

TTM Technologies, Inc.
Todd Schull, Chief Financial Officer
May 22, 2018

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In addition to the financial statements presented in accordance with U.S. generally accepted accounting principles ("GAAP"), TTM uses certain non-GAAP financial measures, including EBITDA, Adjusted EBITDA, Non-GAAP Operating Income, Non-GAAP Net Income, Non-GAAP Operating Margin, Non-GAAP Gross Margin, Non-GAAP EPS and Adjusted Operating Cash Flow. We present non-GAAP financial information to enable investors to see TTM through the eyes of management and to provide better insight into our ongoing financial performance.

A material limitation associated with the use of the above non-GAAP financial measures is that they have no standardized measurement prescribed by GAAP and may not be comparable to similar non-GAAP financial measures used by other companies. We compensate for these limitations by providing full disclosure of each non-GAAP financial measure and reconciliation to the most directly comparable GAAP financial measure. However, the non-GAAP financial measures should not be considered in isolation from, or as a substitute for, financial information prepared in accordance with GAAP.

See Appendix for reconciliations of Adjusted EBITDA and Non-GAAP Operating Income to the most comparable GAAP metric.

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Due to rounding, numbers presented throughout this and other documents may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures.

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### **Outline**

- Who is TTM?
- Growth Drivers
- TTM Differentiation
- Recent Events
- TTM and Anaren Financial Highlights



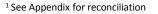


# Leading Global Printed Circuit Board Manufacturer

### **Technology-enabled end markets and customers**

- Critical supplier to today's fastest growing technologies such as smart phones, automobile technology and medical imaging
- ✓ Significant global footprint with 25 facilities, 30,000 employees and \$2.8 billion in assets
- ✓ Scale: \$2,659 mm FY2017 revenue
- ✓ Profitability: \$389mm FY2017 Adj. EBITDA¹







# Why Invest in TTM?

- Solid end market growth with a focus on A&D and Auto
- Diverse end markets
- Differentiated through scale, scope and breadth
- Operating and financial leverage provides earnings power
- Strong free cash flow generation





### **End Market Growth Drivers and Outlook**

FY 2017 Net Sales

**End Market Growth Drivers** 

2016 – 2021 CAGR (3<sup>rd</sup> party) 2018 TTM View

Aerospace / Defense



16%

• Increased Commercial Air Traffic

• Increased Military Equipment Builds

2-4%

Above

Source: TTM filings, Prismark Partners Feb 2017, BCA Research, Company estimates 

¹ Other mobile devices such as e-readers are included in the "Other" end market





# Aerospace and Defense Megatrends

Increasing
Defense Budgets



20% Increase FY17-FY19

Key Program ramps



79 key DoD Program ramps

Increasing
Passenger Traffic



7.6% YoY 2017 Airline Traffic

Commercial Fleet Upgrade

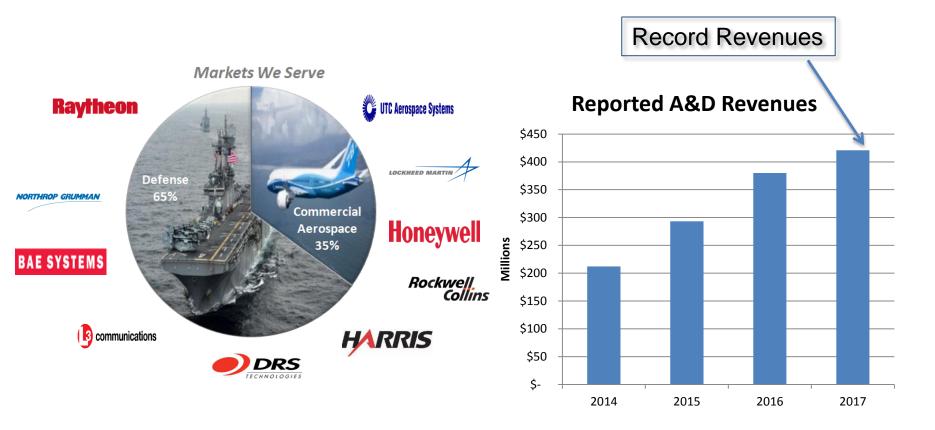


Boeing record backlog





# Leading Player Aligned with Top Tier A&D Customers



#1 A&D PCB Manufacturer with 2017 Revenues of ~\$420M





### **End Market Growth Drivers and Outlook**

	FY 2017 Net Sales	End Market Growth Drivers	2016 – 2021 CAGR (3 <sup>rd</sup> party)	2018 TTM View
Aerospace / Defense	16%	<ul><li>Increased Commercial Air Traffic</li><li>Increased Military Equipment Builds</li></ul>	2-4%	Above
Automotive	19%	<ul><li> Electric Vehicle</li><li> Safety/ADAS/Infotainment</li></ul>	5-8%	In Line

Source: TTM filings, Prismark Partners Feb 2017, Company estimates

¹ Other mobile devices such as e-readers are included in the "Other" end market





## **Automotive Megatrends**



### **Vehicle Safety**

Advanced Driver Assistance Systems (radar, LiDar, cameras)

CAGR 10% (Source: Markets and Markets)

# **Automated Driving**

Sensors, Cameras, GPS, Radar, LiDar Artificial Intelligence

CAGR 134% (Source: Business Insider, Lux Research)

### Connectivity/ Infotainment

Wireless communication, High resolution/touch display, voice recognition

CAGR 12% (Source: Research and Markets)

### **EV/Hybrid**

Inverters/Converters
Battery Management
Charge Modules

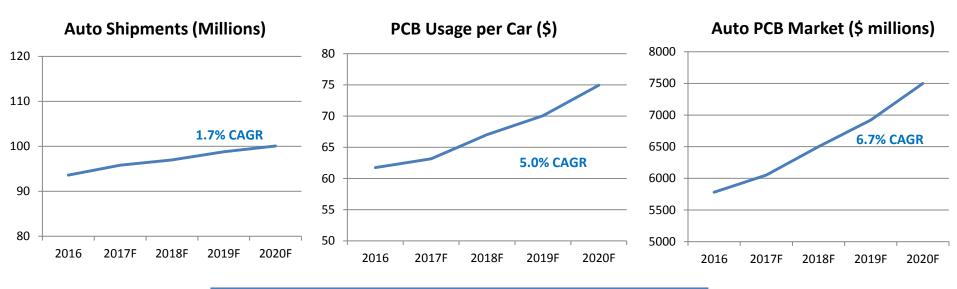
**CAGR 23%** 

(Source: Technavio, Bloomberg)





# **Drives Increasing Electronic Content**



PCB Usage per Car						
Туре	Sq. Meter	USD	MM units			
Compact	0.4 – 0.5	30– 40	~ 36.4			
Mid-Range	0.5 – 0.8	50 – 70	~ 56.4			
Luxury	1.5 – 3.0	100 - 150	~ 7.2			

Average PCB content per vehicle \$62 in 2016 to \$75 in 2020

Source: NTI Digest, September 2017



# Leading Player Aligned with Tier 1 Auto Suppliers





#2 Auto PCB Manufacturer<sup>1</sup> with 2017 Revenues of ~\$510M





### **End Market Growth Drivers and Outlook**

		FY 2017 Net Sales	End Market Growth Drivers	2016 – 2021 CAGR (3 <sup>rd</sup> Party)	2018 TTM View
Aerospace / Defense		16%	<ul><li>Increased Commercial Air Traffic</li><li>Increased Military Equipment Builds</li></ul>	2-4%	Above
Automotive		19%	<ul><li>Electric Vehicle</li><li>Safety/ADAS/Infotainment</li></ul>	5-8%	In Line
Cellular Phone	3	18%	<ul><li>New Phone Functionality</li><li>Emerging Markets</li></ul>	5-8%	In Line
Computing / Storage / Peripherals		13%	<ul><li>High end PC's</li><li>Internet of Things</li></ul>	0-2%	In Line
Medical / Industrial / Instrumentation		14%	<ul><li>Patient Monitoring</li><li>Home Automation</li></ul>	4-6%	In Line
Networking / Communications	HIT EST	18%	<ul><li>4G/5G Infrastructure Spend</li><li>Data Center expansion</li></ul>	1-3%	Below
Other <sup>1</sup>	Total Control of the	2%			

Source: TTM filings, Prismark Partners Nov 2017, Company estimates

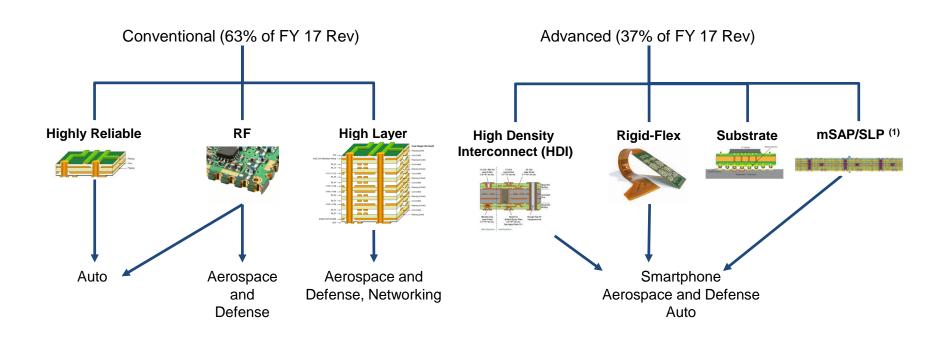
<sup>&</sup>lt;sup>1</sup>Other end market includes other consumer devices such as wearables, portable video devices and personal headphones





# TTM Offers Broad Technology Capabilities

#### Increasing focus on advanced technology to drive growth

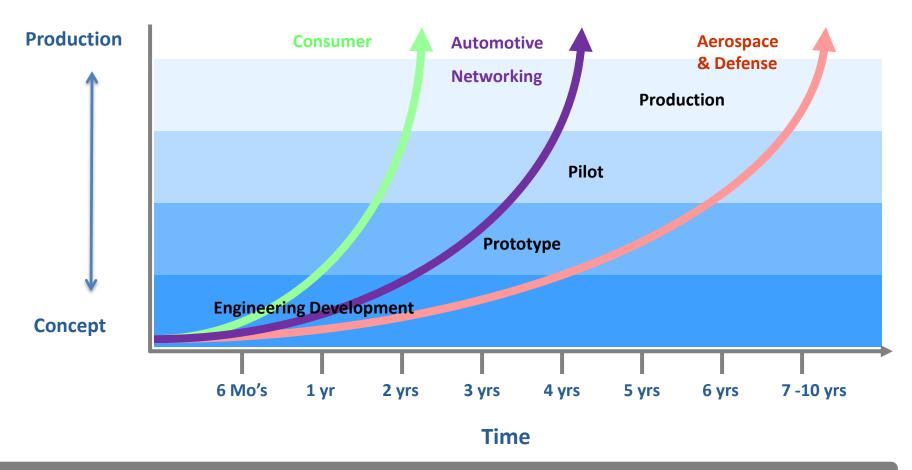




. mSAP = Modified semi additive process. SLP = Substrate like PCB.



# Customer Engagement Model



Engaging customers from concept to volume production





### Operations Close to Customer's Supply Chain





A&D

Aerospace & Defense Specialty

1 Santa Ana - SA

2 San Diego - SD

3 Stafford - ST

Stafford Springs - SS 9 North Jackson - NJ

5 Sterling - STE

6 Anaheim - ANA

7 Denver - DEN

8 Forest Grove - FG

10 Santa Clara, SC

**AMI&I** 

Automotive

11 Zhongshan - ZS

12 Guangzhou - GZ

15 San Jose - SJ

14 Logan - LG

Medical, Ind, Inst

13 Huiyang - HY

16 Toronto - TOR

C&C

Mobility

Guangzhou – GME Guangzhou - FPC

18 Shanghai – SME

19 Shanghai - SP

20 Hong Kong - OPCM

21 Chippewa Falls

Communications

22 Dongguan - DMC

E-MS

**E-M Solutions** 

23 Shanghai – SH BPA

24 Shanghai – SH E-MS

25 Shenzhen - SZ





### **Recent Events**



TTM Technologies, Inc. Acquisition of Anaren, Inc.



### **Transaction Overview**

# TRANSACTION CONSIDERATION

- \$775M purchase price for 100% equity in Anaren, Inc., subject to working capital adjustment at closing
- 100% cash consideration, financed with:
  - \$600M incremental senior secured term loan facility under TTM's existing credit agreement, and cash on hand

#### **FINANCIAL IMPACT**

- Immediately accretive to TTM's non-GAAP operating margin and adjusted EBITDA margin
- Immediately accretive to TTM's non-GAAP EPS and free cash flow
- Expected to achieve \$15M run rate in cost synergies within two years after closing

# PRO FORMA CAPITALIZATION AT CLOSING

- Projected Net Debt / LTM adjusted EBITDA of 3.0x at closing, inclusive of cost savings
- Rapid de-leveraging to achieve target net leverage of 2.0x adjusted EBITDA within 2 to 3 years after close will remain a high priority for TTM

# APPROVAL PROCESS AND CLOSING

Closed April 18<sup>th</sup>, 2018





### **Anaren Overview**

#### Radar



**Space** 



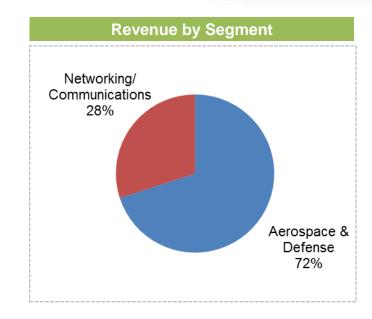
#### **Electronic Warfare**



#### **Wireless Infrastructure**



- Leading provider of mission-critical RF / microwave solutions for space, defense and wireless infrastructure end markets
- Sole-sourced and spec'd in positions on high-priority programs through custom-designed, highlyintegrated subsystems and components
- LTM 12/30/17 revenue of \$234M / Adjusted EBITDA of \$61M<sup>(1)</sup>
- Over 1,000 employees globally, with 235 engineers



<sup>1</sup>See Appendix for reconciliation





### Strategic Rationale

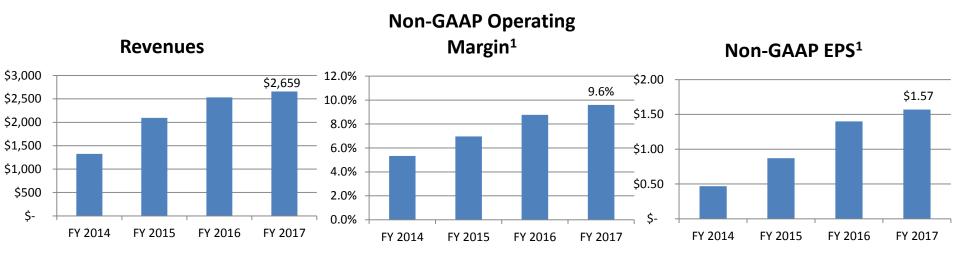
- ✓ Provides differentiated RF expertise in space & defense and embedded technology critical to wireless infrastructure
- ✓ Enhances TTM's strong A&D position and provides new market growth opportunity for the industrial, medical and automotive markets
- ✓ Significantly enhances TTM's A&D business from "Build to Print" to "Build to Spec"
- ✓ Combined customer base includes industry leaders in aerospace & defense and wireless communication infrastructure markets
- ✓ Strong management and engineering talent with extensive experience in the RF design
- ✓ Compelling value creation with Anaren projected to be accretive to TTM's non-GAAP operating margin, adjusted EBITDA margin, non-GAAP EPS and free cash flow





**Financial Overview** 

# Reported Revenue and Profit Growth



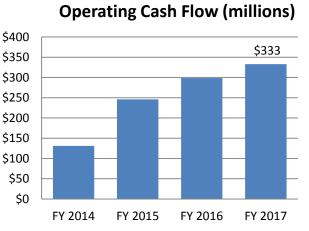
<sup>1</sup>See Appendix for reconciliation

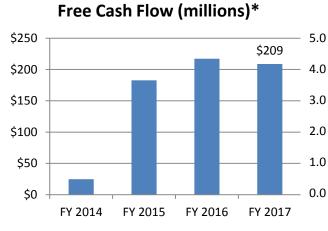
### *Improving margins and EPS*

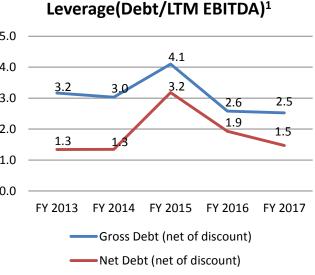




# Strong Free Cash Flow Generation







### Free cash flow used to pay down debt

\*Free Cash Flow is Operating Cash Flow minus capex

<sup>&</sup>lt;sup>1</sup>See Appendix for reconciliation





# **Recent Quarterly Trends**

#### **Net Sales**

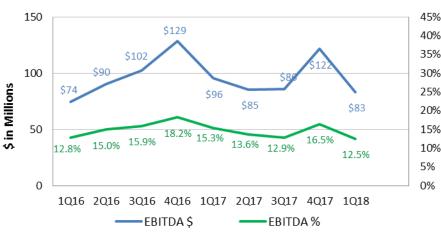


### **Cash Flows from Operations**

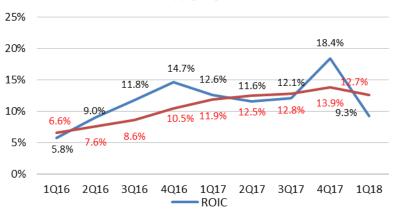


<sup>1</sup>See Appendix for reconciliation

#### EBITDA<sup>1</sup>



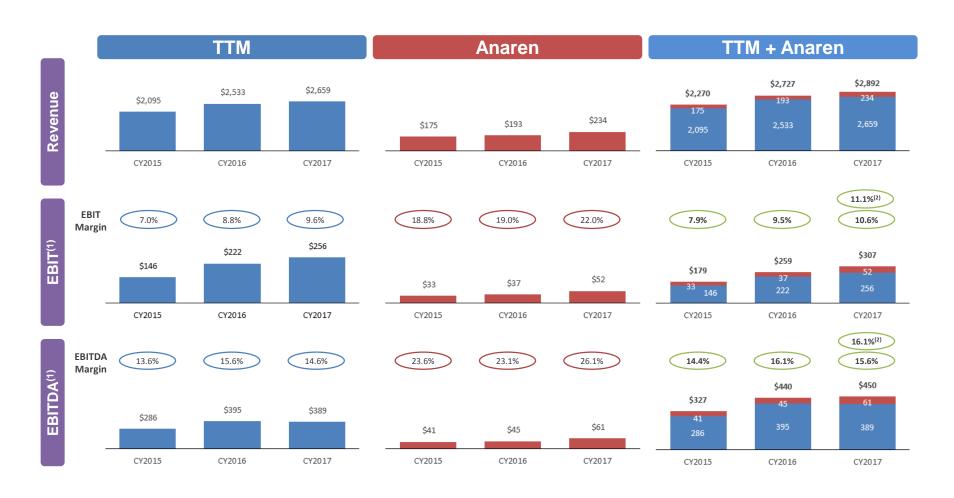
#### **ROIC**



\*LTM ROIC for 1Q16 to 4Q16 are calculated based on YTD average



### TTM+ Anaren: Strengthened Financial Profile



Source: Company disclosure, in \$ millions.

- 1. Non-GAAP EBIT Margin and Adjusted EBITDA. Excludes cost savings. See appendix for reconciliation.
- 2. Including ~\$15 million in run-rate cost savings.



# **Investment Highlights**

- Global leader in the PCB manufacturing market with emphasis on advanced technology
- Diverse end markets with growth opportunities in automotive and aerospace and defense
- One stop shop offering a breadth of products and services ranging from concept to volume production globally
- Improving margins and strong free cash flow generation
- Anaren acquisition adds significant "build to spec" capability to TTM portfolio and the opportunity to improve financial profile



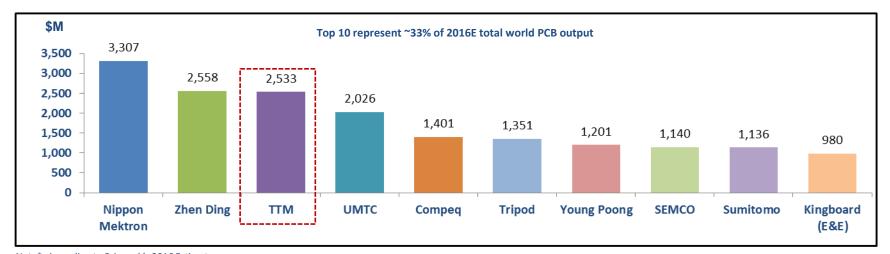




**Appendix** 

# A Leading Global Player

### 2016\* Top 10 world PCB manufacturers by revenue (\$ millions)



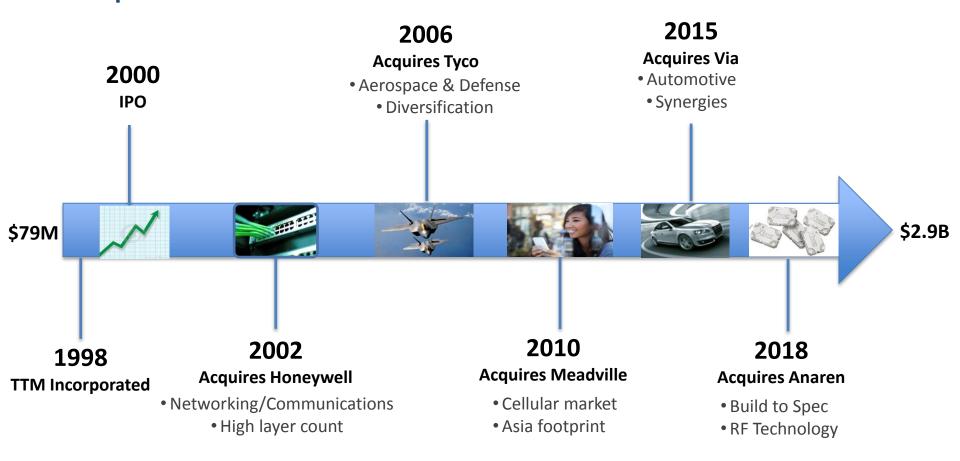
Note\*: According to Prismark's 2016 Estimates Source: Prismark Partners May 2017 (Ref: 217.3/316kk)

- A leading supplier to commercial aerospace & defense contractors
- A major supplier to the high growth automotive end market
- Core supplier to wide range of high-end networking products addressing increasing bandwidth demands
- A strong position in advanced mobile device market





# The Evolution of TTM Through Strategic Acquisitions



Increased scale, diversification, and differentiation

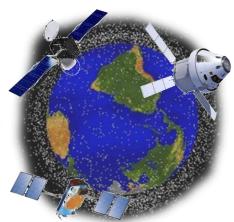


### Focused Defense Product Area's









### Microwave Systems

- F-35 (JSF)
- AMDR
- Q-53
- F-16 (SABR)
- JSTARS
- SEWIP

### Missile Systems

- AMRAAM
- Standard Missile
- JAGM
- JDAM
- Hellfire
- Paveway

### Communication Systems

- JTRS
- Soldier Radio
- Rifleman
- MANPACK

### Space Systems

- Orion
- GOES
- · GPS III
- SBIRS
- XM4





# **Key Outstanding Debt**

- Term loan B (\$950 million)
  - Inclusive of \$600 additional for Anaren
  - Due September, 2024
  - Interest rate: Libor plus 2.50%
- High Yield Bond (\$375 million)
  - Due October, 2025
  - Interest rate: 5.625%
- Convertible notes (\$250 million)
  - Due Dec 15, 2020
  - Interest rate 1.75%
  - Conversion price \$9.64
  - Call spread strategy increases effective conversion price to \$14.26
    - ~1.5M shares for every \$1 over \$14.26 (3M additional at \$16)



# Reconciliations

\$ Millions (except where noted)	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018
GAAP Gross Profit	\$83.6	\$97.6	\$109.6	\$132.8	\$105.0	\$95.9	\$96.8	\$131.9	\$88.7
Add back items:									
Stock-based compensation	0.3	0.4	0.4	0.5	0.4	0.6	0.6	0.6	0.5
Non-GAAP Gross Profit	83.9	98.1	110.0	133.3	105.4	96.5	97.4	132.5	89.2
GAAP Operating Income Add back items:	18.9	34.7	50.2	69.6	52.6	45.1	44.1	71.0	30.0
Amortization of intangibles	5.9	5.9	5.9	6.4	5.9	5.9	5.9	5.9	5.9
Stock-based compensation	2.2	2.8	2.8	3.2	3.6	5.0	4.7	5.0	3.6
(Gain)/loss on sale of assets	-	(1.5)	-	-	(1.5)	(1.3)	0.5	-	-
Impairment, restructuring, acquisition-related and other charges	6.0	4.6	2.3	1.7	0.7	0.4	0.1	2.3	5.0
Non-GAAP Operating Income	33.0	46.6	61.3	81.0	61.3	55.1	55.2	84.3	44.5
GAAP TTM Technologies Net Income (Loss) Add back items:	(7.3)	18.5	25.6	(2.0)	33.0	20.6	21.5	49.2	10.1
Amortization of intangibles	5.9	5.9	5.9	6.4	5.9	5.9	5.9	5.9	5.9
Stock-based compensation	2.2	2.8	2.8	3.2	3.6	5.0	4.7	5.0	3.6
Non-cash interest expense	6.2	5.6	4.7	2.7	2.6	2.7	2.7	3.0	3.1
(Gain)/loss on sale of assets	-	(1.5)	-	-	(1.5)	(1.3)	0.5	-	-
Loss on extinguishment of debt	-	-	-	47.8	-	0.0	8.0	-	
Impairment, restructuring, acquisition-related and other charges	6.0	4.6	2.3	1.7	0.7	0.4	0.1	2.3	5.3
Income taxes	0.8	(7.6)	(1.2)	0.0	(5.1)	(0.1)	(2.6)	(4.2)	0.1
Non-GAAP TTM Technologies Net Income	13.9	28.4	40.1	59.8	39.2	33.3	33.4	61.2	28.0
Non-GAAP EPS (\$ per diluted share)	\$0.14	\$0.28	\$0.39	\$0.58	\$0.37	\$0.31	\$0.32	\$0.57	\$0.26
GAAP Net Income (Loss) Add back items:	(7.2)	18.8	25.8	(1.8)	33.1	20.8	21.5	49.3	10.1
Income tax provision (benefit)	5.5	(1.0)	9.5	17.4	4.1	5.6	1.2	4.3	5.1
Interest expense	21.8	20.1	18.9	15.3	13.6	12.9	13.6	13.8	13.7
Amortization of intangibles	5.9	5.9	5.9	6.4	5.9	5.9	5.9	5.9	5.9
Depreciation expense	40.2	40.5	37.0	38.5	36.1	36.1	37.5	41.1	39.8
Stock-based compensation	2.2	2.8	2.8	3.2	3.6	5.0	4.7	5.0	3.6
(Gain)/loss on sale of assets	-	(1.5)	-	-	(1.5)	(1.3)	0.5	-	-
Loss on extinguishment of debt	-	- 1	-	47.8	- 1	0.0	0.8	-	-
Impairment, restructuring, acquisition-related and other charges	6.0	4.6	2.3	1.7	0.7	0.4	0.1	2.3	5.0
Adjusted EBITDA	74.5	90.2	102.2	128.5	95.6	85.5	85.7	121.7	83.2





# Reconciliations

\$ Millions (except where noted)	2014	2015	2016	2017
GAAP Gross Profit	\$194.7	\$310.1	\$423.6	\$429.6
Add back item:				
Inventory markup	-	16.2	-	-
Stock-based compensation  Non-GAAP Gross Profit	0.9 <b>195.6</b>	1.1 327.5	1.6 <b>425.2</b>	2.3 <b>431.8</b>
	193.0	327.3	423.2	431.8
GAAP Operating Income Add back items:	46.5	61.3	173.5	212.8
Amortization of intangibles	8.4	18.9	24.3	23.6
Stock-based compensation	7.8	9.7	11.1	18.3
Impairment, restructuring, and acquisition-related charges	7.9	42.3	14.6	3.6
Inventory markup	-	16.2	-	-
Other infrequent items	0.0	(2.4)	(1.5)	(2.3)
Non-GAAP Operating Income	70.6	146.0	221.9	255.9
GAAP TTM Technologies Net Income (Loss)	14.7	(25.9)	34.9	124.2
Add back items:				
Amortization of intangibles	8.4	18.9	24.3	23.6
Stock-based compensation	7.8	9.7	11.1	18.3
Non-cash interest expense	10.2	15.6	19.2	11.1
Impairment, restructuring, acquisition-related, and loss on extinguishment of debt	7.9	43.1	62.3	4.3
Inventory markup	-	16.2	0.0	0.0
Other infrequent items	0.5	(2.4)	(1.5)	(2.3)
Income tax effects	(10.2)	5.9	(8.0)	(12.1)
Non-GAAP TTM Technologies Net Income	39.3	81.1	142.3	167.1
Non-GAAP EPS (\$ per diluted share)	0.47	0.87	1.40	1.57
GAAP Net Income (Loss)	14.7	(25.6)	35.6	124.7
Add back items:		(=0.0)	00.0	
Income tax provision	7.6	34.6	31.4	15.2
Interest expense	23.8	59.8	76.0	53.9
Amortization of intangibles	8.4	18.9	24.3	23.6
Depreciation expense	95.3	133.5	156.2	150.8
Stock-based compensation	7.8	9.7	11.1	18.3
Other infrequent items	-	(2.5)	(1.5)	(2.3)
Inventory markup	-	14.2	-	-
Impairment, restructuring, acquisition-related, and loss on extinguishment of debt	8.4	43.1	62.3	4.3
Adjusted EBITDA	166.0	285.7	395.4	388.6





### Anaren Operating Income and EBITDA Reconciliation

(\$ in millions)	CY2015A	CY2016A	LTM 9/30/17	CY2017A	
Reported Operating Income	\$6.7	\$14.1	\$25.5	\$32.4	
Stock based compensation	0.8	0.7	0.7	0.7	
Sponsor fee	1.3	1.3	1.4	1.4	
Debt related fees	0.3	0.3	0.3	0.3	
Non-recurring professional fees	1.3	1.0	0.6	0.4	
Termination and severance costs	0.9	1.0	0.5	0.5	
Amortization	19.8	17.8	16.1	15.0	
MSK operation consolidation	1.5	0.2	0.1	0.0	
Other adjustments - Excluding Transaction Costs	0.2	0.3	0.4	8.0	
Non-GAAP Operating Income	\$32.8	\$36.7	\$45.6	\$51.5	
Depreciation	8.2	8.1	7.9	7.7	
Other adjustments	0.3	(0.1)	1.0	1.8	
Adj. EBITDA	\$41.3	\$44.7	\$54.5	\$61.0	



Note: Figures may not sum exactly due to roundi

