



# Amkor Technology, Inc. Investor Presentation

October 2021

# Disclaimer

## Forward-Looking Statement Disclaimer

This presentation contains forward-looking statements within the meaning of the federal securities laws. You are cautioned not to place undue reliance on forward-looking statements, which are often characterized by terminology such as “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential,” “continue,” or “intend,” by the negative of these terms or other comparable terminology or by discussions of strategy, plans or intentions. These forward-looking statements involve a number of risks, uncertainties, assumptions and other factors that could affect future results and cause actual results and events to differ materially from historical and expected results and those expressed or implied in the forward-looking statements. Other important risk factors that could affect the outcome of the events set forth in these statements and that could affect our operating results and financial condition are discussed in the company’s Annual Report on Form 10-K for the year ended December 31, 2020 (the “Form 10-K”) and in the company’s subsequent filings with the Securities and Exchange Commission (“SEC”) made prior to or after the date hereof. You should carefully consider the trends, risks and uncertainties described in this presentation, the Form 10-K and other reports filed with or furnished to the SEC before making any investment decision with respect to our securities. If any of the following trends, risks or uncertainties actually occurs or continues, our business, financial condition or operating results could be materially adversely affected, the trading prices of our securities could decline, and you could lose part or all of your investment. All forward-looking statements in this presentation are made based on our current expectations, forecasts, estimates and assumptions. Amkor undertakes no obligation to review or update any forward-looking statements to reflect events or circumstances occurring after the date of this presentation except as may be required by law. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by this cautionary statement.

## Non-GAAP Measures

This presentation contains certain measures that are not defined terms under U.S. generally accepted accounting principles (“GAAP”). These non-GAAP measures should not be considered in isolation or as a substitute for, or superior to, measures of liquidity or performance prepared in accordance with U.S. GAAP and may not be comparable to calculations of similarly titled measures by other companies. See the Appendix for a description of these financial measures and a reconciliation of all such non-GAAP financial measures to the most directly comparable U.S. GAAP financial measures.

# Amkor Technology

- ▶ Trusted Outsourced Semiconductor Assembly and Test (OSAT) partner since 1968
- ▶ Advanced packaging leader
- ▶ #1 OSAT for Automotive ICs
- ▶ \$5.1B sales in 2020

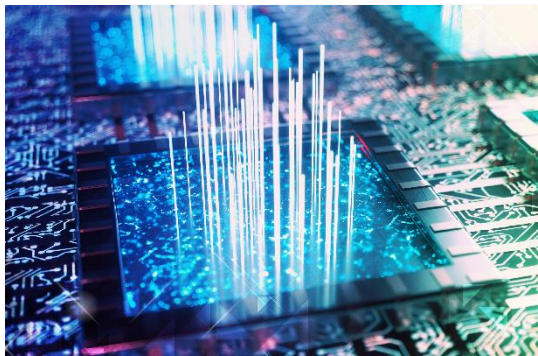


# Amkor in the Supply Chain

Amkor's packaging and test services are an integral part of the worldwide semiconductor supply chain



# Amkor's Differentiators



## Technology

- ▶ Advanced Packaging Leadership
- ▶ Engineering Services
- ▶ Broad Portfolio



## Quality

- ▶ QualityFIRST Culture
- ▶ Execution
- ▶ Automation



## Service

- ▶ Design Through Drop Ship
- ▶ Manufacturing Footprint
- ▶ Local Sales & Support



# Best-in-Class R&D

- ▶ 650+ R&D engineers
- ▶ Design services in 8 countries
- ▶ Fast time to market
- ▶ Complete toolbox of engineering services

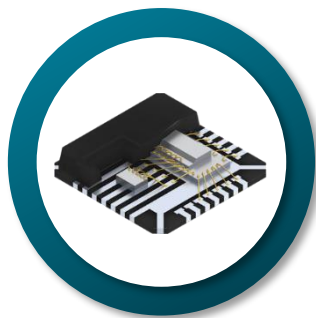


# Complete Package and Test Portfolio

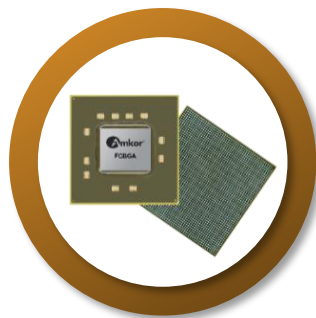
Turnkey services from wafer sort through drop ship



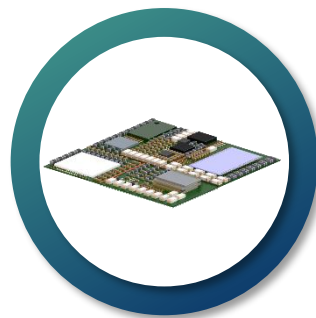
Leadframe/  
Power



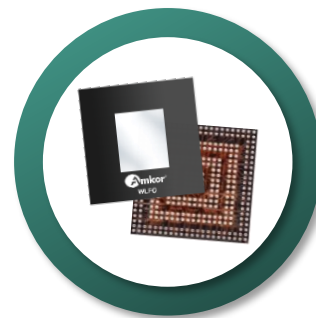
MEMS



Flip Chip



SiP



Wafer Level

# Broad Geographic Footprint

11 million square feet of manufacturing space





# Growth Catalysts Rely on Advanced Packaging



## 5G

- ▶ Mobile comms
- ▶ Connected devices
- ▶ Speed, streaming



## IoT

- ▶ Connected home
- ▶ Wearables
- ▶ Industrial automation



## Automotive

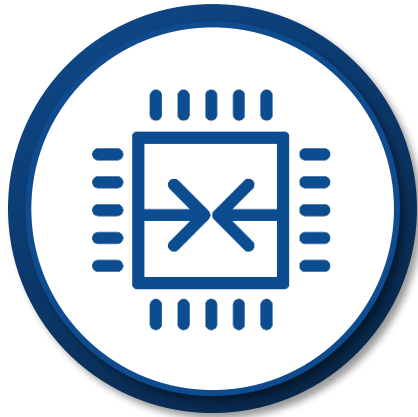
- ▶ ADAS
- ▶ Safety
- ▶ Infotainment
- ▶ Electrification



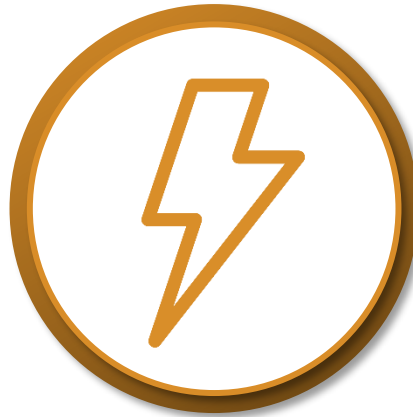
## HPC/Networking

- ▶ AI/AR
- ▶ Data center

# Advanced Packaging Value Proposition



Minimize  
Footprint

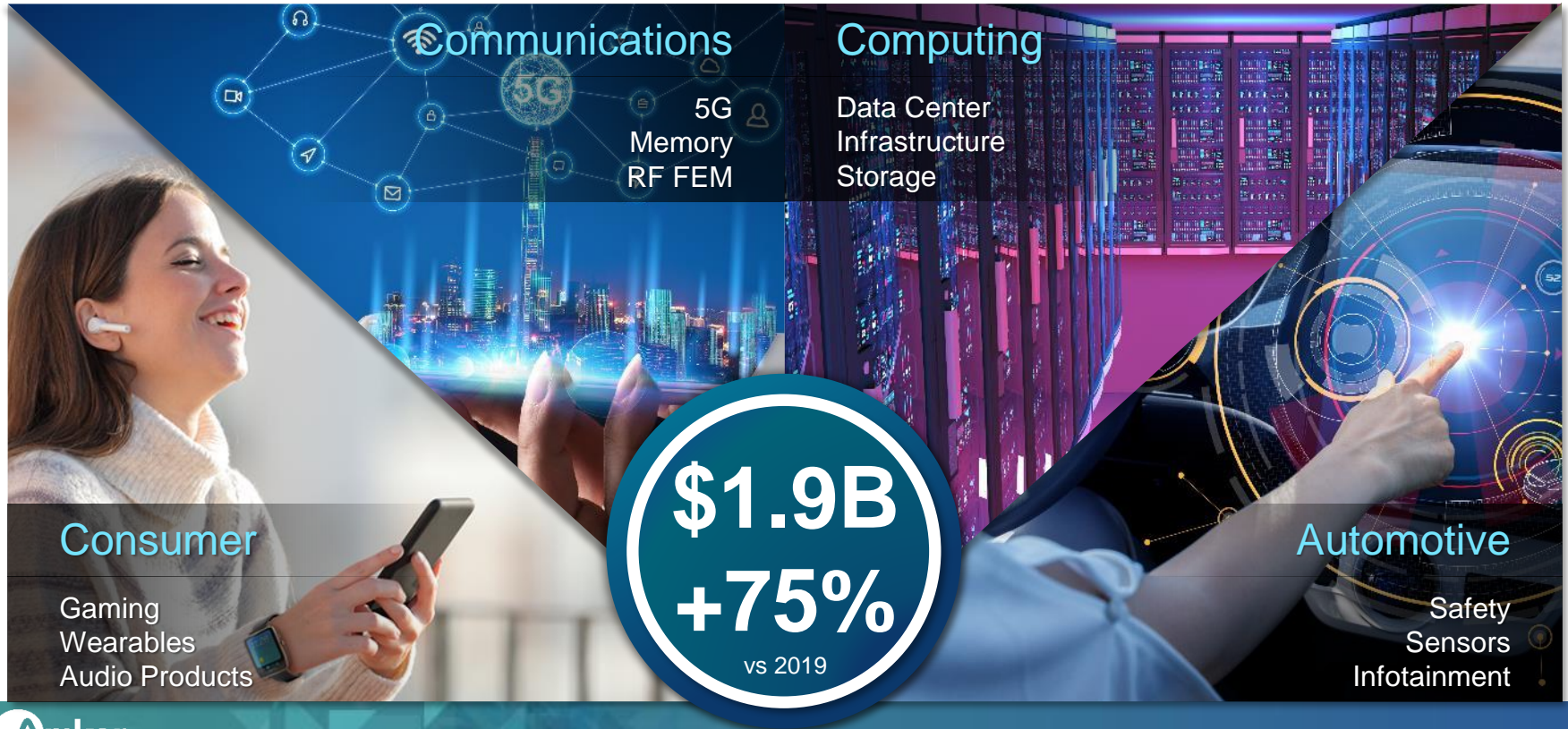


Manage  
Power

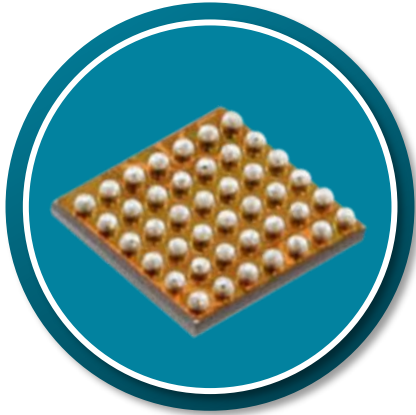


Improve  
Performance

# Advanced SiP Adopted by Multiple Applications



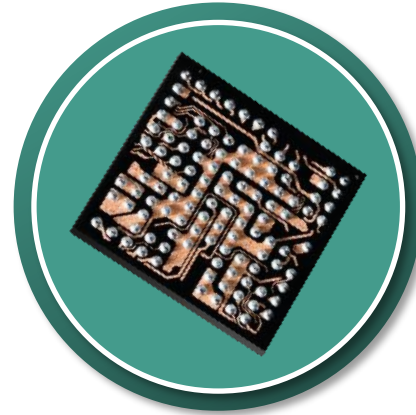
# Wafer Level Packaging



**WLCSP**

**Wafer Level Chip Scale Package**  
(Fan-In)

Eliminates substrate



**WLFO**

**Wafer Level Fan-Out**

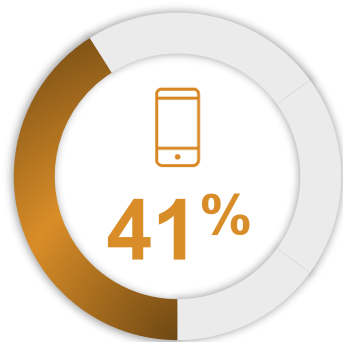
“Stretch” small die to  
accommodate bond pads

# Flip Chip

- ▶ A proven technology
  - ▷ High reliability
  - ▷ Single and multi-die solutions
- ▶ Applications in smartphones, automotive and high performance computing

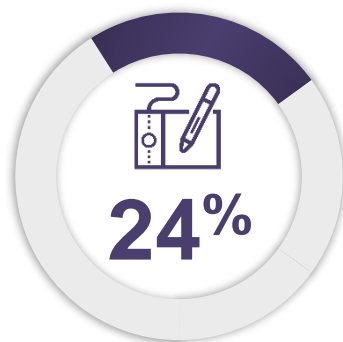


# 2020 End Markets



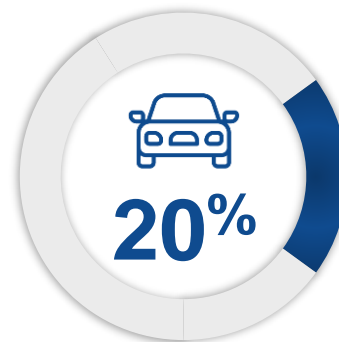
## Communications

Smartphones  
Tablets



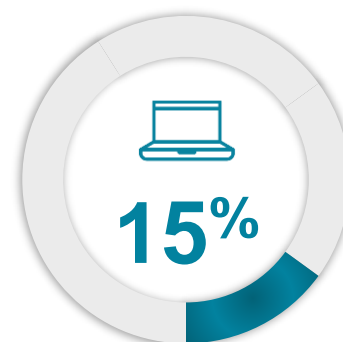
## Consumer

A/R & Gaming  
Connected Home  
Televisions  
Wearables



## Automotive & Industrial

ADAS  
Electrification  
Infotainment  
IoT



## Computing

Data Center  
HPC  
Infrastructure  
Storage



# Amkor Throughout the Smartphone

## Communications

### Value Propositions

- ▶ Recognized technology leader
- ▶ Diverse packaging solutions
- ▶ Large scale manufacturing in multiple geographies

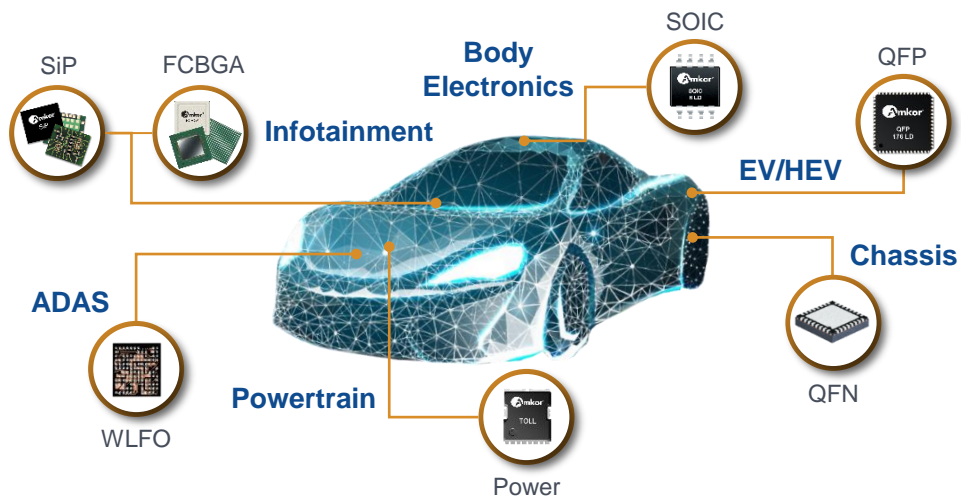


# Amkor Enabling New Applications in the Car

## Largest Automotive OSAT

### Advanced Packages

### Wirebond Packages



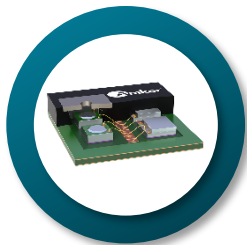
### Value Propositions

- ▶ >40 yrs of Automotive experience
- ▶ QualityFIRST mindset
- ▶ Leader in advanced Automotive packaging

# Amkor Makes IoT Possible

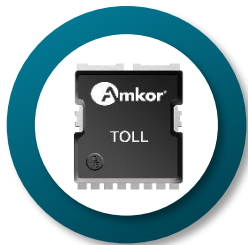
## Consumer

### Multiple Applications



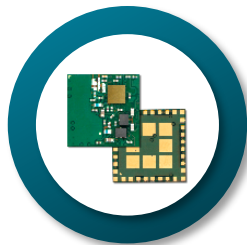
Connectivity  
Sensing  
Computing  
Storage

### Diverse Requirements



Power  
Bandwidth  
Integration  
Security

### Scale



Amkor ships  
billions of IoT  
devices per year!



# Amkor Supports All Big Data Requirements

## Computing



### Data Center

HPC, AI, ML  
Performance  
FCBGA, HDFO, SiP



### Networking

Switch, SerDes  
Integration  
SiP, HDFO, 2.5D

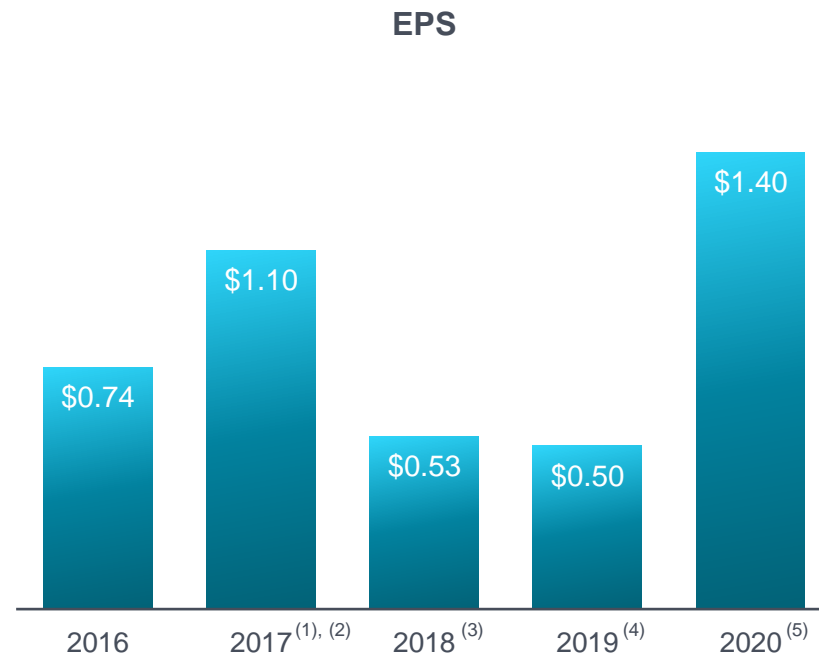
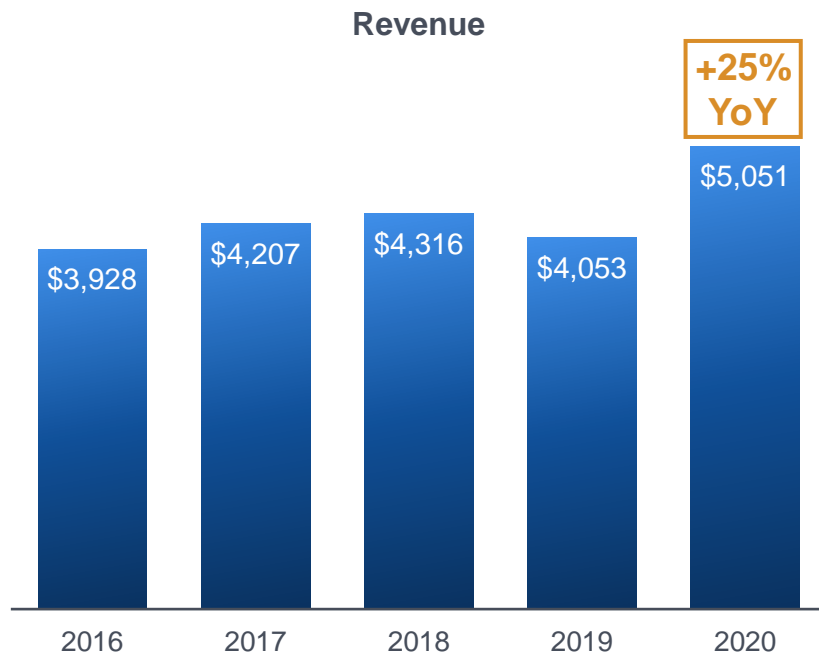


### Storage

Solid State Drive  
Die Stacking  
Stack CSP, WBBGA, SiP

# Revenue & EPS Trends

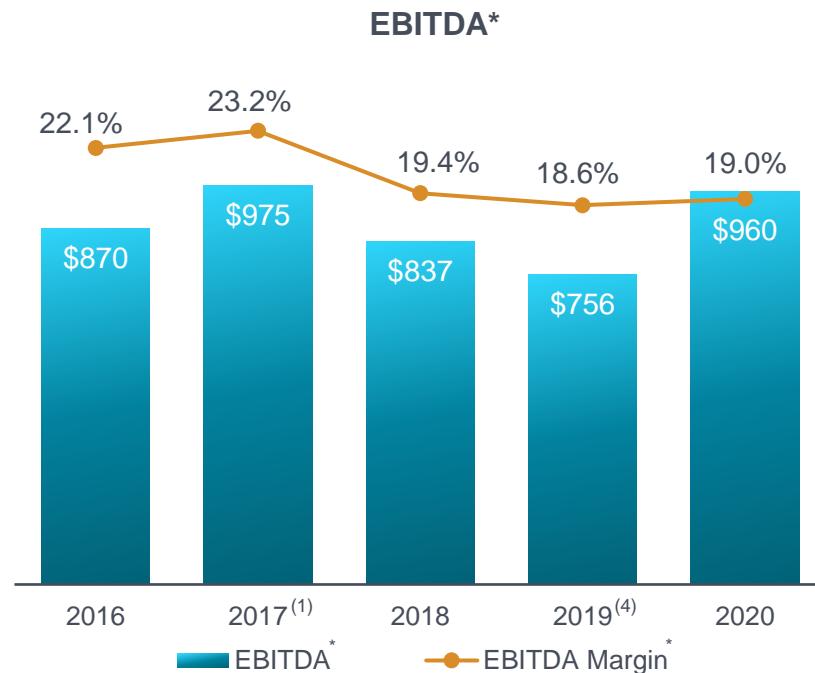
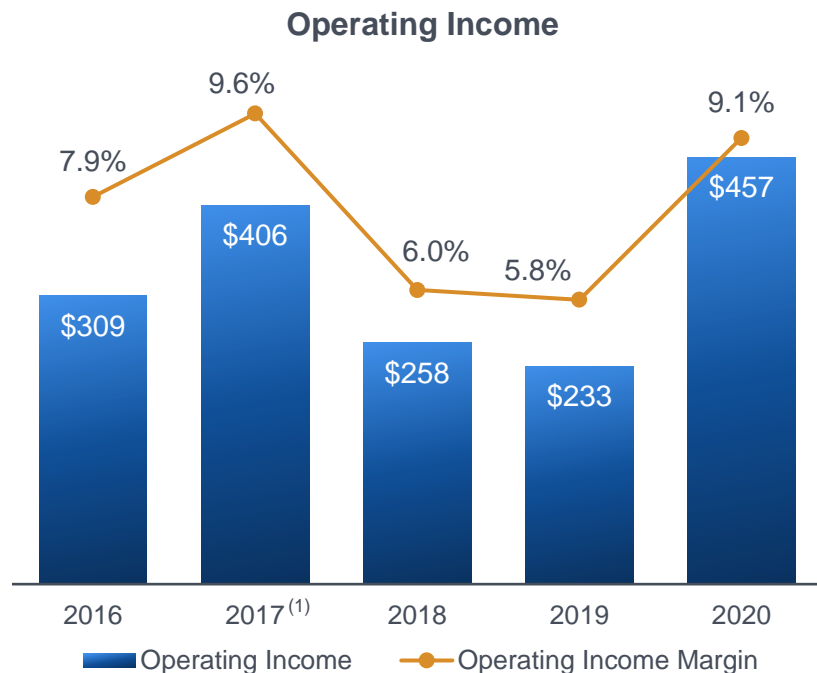
(\$ in millions)



See corresponding endnotes on slide 30.

# Operating Income & EBITDA Trends

(\$ in millions)



See corresponding endnotes on slide 30.

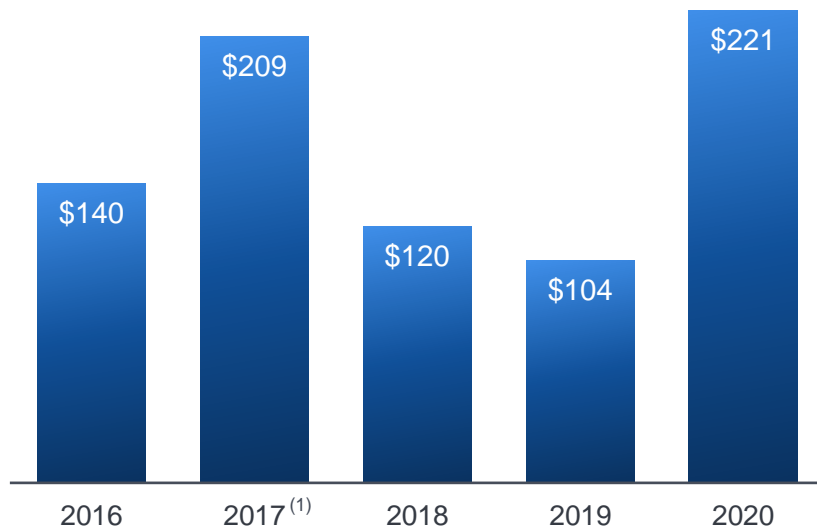
\*See discussion of Non-GAAP measures on slide 29 and the reconciliation to the most directly comparable GAAP measure on slide 27.



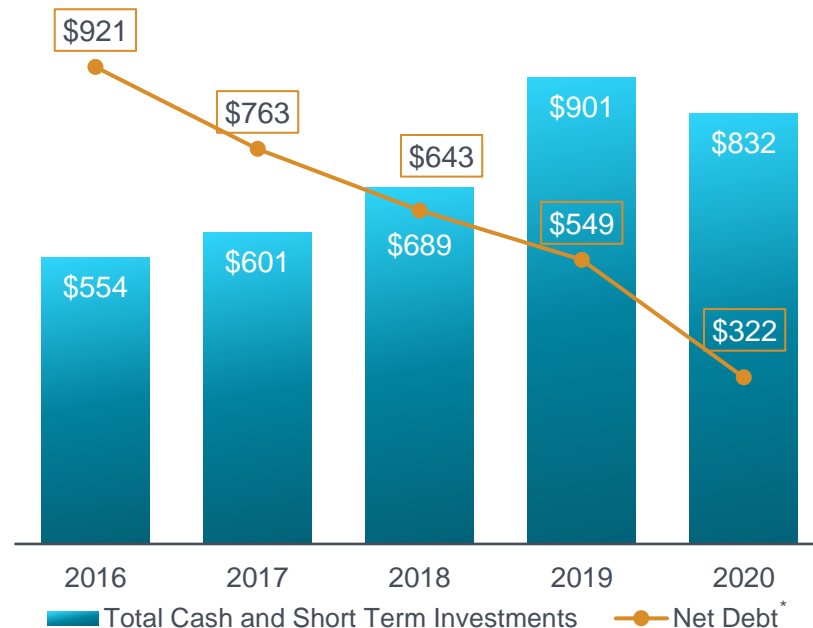
# Free Cash Flow & Balance Sheet Trends

(\$ in millions)

## Free Cash Flow\*



## Balance Sheet Trends

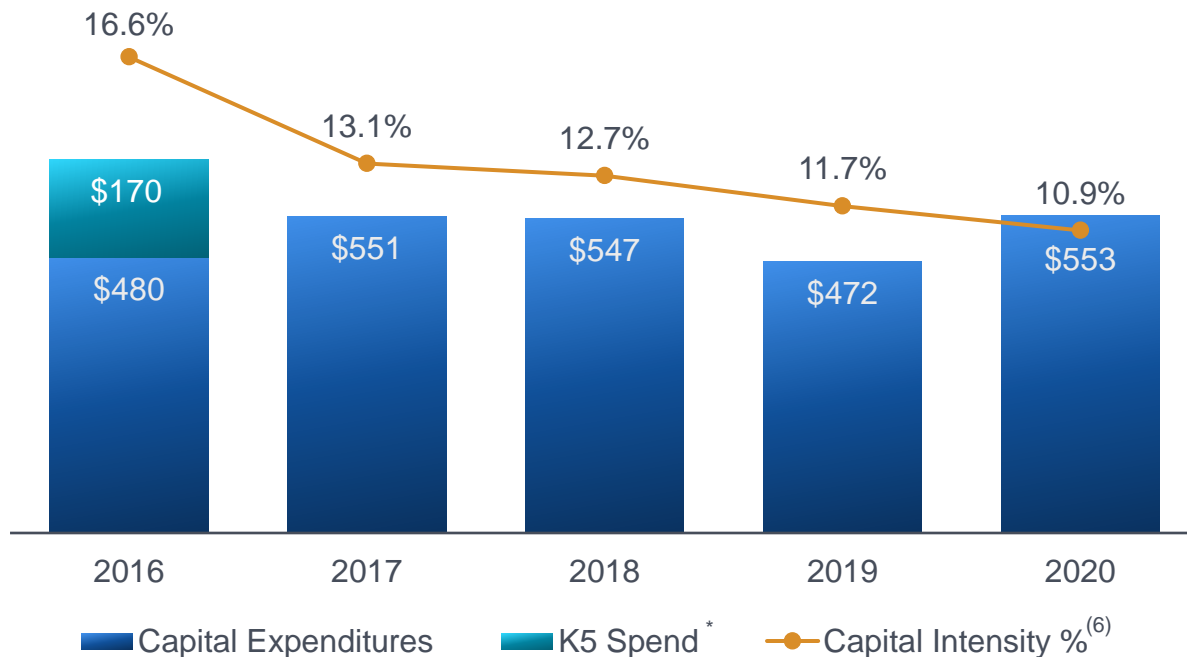


See corresponding endnotes on slide 30.

\*See discussion of Non-GAAP measures on slide 29 and the reconciliation to the most directly comparable GAAP measure on slides 27-28.

# Capital Expenditures and Capital Intensity

(\$ in millions)



Expect 2021 Capital Expenditures<sup>(7)</sup> of Around

**\$775M**

See corresponding endnotes on slide 30.

\*K5 Spend refers to the construction of our K5 facility in Korea, which started operations in 2017.

# Amkor Summary

- ▶ Industry leader
  - ▷ Pioneer of OSAT model
  - ▷ #1 Automotive OSAT
- ▶ Multiple long-term growth drivers
  - ▷ 5G, IoT, Automotive, HPC
  - ▷ Advanced packaging
- ▶ Well-positioned to capture growth
  - ▷ \$775M CapEx
  - ▷ Financial flexibility



A world map with a light blue background. The landmasses are outlined in a darker blue. Overlaid on the map are various geometric shapes in shades of teal and blue, including triangles and polygons, some of which are semi-transparent. The word "Appendix" is written in a dark blue, sans-serif font on the left side of the map.

# Appendix

# Q3 2021 Highlights

<i>(In millions, except per share data)</i>	<b>Q3 2021</b>	<b>Q3 2020</b>	<b>YoY</b>
Net Sales	\$1,681	\$1,354	24%
Gross Margin	19.3%	17.8%	150 bps
Operating Income	\$211	\$127	66%
Operating Income Margin	12.6%	9.4%	320 bps
Net Income attributable to Amkor	\$181	\$92	\$89
Earnings per Diluted Share	\$0.74	\$0.38	\$0.36

- ▶ All-time record revenue and gross profit dollars
- ▶ Operating income margin increased 320 bps YoY
- ▶ Record EPS of \$0.74; YTD EPS of \$1.74, double vs PY

# Q4 2021 Guidance

As of October 25, 2021<sup>(7)</sup>



**\$1.59B-\$1.69B**

Net Sales



**18.0%-20.5%**

Gross Margin



**\$140M-\$190M**

Net Income



**\$0.55-\$0.75**

Earnings per  
Diluted Share

See corresponding endnotes on slide 30.



# Financial Reconciliation Tables

(\$ in millions)	2016	2017 <sup>(1), (2)</sup>	2018 <sup>(3)</sup>	2019 <sup>(4), (8)</sup>	2020 <sup>(5)</sup>
<b>Net Income</b>	<b>\$179</b>	<b>\$268</b>	<b>\$130</b>	<b>\$123</b>	<b>\$340</b>
Plus: Interest Expense (including Related Party)	85	85	79	72	64
Plus: Income Tax Expense	51	40	56	37	46
Plus: Depreciation & Amortization	555	582	572	524	510
<b>EBITDA*</b>	<b>\$870</b>	<b>\$975</b>	<b>\$837</b>	<b>\$756</b>	<b>\$960</b>
<b>Net Sales</b>	<b>\$3,928</b>	<b>\$4,207</b>	<b>\$4,316</b>	<b>\$4,053</b>	<b>\$5,051</b>
<b>Net Income Margin</b>	<b>4.5%</b>	<b>6.4%</b>	<b>3.0%</b>	<b>3.0%</b>	<b>6.7%</b>
<b>EBITDA Margin*</b>	<b>22.1%</b>	<b>23.2%</b>	<b>19.4%</b>	<b>18.6%</b>	<b>19.0%</b>
<b>Total Debt</b>	<b>\$1,475</b>	<b>\$1,364</b>	<b>\$1,332</b>	<b>\$1,450</b>	<b>\$1,154</b>
Less: Cash and Cash Equivalents	(550)	(596)	(682)	(895)	(698)
Less: Short Term Investment	(4)	(5)	(7)	(6)	(134)
<b>Net Debt*</b>	<b>\$921</b>	<b>\$763</b>	<b>\$643</b>	<b>\$549</b>	<b>\$322</b>

See corresponding endnotes on slide 30.

\*See discussion of Non-GAAP measures on slide 29.

# Financial Reconciliation Tables

<i>(\$ in millions)</i>	2016	2017 <sup>(1)</sup>	2018	2019	2020
<b>Net Cash Provided by Operating Activities</b>	<b>\$729</b>	<b>\$618</b>	<b>\$663</b>	<b>\$564</b>	<b>\$770</b>
Less: Payments for Property, Plant and Equipment	(650)	(551)	(547)	(472)	(553)
Plus: Proceeds from Sale of and Insurance Recovery for Property, Plant and Equipment	61	142	4	12	4
<b>Free Cash Flow *</b>	<b>\$140</b>	<b>\$209</b>	<b>\$120</b>	<b>\$104</b>	<b>\$221</b>

See corresponding endnotes on slide 30.

\*See discussion of Non-GAAP measures on slide 29.

# Non-GAAP Measures

Generally, a non-GAAP financial measure is a numerical measure of a company's performance, financial position or cash flows that either excludes or includes amounts that are not normally excluded or included in the most directly comparable measure calculated and presented in accordance with U.S. GAAP.

In this presentation we refer to EBITDA and EBITDA Margin, which are not defined by U.S. GAAP. We define EBITDA as net income before interest expense, income tax expense and depreciation and amortization. EBITDA Margin is calculated by dividing EBITDA by Net Sales for the period. We believe EBITDA and EBITDA Margin, and to be relevant and useful information to our investors because they provide additional information in assessing our financial operating results. Our management uses EBITDA in evaluating our operating performance, our ability to service debt and our ability to fund capital expenditures. However, EBITDA has certain limitations in that it does not reflect the impact of certain expenses on our consolidated statements of income, including interest expense, which is a necessary element of our costs because we have borrowed money in order to finance our operations, income tax expense, which is a necessary element of our costs because taxes are imposed by law, and depreciation and amortization, which is a necessary element of our costs because we use capital assets to generate income. EBITDA and EBITDA Margin should be considered in addition to, and not as a substitute for, or superior to, operating income, net income, net income margin or other measures of financial performance prepared in accordance with U.S. GAAP. Furthermore, our definition of EBITDA may not be comparable to similarly titled measures reported by other companies. Please see Slide 27 for reconciliations to the most directly comparable U.S. GAAP measures.

Free cash flow is not defined by U.S. GAAP. We define free cash flow as net cash provided by operating activities less payments for property, plant and equipment, plus proceeds from the sale of, and insurance recovery for property, plant and equipment, if applicable. We believe free cash flow to be relevant and useful information to our investors because it provides them with additional information in assessing our liquidity, capital resources and financial operating results. Our management uses free cash flow in evaluating our liquidity, our ability to service debt, and our ability to fund capital expenditures and pay dividends. However, free cash flow has certain limitations, including that it does not represent the residual cash flow available for discretionary expenditures since other, non-discretionary expenditures, such as mandatory debt service, are not deducted from the measure. The amount of mandatory versus discretionary expenditures can vary significantly between periods. This measure should be considered in addition to, and not as a substitute for, or superior to, other measures of liquidity or financial performance prepared in accordance with U.S. GAAP, such as net cash provided by operating activities. Furthermore, our definition of free cash flow may not be comparable to similarly titled measures reported by other companies. Please see Slide 28 for the reconciliation to the most directly comparable U.S. GAAP measure.

Net Debt is not defined by U.S. GAAP. We define net debt as total debt as reported on the consolidated balance sheet less the sum of cash and cash equivalents, and short-term investments. We believe net debt to be relevant and useful information to our investors because it provides them with additional information in assessing our capital structure, financial leverage, and our ability to reduce debt and to fund investing and financing activities. This measure should be considered in addition to, and not as a substitute for, or superior to, total debt, prepared in accordance with U.S. GAAP. Furthermore, our definition of net debt may not be comparable to similarly titled measures reported by other companies. Please see Slide 27 for the reconciliation to the most directly comparable U.S. GAAP measure.

# Endnotes

1. In Q2 2017, we sold the land and buildings comprising our K1 factory for \$142 million, which resulted in a pre-tax gain of \$108 million, or \$0.34 per diluted share. During 2017, we received \$128 million of the proceeds.
2. 2017 net income includes an estimated one-time net tax benefit of \$42 million, or \$0.17 per diluted share, primarily due to the reversal of a valuation allowance on certain U.S. deferred tax assets as a result of the enactment of U.S. tax reform.
3. 2018 net income includes a \$17 million discrete income tax charge, or \$0.07 per diluted share, driven by finalizing the accounting for U.S. tax reform.
4. 2019 net income includes an \$8 million charge, or \$0.03 per share, related to the early redemption of \$525 million of senior notes due 2022 and a net \$11 million discrete income tax charge, or \$0.05 per diluted share, related to changes in the valuation of certain deferred tax assets.
5. Q4 2020 net income includes a \$20 million discrete income tax benefit, or \$0.08 per diluted share, primarily related to changes in the valuation of certain deferred tax assets.
6. Capital intensity is defined as capital expenditures as a percentage of net sales.
7. This financial guidance is from our October 25, 2021 earnings release and is reproduced here for convenience of reference only. This reference is not intended, and should not be relied upon, as a reaffirmation or other commentary with respect to such financial guidance. Please see slide 2.
8. In Q1 2020, we repaid \$120 million of our term loan due December 2023 with proceeds from a term loan entered into in December 2019, thus increasing our outstanding debt at Q4 2019 period end.