



Alpha and Omega Semiconductor (Nasdaq: AOSL)

Investor Presentation

February 2019



Safe Harbor Statement



This presentation contains forward-looking statements that are based on current expectations, estimates, forecasts and projections of future performance based on management's judgment, beliefs, current trends, and anticipated product performance. These forward looking statements include, without limitation, statements relating to projected amount of revenues, gross margin, operating income, statements regarding market segments, diversification of products and new customers; the expected trend on revenue and sales for each segment of our serviceable market; the progress of construction of manufacturing facility in our joint venture with Chongqing funds; our ability and strategy to develop new products in DMOS. PIC and Digital Power Controller, expand our sales, revenue and profitability; expectation with respect to our license agreement with STMicroelectronics; our ability to manage supply constraints and the expectation with respect to capacity limitation; the execution of our business plan; and other information regarding the future development of our business. Forward-looking statements involve risks and uncertainties that may cause actual results to differ materially from those contained in this presentation. Additional information concerning these and other risk factors is contained in the Risk Factors sections of our most recently filed Forms 10-K and 10-Q. AOS undertakes no obligation and does not intend to update these forward-looking statements to reflect events or circumstances occurring after this presentation.

Non-GAAP Results

Non-GAAP results referenced in this presentation contain non-GAAP financial measures because the financial community uses non-GAAP results in its analysis and comparison of historical results and projections of the Company's future operating results. These non-GAAP results exclude share-based compensation expense, Chongqing pre-production expenses and certain other expenses and benefits. Management uses these non-GAAP measures to manage and assess the profitability of the business. These non-GAAP results are also consistent with another way management internally analyzes the company's results and may be useful.



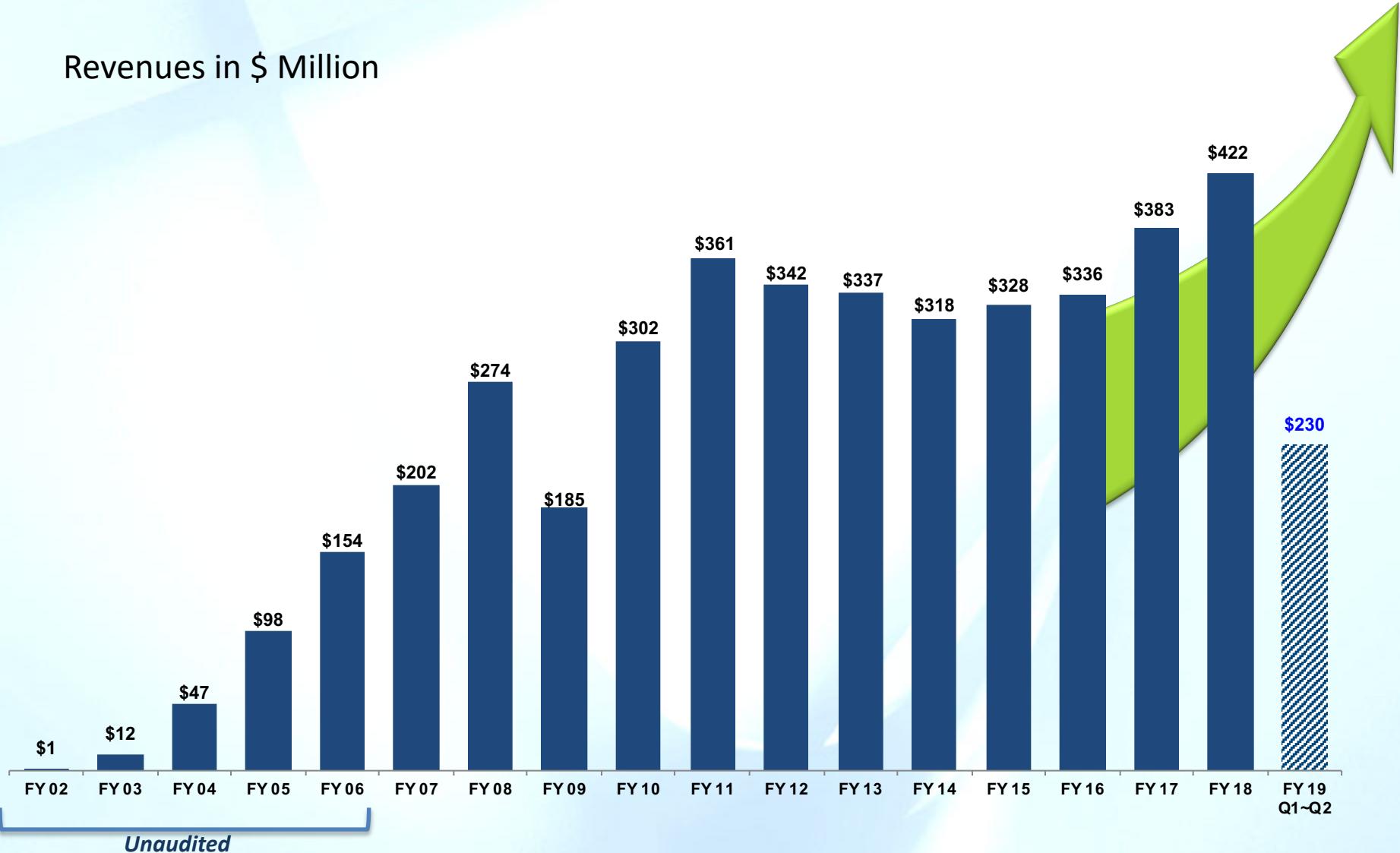
- ❑ 12th consecutive quarter of Y/Y revenue growth
- ❑ Healthy operating cash flow
- ❑ Demand still ahead of capacity driven by high-value new product momentum
- ❑ Stronger partnership with global brand customers

Dollars in millions. Source: Gartner.

Reigniting Growth

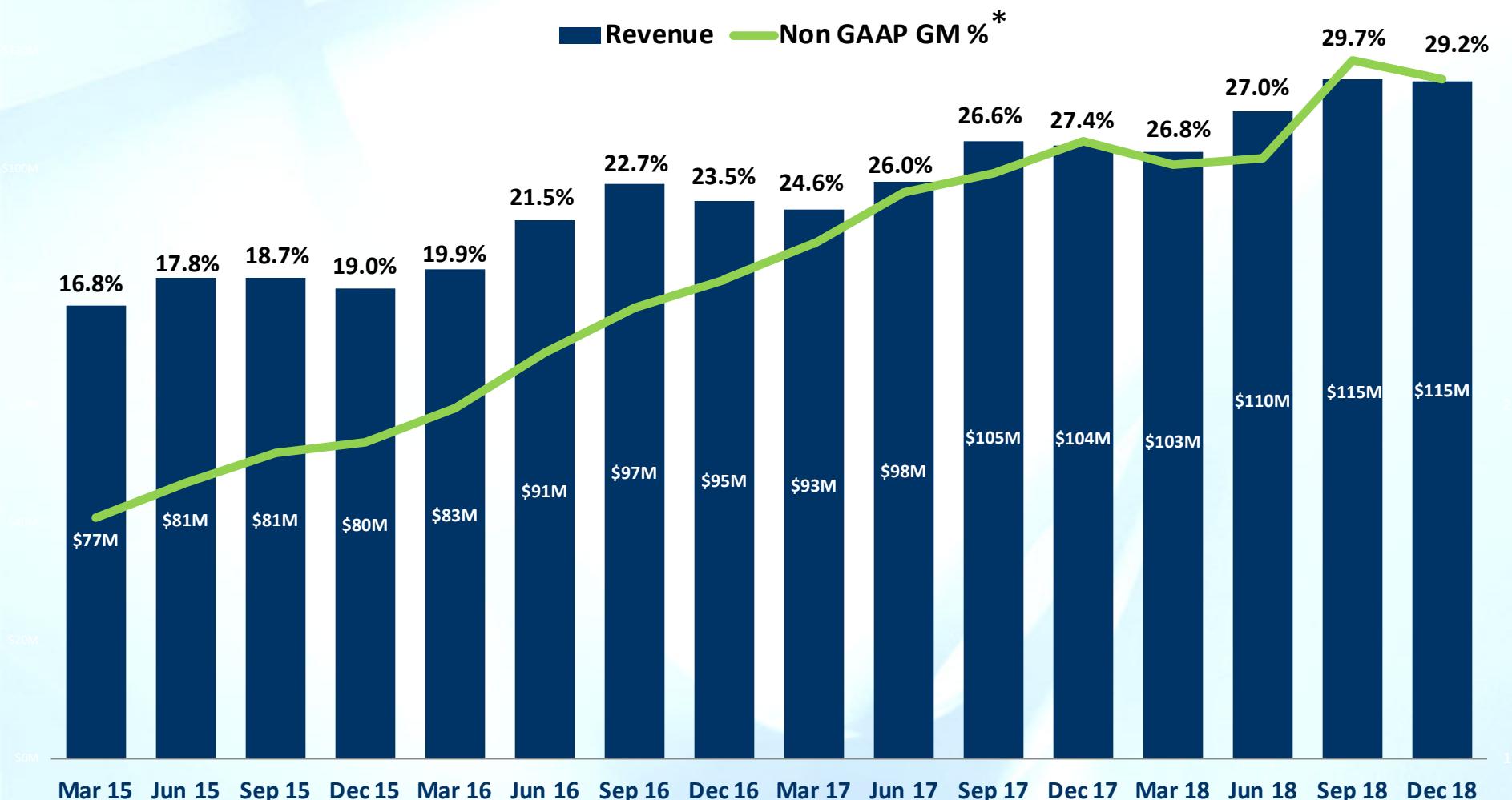


Revenues in \$ Million



Unaudited

Quarterly Revenue & Non GAAP GM%



* Non-GAAP gross margin excludes share-based compensation expenses and production ramp-up costs related to joint venture.

SAM Expansion – New Growth Drivers



License Agreement with STMicroelectronics enables Digital Power Controller Products and >\$1B New Markets

AOSL

- Highly efficient discrete and Power IC
- Differentiated packaging capability
- Strong customer relationship



STMicro IP

- Digital power controller
- Optimal performance and programmability
- Ease-of-use



Advanced PIC

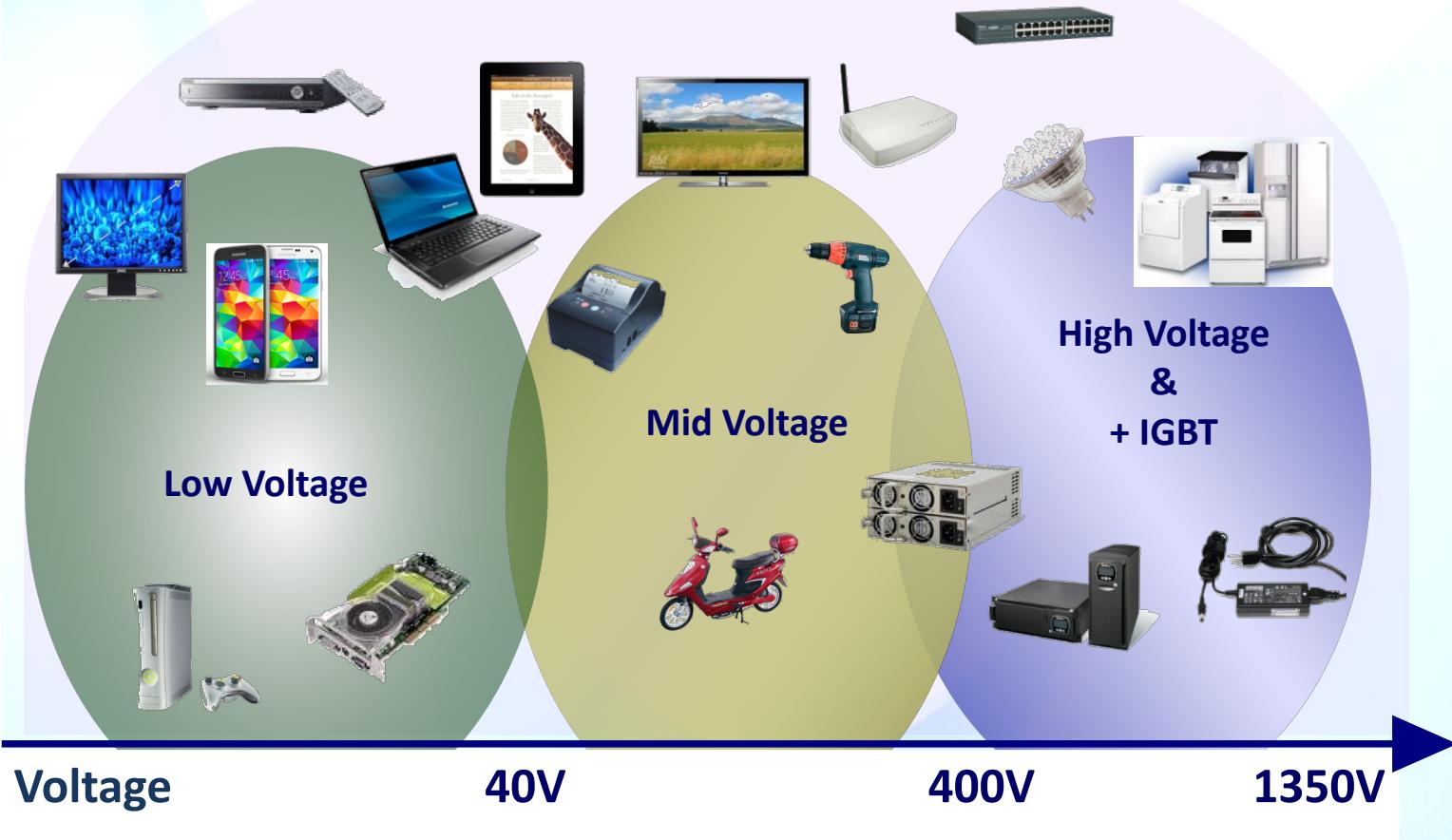
- Total power solution
- Diversify into new markets and customers
- Shift to higher value products

Product Expansion



+ Digital Controller

Co-packaged Power IC and
Modules



Everyone Needs Power



World Class OEMs / ODMs



Key Distributors



Focused Market Segments



Computing



Consumer



Power Supply/ Industrial



Communications



- Notebook PC
- Desktop PC
- Graphic Cards
- Servers

- UHD TVs
- White Goods
- Gaming
- Set Top Boxes

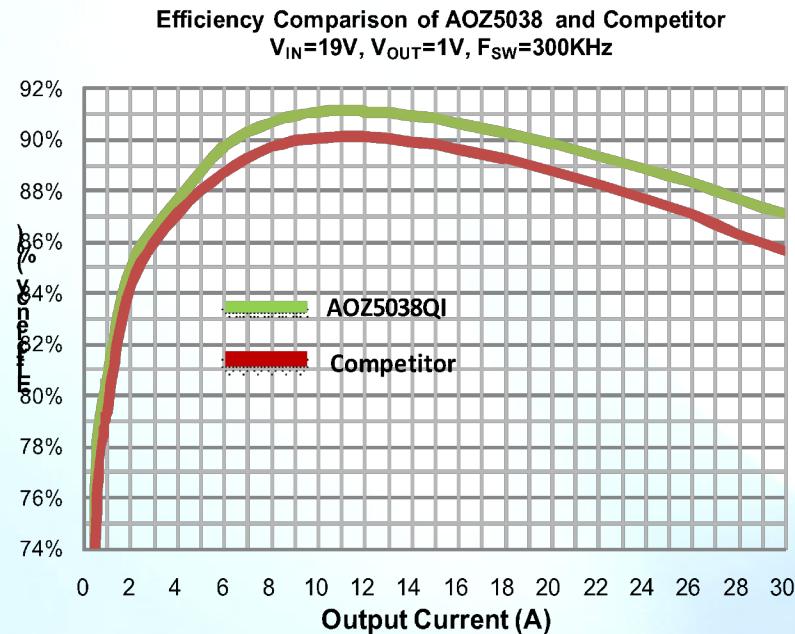
- Quick Charger
- Motion Control
- Power Tools
- Welding

- Smart Phones
- Battery Packs
- Infrastructure
- Networking

Market Leader in Discrete MOSFET PC Power

AOS Advantage

- ❑ New LV platform, cost-performance
- ❑ Power IC DrMOS with high efficiency



Strategy

- ❑ Grow share in high-value sockets
- ❑ Expand BOM content



PCs



Servers

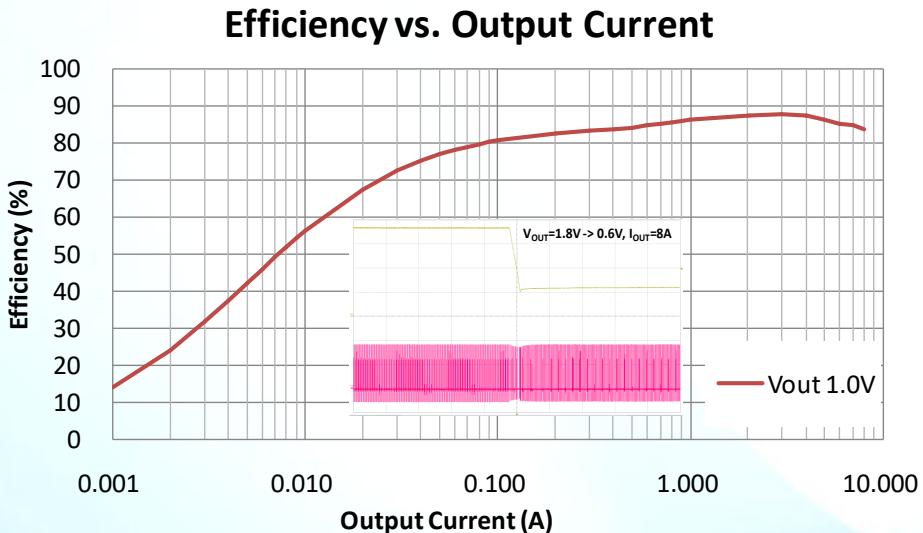


Graphic Cards

IGBT Gaining Traction

AOS Advantage

- High Efficiency solutions for chipset power and for TV backlighting



EzBuck with I²C enables Dynamic voltage scaling for power savings in UHD TV market

Strategy

- SAM expansion with IGBT products
- Geographic diversification of customer base
- Higher BOM with Smart TV trend



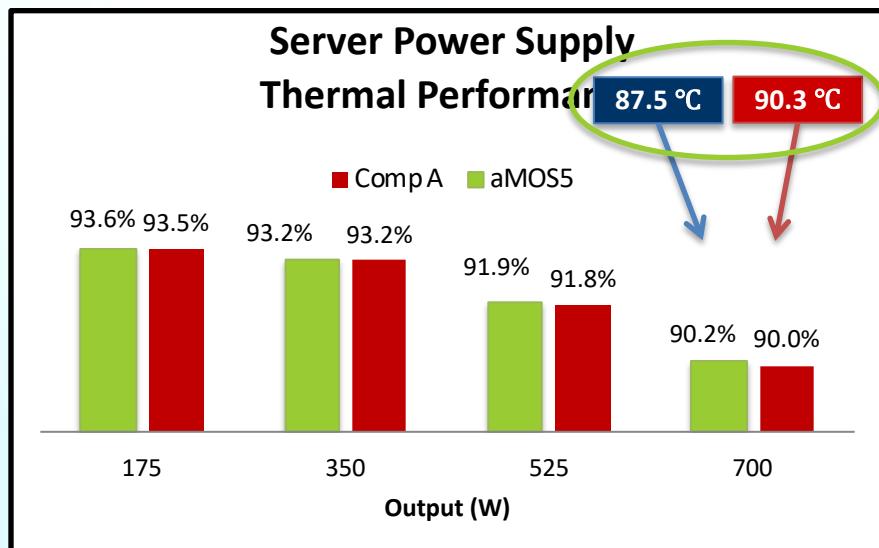
New Market: Home Appliance

Total MOSFET Solutions for High Efficiency

AOS Advantage

- High efficiency High Voltage αMOS5 solutions

Better efficiency and lower thermals



Strategy

- Expand SAM with new high voltage and quick charging solutions
- Broaden customer base in power tools and motion control



Quick Chargers



Arc Welders



AC/DC Adapter



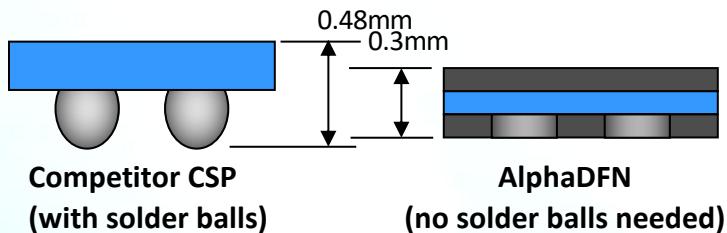
Power Tools

Fastest Growing Segment

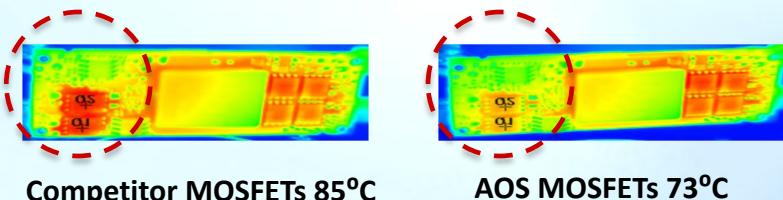
AOS Advantage

- Small package solution with better protection LV MOSFETs
- Leading efficiency MV MOSFETs

Chip Scale Package Thickness



Thermal Measurement on 1/8 Brick Datacom Power Supply



Strategy

- Strategic alliance with global brand high-end smart phone customers
- Further penetrate telecom networking and surge protection applications



Mobile Phones and Battery Packs



Networking Power and Equipment

Chongqing JV (\$379mil)

AOS (51%)

\$35 mil cash contribution

Existing equipment + Certain Mfg. IP

Chongqing (49%)

\$186 mil cash contribution

- ❑ Support growing demand and efficient CapEx
- ❑ Better access to diverse customers in China
- ❑ Phase 1 JV supports ~ \$150 mil of additional AOS revenue

Chongqing JV Buildings and Cleanrooms



Approaching Target Model



Non-GAAP Model

Revenue

Gross Margin*

Operating Expense **

FY19

10% Growth

Mid-High 20%

~22%

Mid-Term

~\$600 mil

>30%

~20%

* Non-GAAP gross margin excludes share-based compensation expenses and production ramp up costs related to joint venture.

** Non-GAAP Operating Expense excludes share-based compensation expenses and pre-production costs related to joint venture.

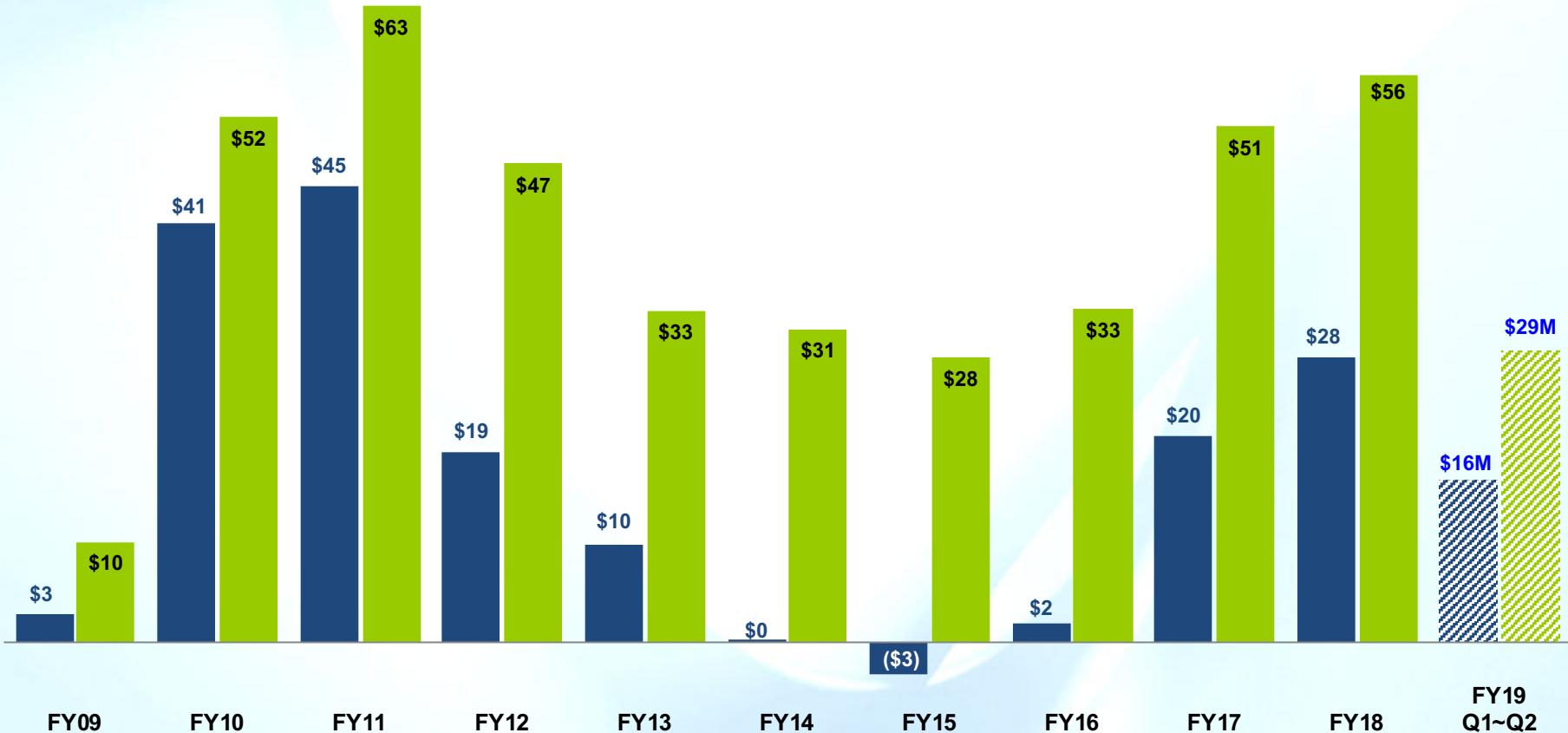
Healthy EBITDAS



(\$Millions)

■ Non GAAP Net Income*

■ EBITDAS



* Non-GAAP net income excludes share-based compensation expenses, production ramp up costs and pre-production costs related to joint venture.

Key Balance Sheet Metrics



(\$Millions, except for ratios)

	FY2016	FY2017	FY2018	FY2019Q2	Comments
Cash	\$87.8	\$115.7	\$131.5	\$146.6	<i>AOS: \$93.6 CQJV: \$53.0</i>
Debt	\$0.0	\$0.0	\$91.3	\$117.9	<i>AOS: \$45.2 CQJV: \$72.7</i>
Trade Receivable	\$26.6	\$28.4	\$33.8	\$33.9	<i>23 days DSO</i>
Inventory	\$68.8	\$76.3	\$90.2	\$103.0	<i>106 days in INV</i>
Fixed Assets, Net	\$116.1	\$148.2	\$331.7	\$380.8	<i>AOS: \$149.3 CQJV: \$231.5</i>
Total Equity	\$242.1	\$298.5	\$426.2	\$444.5	<i>AOS: \$306.7 CQJV: \$137.8</i>

Dollars in millions. Source: Gartner.



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ALPHA & OMEGA
SEMICONDUCTOR

NASDAQ: AOSL

Q&A

www-aosmd.com



APPENDIX

Alpha and Omega Semiconductor Limited

Reconciliation of Condensed Consolidated GAAP Measures to Non-GAAP

(in thousands, except percentages and per share data)

(unaudited)

	Three Months Ended		
	September 30, 2018	June 30, 2018	September 30, 2017
GAAP gross profit	\$ 32,611	\$ 29,183	\$ 27,530
Share-based compensation	497	461	316
Production ramp up costs related to joint venture	1,117	—	—
Non-GAAP gross profit	<u>\$ 34,225</u>	<u>\$ 29,644</u>	<u>\$ 27,846</u>
<i>Non-GAAP gross margin</i>	29.7%	27.0%	26.6%
GAAP net income attributable to AOS	\$ 2,416	\$ 1,021	\$ 4,800
Share-based compensation	3,129	2,935	2,008
Pre-production expenses related to joint venture	2,662	3,643	—
Production ramp up costs related to joint venture	582	—	—
Non-GAAP net income attributable to AOS	<u>\$ 8,789</u>	<u>\$ 7,599</u>	<u>\$ 6,808</u>
<i>Non-GAAP net margin attributable to AOS</i>	7.6%	6.9%	6.5%
GAAP diluted net income per share attributable to AOS	\$ 0.10	\$ 0.04	\$ 0.19
Share-based compensation	0.13	0.12	0.08
Pre-production expenses related to joint venture	0.11	0.15	—
Production ramp up costs related to joint venture	0.02	—	—
Non-GAAP diluted net income per share attributable to AOS	<u>\$ 0.36</u>	<u>\$ 0.31</u>	<u>\$ 0.27</u>
Shares used to compute diluted net income per share	24,594	24,628	24,960