.4	18.9
Depreciation expense	84.3	92.1	95.3	133.5
Stock-based compensation	10.3	9.0	7.8	9.7
Gain on sale of assets	-	(17.9)	-	(2.5)
Inventory markup	-	-	-	14.2
Impairments, restructuring and other infrequent items	223.9	24.9	8.4	43.1
Adjusted EBITDA	190.6	181.3	166.0	285.7
Operating Cash Flow	182.6	71.4	129.8	237.5
Add back items: Payment of accreted interest on convertible senior notes		27.7	1.3	8.7
Payment of acquisition-related costs	-	-	2.1	36.2
Adjusted Operating Cash Flow	182.6	99.1	133.2	282.4