UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-Q

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Quarterly Period Ended June 30, 2019

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission File Number 000-29472

AMKOR TECHNOLOGY, INC.

(Exact name of registrant as specified in its charter)

Delaware	**23-1722724**
(State of incorporation)	*(I.R.S. Employer Identification Number)*

2045 East Innovation Circle
Tempe, AZ 85284
(Address of principal executive offices and zip code)

(480) 821-5000
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol	Name of Each Exchange on Which Registered
Common Stock, $0.001 par value	AMKR	The NASDAQ Global Select Market

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934, during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	☑	Accelerated filer	☐	Non-accelerated filer	☐	Smaller reporting company	☐	Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

The number of outstanding shares of the registrant's Common Stock as of July 26, 2019 was 239,704,033.

QUARTERLY REPORT ON FORM 10-Q
For the Quarter Ended June 30, 2019

TABLE OF CONTENTS

This report contains forward-looking statements within the meaning of the federal securities laws, including but not limited to statements regarding (1) the amount, timing and focus of our expected capital investments in 2019 including expenditures in support of advanced packaging and test equipment, (2) our ability to fund our operating activities and financial requirements for the next twelve months, (3) the effect of changes in revenue levels and capacity utilization on our gross margin, (4) the focus of our research and development activities, (5) the anticipated impact of the Tax Cuts and Jobs Act (the "Tax Act") on our taxes, (6) the grant and expiration of tax holidays in jurisdictions in which we operate and expectations regarding our effective tax rate and the availability of tax incentives, (7) the creation or release of valuation allowances related to taxes in the future, (8) our repurchase or repayment of outstanding debt, (9) payment of dividends, (10) compliance with our covenants, (11) expected contributions to foreign pension plans, (12) liability for unrecognized tax benefits and the potential impact of our unrecognized tax benefits on our effective tax rate, (13) the effect of foreign currency exchange rate exposure on our financial results, (14) the volatility of the trading price of our common stock, (15) changes to our internal controls related to integration of acquired operations and implementation of an enterprise resource planning system, (16) our efforts to enlarge our customer base in certain geographic areas and markets, (17) demand for advanced packages in mobile and automotive devices and our technology leadership and potential growth in this market, and (18) other statements that are not historical facts. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue," "intend" or the negative of these terms or other comparable terminology. Because such statements include risks and uncertainties, actual results may differ materially from those anticipated in such forward-looking statements as a result of various factors, including those set forth in the following report as well as in Part II, Item 1A of this Quarterly Report on Form 10-Q.

PART I. FINANCIAL INFORMATION

Item 1. ***Financial Statements***

AMKOR TECHNOLOGY, INC.
CONSOLIDATED STATEMENTS OF INCOME
(Unaudited)

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2019	2018	2019	2018
	(In thousands, except per share data)			
Net sales	$ 895,305	$ 1,065,684	$ 1,790,269	$ 2,091,003
Cost of sales	771,851	895,967	1,546,054	1,763,515
Gross profit	123,454	169,717	244,215	327,488
Selling, general and administrative	64,758	74,700	136,345	155,423
Research and development	36,186	41,076	71,940	82,005
Total operating expenses	100,944	115,776	208,285	237,428
Operating income	22,510	53,941	35,930	90,060
Interest expense	18,653	21,127	37,926	41,138
Other (income) expense, net	6,966	(11,001)	2,401	(7,569)
Total other expense, net	25,619	10,126	40,327	33,569
Income (loss) before taxes	(3,109)	43,815	(4,397)	56,491
Income tax expense	5,897	10,631	27,277	13,112
Net income (loss)	(9,006)	33,184	(31,674)	43,379
Net income attributable to non-controlling interests	(444)	(593)	(655)	(1,244)
Net income (loss) attributable to Amkor	$ (9,450)	$ 32,591	$ (32,329)	$ 42,135
Net income (loss) attributable to Amkor per common share:				
Basic	$ (0.04)	$ 0.14	$ (0.14)	$ 0.18
Diluted	$ (0.04)	$ 0.14	$ (0.14)	$ 0.18
Shares used in computing per common share amounts:				
Basic	239,508	239,351	239,461	239,283
Diluted	239,508	239,804	239,461	239,805

The accompanying notes are an integral part of these statements.

AMKOR TECHNOLOGY, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited)

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2019	2018	2019	2018
	(In thousands)			
Net income (loss)	$ (9,006)	$ 33,184	$ (31,674)	$ 43,379
Other comprehensive income (loss), net of tax:				
Adjustments to unrealized components of defined benefit pension plans	(57)	(42)	(189)	(81)
Foreign currency translation	5,918	(11,144)	3,694	3,947
Total other comprehensive income (loss)	5,861	(11,186)	3,505	3,866
Comprehensive income (loss)	(3,145)	21,998	(28,169)	47,245
Comprehensive income attributable to non-controlling interests	(444)	(593)	(655)	(1,244)
Comprehensive income (loss) attributable to Amkor	$ (3,589)	$ 21,405	$ (28,824)	$ 46,001

The accompanying notes are an integral part of these statements.

AMKOR TECHNOLOGY, INC.
CONSOLIDATED BALANCE SHEETS
(Unaudited)

	June 30, 2019	December 31, 2018
	(In thousands, except per share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 551,438	$ 681,569
Restricted cash	2,590	2,589
Accounts receivable, net of allowances	702,466	724,456
Inventories	217,638	230,589
Other current assets	38,988	32,005
Total current assets	1,513,120	1,671,208
Property, plant and equipment, net	2,515,533	2,650,448
Operating lease right of use asset	132,763	—
Goodwill	26,159	25,720
Restricted cash	2,878	3,893
Other assets	118,831	144,178
Total assets	$ 4,309,284	$ 4,495,447
LIABILITIES AND EQUITY		
Current liabilities:		
Short-term borrowings and current portion of long-term debt	$ 198,230	$ 114,579
Trade accounts payable	459,548	530,398
Capital expenditures payable	134,500	255,237
Accrued expenses	246,615	258,209
Total current liabilities	1,038,893	1,158,423
Long-term debt	1,109,945	1,217,732
Pension and severance obligations	174,897	184,321
Long-term operating lease liability	80,049	—
Other non-current liabilities	74,324	79,071
Total liabilities	2,478,108	2,639,547
Commitments and contingencies (Note 15)		
Stockholders’ equity:		
Preferred stock, $0.001 par value, 10,000 shares authorized, designated Series A, none issued	—	—
Common stock, $0.001 par value, 500,000 shares authorized; 285,510 and 285,352 shares issued; and 239,532 and 239,385 shares outstanding in 2019 and 2018, respectively	285	285
Additional paid-in capital	1,913,103	1,909,425
Retained earnings	80,860	113,189
Accumulated other comprehensive income (loss)	27,317	23,812
Treasury stock, at cost, 45,978 and 45,967 shares, in 2019 and 2018, respectively	(216,254)	(216,171)
Total Amkor stockholders’ equity	1,805,311	1,830,540
Non-controlling interests in subsidiaries	25,865	25,360
Total equity	1,831,176	1,855,900
Total liabilities and equity	$ 4,309,284	$ 4,495,447

The accompanying notes are an integral part of these statements.

AMKOR TECHNOLOGY, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)

	Common Stock					Treasury Stock				
	Shares	Par Value	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Shares	Cost	Total Amkor Stockholders' Equity	Noncontrolling Interest in Subsidiaries	Total Equity
					(In thousands)					
Balance at March 31, 2019	285,430	$ 285	$ 1,911,179	$ 90,310	$ 21,456	(45,972)	$ (216,219)	$ 1,807,011	$ 25,571	$ 1,832,582
Net income (loss)	—	—	—	(9,450)	—	—	—	(9,450)	444	(9,006)
Other comprehensive income (loss)	—	—	—	—	5,861	—	—	5,861	—	5,861
Treasury stock acquired through surrender of shares for tax withholding	—	—	—	—	—	(6)	(35)	(35)	—	(35)
Issuance of stock through share-based compensation plans	80	—	150	—	—	—	—	150	—	150
Share-based compensation	—	—	1,774	—	—	—	—	1,774	—	1,774
Subsidiary dividends to noncontrolling interests	—	—	—	—	—	—	—	—	(150)	(150)
Balance at June 30, 2019	285,510	$ 285	$ 1,913,103	$ 80,860	$ 27,317	(45,978)	$ (216,254)	$ 1,805,311	$ 25,865	$ 1,831,176
Balance at December 31, 2018	285,352	$ 285	$ 1,909,425	$ 113,189	$ 23,812	(45,967)	$ (216,171)	$ 1,830,540	$ 25,360	$ 1,855,900
Net income (loss)	—	—	—	(32,329)	—	—	—	(32,329)	655	(31,674)
Other comprehensive income (loss)	—	—	—	—	3,505	—	—	3,505	—	3,505
Treasury stock acquired through surrender of shares for tax withholding	—	—	—	—	—	(11)	(83)	(83)	—	(83)
Issuance of stock through share-based compensation plans	158	—	436	—	—	—	—	436	—	436
Share-based compensation	—	—	3,242	—	—	—	—	3,242	—	3,242
Subsidiary dividends to noncontrolling interests	—	—	—	—	—	—	—	—	(150)	(150)
Balance at June 30, 2019	285,510	$ 285	$ 1,913,103	$ 80,860	$ 27,317	(45,978)	$ (216,254)	$ 1,805,311	$ 25,865	$ 1,831,176

The accompanying notes are an integral part of these statements.

AMKOR TECHNOLOGY, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)

	Common Stock					Treasury Stock				
	Shares	Par Value	Additional Paid-In Capital	Retained Earnings (Accumulated Deficit)	Accumulated Other Comprehensive Income (Loss)	Shares	Cost	Total Amkor Stockholders' Equity	Noncontrolling Interest in Subsidiaries	Total Equity
	(In thousands)									
Balance at March 31, 2018	285,284	$ 285	$ 1,905,666	$ (4,359)	$ 37,571	(45,950)	$ (216,038)	$ 1,723,125	$ 23,949	$ 1,747,074
Net income	—	—	—	32,591	—	—	—	32,591	593	33,184
Other comprehensive income (loss)	—	—	—	—	(11,186)	—	—	(11,186)	—	(11,186)
Treasury stock acquired through surrender of shares for tax withholding	—	—	—	—	—	(6)	(49)	(49)	—	(49)
Issuance of stock through share-based compensation plans	38	—	1	—	—	—	—	1	—	1
Share-based compensation	—	—	1,269	—	—	—	—	1,269	—	1,269
Subsidiary dividends to noncontrolling interests	—	—	—	—	—	—	—	—	(135)	(135)
Balance at June 30, 2018	285,322	$ 285	$ 1,906,936	$ 28,232	$ 26,385	(45,956)	$ (216,087)	$ 1,745,751	$ 24,407	$ 1,770,158
Balance at December 31, 2017	285,129	$ 285	$ 1,903,357	$ (13,903)	$ 22,519	(45,945)	$ (215,982)	$ 1,696,276	$ 23,433	$ 1,719,709
Net income	—	—	—	42,135	—	—	—	42,135	1,244	43,379
Other comprehensive income (loss)	—	—	—	—	3,866	—	—	3,866	—	3,866
Treasury stock acquired through surrender of shares for tax withholding	—	—	—	—	—	(11)	(105)	(105)	—	(105)
Issuance of stock through share-based compensation plans	193	—	1,023	—	—	—	—	1,023	—	1,023
Share-based compensation	—	—	2,556	—	—	—	—	2,556	—	2,556
Subsidiary dividends to noncontrolling interests	—	—	—	—	—	—	—	—	(270)	(270)
Balance at June 30, 2018	285,322	$ 285	$ 1,906,936	$ 28,232	$ 26,385	(45,956)	$ (216,087)	$ 1,745,751	$ 24,407	$ 1,770,158

The accompanying notes are an integral part of these statements.

AMKOR TECHNOLOGY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	For the Six Months Ended June 30,	
	2019	2018
	(In thousands)	
Cash flows from operating activities:		
Net income (loss)	$ (31,674)	$ 43,379
Depreciation and amortization	268,819	285,515
Other operating activities and non-cash items	33,112	(3,239)
Changes in assets and liabilities	(101,329)	(119,276)
Net cash provided by operating activities	168,928	206,379
Cash flows from investing activities:		
Payments for property, plant and equipment	(273,672)	(389,568)
Proceeds from sale of property, plant and equipment	8,247	603
Proceeds from insurance recovery for property, plant and equipment	1,538	—
Other investing activities	2,864	2,647
Net cash used in investing activities	(261,023)	(386,318)
Cash flows from financing activities:		
Proceeds from revolving credit facilities	85,000	—
Payments of revolving credit facilities	(5,000)	—
Proceeds from short-term debt	29,781	7,264
Payments of short-term debt	(25,548)	(31,546)
Proceeds from issuance of long-term debt	614,375	64,000
Payments of long-term debt	(732,178)	(77,015)
Payments of finance lease obligations	(2,746)	(1,689)
Other financing activities	(3,865)	492
Net cash used in financing activities	(40,181)	(38,494)
Effect of exchange rate fluctuations on cash, cash equivalents and restricted cash	1,131	1,347
Net decrease in cash, cash equivalents and restricted cash	(131,145)	(217,086)
Cash, cash equivalents and restricted cash, beginning of period	688,051	602,851
Cash, cash equivalents and restricted cash, end of period	$ 556,906	$ 385,765
Non-cash investing and financing activities:		
Property, plant and equipment included in capital expenditures payable	$ 135,126	$ 239,460
Right of use assets acquired through finance lease liabilities	2,304	6,477
Right of use assets acquired through operating lease liabilities	21,238	—

The accompanying notes are an integral part of these statements.

AMKOR TECHNOLOGY, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Interim Financial Statements

Basis of Presentation. The Consolidated Financial Statements and related disclosures as of June 30, 2019, and for the three and six months ended June 30, 2019 and 2018, are unaudited, pursuant to the rules and regulations of the United States Securities and Exchange Commission ("SEC"). The December 31, 2018 Consolidated Balance Sheet data was derived from audited financial statements but does not include all disclosures required by accounting principles generally accepted in the United States of America ("U.S."). Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP") have been condensed or omitted pursuant to such rules and regulations. In our opinion, these financial statements include all adjustments (consisting only of normal recurring adjustments) necessary for the fair statement of the results for the interim periods. These financial statements should be read in conjunction with the financial statements included in our Annual Report for the year ended December 31, 2018, filed on Form 10-K with the SEC on February 22, 2019. The results of operations for the three and six months ended June 30, 2019 are not necessarily indicative of the results to be expected for the full year. Unless the context otherwise requires, all references to "Amkor," "we," "us," "our" or the "company" are to Amkor Technology, Inc. and our subsidiaries.

Use of Estimates. The Consolidated Financial Statements have been prepared in conformity with U.S. GAAP, using management's best estimates and judgments where appropriate. These estimates and judgments affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements. The estimates and judgments will also affect the reported amounts for certain revenues and expenses during the reporting period. Actual results could differ materially from these estimates and judgments.

Goodwill. The balance of goodwill in our Consolidated Balance Sheets reflects adjustments for foreign currency translation.

Unbilled Receivables. Total unbilled receivables as of June 30, 2019 and December 31, 2018 were $88.7 million and $89.3 million, respectively.

2. New Accounting Standards

Recently Adopted Standards

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, which was subsequently amended and clarified. Topic 842 requires a dual approach for lease accounting under which a lessee would account for leases as finance leases or operating leases. The standard also requires the lessee to recognize a right-of-use asset and a corresponding lease liability for both finance leases and operating leases. For finance leases, the lessee recognizes interest expense and amortization of the right-of-use asset, and for operating leases, the lessee recognizes a straight-line lease expense. The standard permits the use of two alternative transition approaches, either with application in all comparative periods presented, or with application beginning with the effective date without restating comparative period financial statements.

Effective January 1, 2019, we adopted the requirements of Topic 842 using the modified transition approach without restating the comparative period financial statements. The new standard resulted in increases in our operating lease right of use asset, accrued expenses and long-term operating lease liability account balances to record our operating leases on our Consolidated Balance Sheet. The new standard also resulted in additional disclosures for our operating and finance leases (Note 10).

In accordance with Topic 842, we applied practical expedients permitted under the transition guidance, which allowed us to not:

- Reassess whether any existing contracts are or contain a lease,
- Reassess the lease classification for any existing contracts,
- Reassess initial direct costs for any existing leases, and
- Separate non-lease components from lease components and instead to account for them as a single lease component for all asset classes.

3. Net Sales by Product Group and End Market

Net sales by product group consist of the following:

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2019	2018	2019	2018
	(In thousands)		(In thousands)	
Advanced products (1)	$ 432,639	$ 496,241	$ 855,084	$ 971,993
Mainstream products (2)	462,666	569,443	935,185	1,119,010
Total net sales	$ 895,305	$ 1,065,684	$ 1,790,269	$ 2,091,003

(1) Advanced products include flip chip and wafer-level processing and related test services.

(2) Mainstream products include wirebond packaging and related test services.

Net sales by end market consist of the following**:**

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2019	2018	2019	2018
Communications (handheld devices, smartphones, tablets)	37%	42%	38%	42%
Automotive, industrial and other (driver assist, infotainment, performance, safety)	29%	26%	29%	26%
Computing (datacenter, infrastructure, PC/laptop, storage)	19%	19%	19%	19%
Consumer (connected home, set-top boxes, televisions, visual imaging, wearables)	15%	13%	14%	13%
Total net sales	100%	100%	100%	100%

4. Other Income and Expense

Other income and expense consists of the following:

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2019	2018	2019	2018
	(In thousands)			
Interest income	$ (1,598)	$ (955)	$ (3,662)	$ (1,943)
Foreign currency (gain) loss, net	606	(7,110)	(1,407)	(2,397)
Loss on debt retirement	8,356	18	8,356	18
Other	(398)	(2,954)	(886)	(3,247)
Other (income) expense, net	$ 6,966	$ (11,001)	$ 2,401	$ (7,569)

5. Income Taxes

Income tax expense of $27.3 million for the six months ended June 30, 2019 reflects income taxes, foreign withholding taxes and minimum taxes. Income tax expense for the six months ended June 30, 2019 also includes a $14.9 million non-cash discrete tax expense primarily for the recognition of a valuation allowance for certain deferred tax assets.

We monitor on an ongoing basis our ability to utilize our deferred tax assets and whether there is a need for a related valuation allowance. In evaluating our ability to recover our deferred tax assets in the jurisdictions from which they arise, we consider all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax-planning strategies and results of recent operations. Based on current projections of future taxable income in foreign jurisdictions, foreign deferred tax assets of $14.9 million are not expected to be realized, including certain tax credit carryforwards that are expected to expire unused.

We maintain a valuation allowance on a portion of our U.S. net deferred tax assets for deferred interest expense carryforwards, net operating loss carryforwards and foreign tax credit carryforwards that are expected to expire unused. Such valuation allowances are released as the related tax benefits are realized or when sufficient evidence exists to conclude that it is more likely than not that the deferred tax assets will be realized.

Unrecognized tax benefits represent reserves for potential tax deficiencies or reductions in tax benefits that could result from federal, state or foreign tax audits. Gross unrecognized tax benefits were $25.3 million at December 31, 2018 and $25.7 million as of June 30, 2019. All of our unrecognized tax benefits would reduce our effective tax rate, if recognized. Our unrecognized tax benefits are subject to change for effective settlement of examinations, changes in the recognition threshold of tax positions, the expiration of statutes of limitations and other factors.

We have tax returns that are open to examination in various jurisdictions for tax years 2012-2018. The open years contain matters that could be subject to differing interpretations of applicable tax laws and regulations related to the amount and/or timing of income, deductions and tax credits. There can be no assurance that the outcome of the examinations will be favorable. Current examinations include income tax returns in the Philippines (2012-2013), Singapore (2014-2016) and Korea (2015-2018).

6. Earnings Per Share

Basic earnings per share (“EPS”) is computed by dividing net income attributable to Amkor common stockholders by the weighted-average number of common shares outstanding during the period. The weighted-average number of common shares outstanding is reduced for treasury stock.

Diluted EPS is computed based on the weighted-average number of common shares outstanding plus the effect of dilutive potential common shares outstanding during the period. Dilutive potential common shares include outstanding stock options and unvested restricted shares.

The following table summarizes the computation of basic and diluted EPS:

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2019	2018	2019	2018
	(In thousands, except per share data)			
Net income (loss) attributable to Amkor common stockholders	$ (9,450)	$ 32,591	$ (32,329)	$ 42,135
Weighted-average number of common shares outstanding — basic	239,508	239,351	239,461	239,283
Effect of dilutive securities:				
Stock options and restricted share awards	—	453	—	522
Weighted-average number of common shares outstanding — diluted	239,508	239,804	239,461	239,805
Net income (loss) attributable to Amkor per common share:				
Basic	$ (0.04)	$ 0.14	$ (0.14)	$ 0.18
Diluted	(0.04)	0.14	(0.14)	0.18

The following table summarizes the potential shares of common stock that were excluded from diluted EPS because the effect of including these potential shares was anti-dilutive:

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2019	2018	2019	2018
	(In thousands)			
Stock options and restricted share awards	7,618	3,644	7,618	3,524

7. Accumulated Other Comprehensive Income (Loss)

Changes in accumulated other comprehensive income (loss), net of tax, consist of the following:

	Defined Benefit Pension	Foreign Currency Translation	Total
		(In thousands)	
Accumulated other comprehensive income (loss) at December 31, 2018	$ 2,659	$ 21,153	$ 23,812
Other comprehensive income (loss) before reclassifications	—	3,694	3,694
Amounts reclassified from accumulated other comprehensive income (loss)	(189)	—	(189)
Other comprehensive income (loss)	(189)	3,694	3,505
Accumulated other comprehensive income (loss) at June 30, 2019	$ 2,470	$ 24,847	$ 27,317

	Defined Benefit Pension	Foreign Currency Translation	Total
		(In thousands)	
Accumulated other comprehensive income (loss) at December 31, 2017	$ 6,303	$ 16,216	$ 22,519
Other comprehensive income (loss) before reclassifications	—	3,947	3,947
Amounts reclassified from accumulated other comprehensive income (loss)	(81)	—	(81)
Other comprehensive income (loss)	(81)	3,947	3,866
Accumulated other comprehensive income (loss) at June 30, 2018	$ 6,222	$ 20,163	$ 26,385

Amounts reclassified out of accumulated other comprehensive income (loss) are included as a component of net periodic pension cost (Note 13).

8. Factoring of Accounts Receivable

For certain accounts receivable, we use non-recourse factoring arrangements with third-party financial institutions to manage our working capital and cash flows. Under this program, we sell receivables to a financial institution for cash at a discount to the face amount. As part of the factoring arrangements, we perform certain collection and administrative functions for the receivables sold. For the three and six months ended June 30, 2019, we sold receivables totaling $149.1 million and $304.8 million, net of discounts and fees of $1.1 million and $2.2 million, respectively. For the three and six months ended June 30, 2018, we sold receivables totaling $203.1 million and $428.6 million, net of discounts and fees of $2.0 million and $3.8 million, respectively.

9. Property, Plant and Equipment

Property, plant and equipment consist of the following:

	June 30, 2019	December 31, 2018
	(In thousands)	
Land	$ 219,991	$ 222,884
Land use rights (1)	—	26,845
Buildings and improvements	1,569,785	1,523,065
Machinery and equipment	5,266,111	5,196,930
Finance lease assets	26,414	25,874
Software and computer equipment	218,268	213,440
Furniture, fixtures and other equipment	18,877	17,204
Construction in progress	16,753	44,381
Total property, plant and equipment	7,336,199	7,270,623
Accumulated depreciation and amortization	(4,820,666)	(4,620,175)
Total property, plant and equipment, net	$ 2,515,533	$ 2,650,448

(1) Effective January 1, 2019, and in connection with the adoption of Topic 842, land use rights were reclassified to operating lease right of use asset within our Consolidated Balance Sheet.

The following table summarizes our depreciation expense:

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2019	2018	2019	2018
	(In thousands)			
Depreciation expense	$ 132,642	$ 142,497	$ 268,139	$ 284,502

10. Leases

We lease certain machinery and equipment, office space, and manufacturing facilities. Leases with an initial term of 12 months or less are not recorded on the balance sheet, and we recognize lease expense for these leases on a straight-line basis over the lease term. We account for lease components (e.g., fixed payments including rent, real estate taxes and insurance costs) combined with the non-lease components (e.g., common-area maintenance costs). We use our incremental borrowing rate based on the information available at the lease commencement date to determine the lease liability. Our leases have remaining lease terms ranging from less than one year to 86 years. For purposes of calculating our lease liabilities, our lease terms include options to extend or terminate the lease when it is reasonably certain that we will exercise those options. Certain leases also include options to purchase the leased property.

The components of lease expense were as follows:

	For the Three Months Ended June 30, 2019	For the Six Months Ended June 30, 2019
	(In thousands)	
Operating lease cost	$ 9,679	$ 17,726
Finance lease cost		
Amortization of leased assets	1,145	2,210
Interest on lease liabilities	198	413
Total finance lease cost	1,343	2,623
Short-term lease cost	1,933	4,361
Variable lease cost	1,479	3,129
Net lease cost	$ 14,434	$ 27,839

Rent expense was $11.2 million and $24.0 million for three and six months ended June 30, 2018, respectively.

Other information related to leases was as follows:

	For the Six Months Ended June 30, 2019
Supplemental Cash Flows Information (in thousands)	
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows for operating leases	$ 17,408
Operating cash flows for finance leases	419
Financing cash flows for finance leases	2,746
Weighted Average Remaining Lease Term (Years)	
Operating leases	4.8
Finance leases	4.3
Weighted Average Discount Rate	
Operating leases	4.3%
Finance leases	4.8%

Maturities of lease liabilities were as follows:

	June 30, 2019		December 31, 2018	
	Operating Leases	Finance Leases	Operating Leases	Finance Leases
	(In thousands)			
2019 - Remaining	$ 19,752	$ 4,051	$ 32,461	$ 6,430
2020	34,340	5,557	24,630	4,555
2021	24,658	5,642	17,676	4,748
2022	13,349	1,410	10,942	936
2023	9,307	946	9,008	936
Thereafter	26,515	3,846	26,070	3,807
Total future minimum lease payments	127,921	21,452	$ 120,787	$ 21,412
Less: Imputed interest	(13,952)	(2,402)		
Total	$ 113,969	$ 19,050		

As of June 30, 2019, we have entered into additional lease agreements that have not yet commenced of approximately $21.8 million.

11. Accrued Expenses

Accrued expenses consist of the following:

	June 30, 2019	December 31, 2018
	(In thousands)	
Payroll and benefits	$ 95,452	$ 124,943
Short-term operating lease liability	33,920	—
Income taxes payable	19,748	38,567
Deferred revenue and customer advances	16,621	16,736
Accrued severance plan obligations	13,423	13,179
Accrued interest	11,652	10,302
Other accrued expenses	55,799	54,482
Total accrued expenses	$ 246,615	$ 258,209

12. Debt

Following is a summary of short-term borrowings and long-term debt:

	June 30, 2019	December 31, 2018
	(In thousands)	
Debt of Amkor Technology, Inc.:		
Senior notes:		
6.375% Senior notes, due October 2022 (1)	$ —	$ 524,971
6.625% Senior notes, due September 2027 (1)	525,000	—
Debt of subsidiaries:		
Amkor Technology Korea, Inc.:		
$30 million revolving credit facility, LIBOR plus the applicable bank rate, due October 2019 (2)	—	—
Term loan, fixed rate at 3.70%, due May 2020 (3)	40,000	120,000
Term loan, fund floating rate plus 1.60%, due June 2020 (4)	84,000	125,000
Term loan, LIBOR plus 2.56%, due December 2023	200,000	200,000
Term loan, applicable bank rate plus 1.98%, due December 2028 (4)	66,000	24,000
J-Devices Corporation:		
Short-term term loans, variable rate (5)	12,888	8,232
Term loan, fixed rate at 0.86%, due June 2022	27,816	31,908
Term loan, fixed rate at 0.60%, due July 2022	6,027	6,838
Term loan, fixed rate at 1.30%, due July 2023	204,915	225,180
Amkor Assembly & Test (Shanghai) Co., Ltd.:		
Term loan, LIBOR plus 1.80%, due December 2019 (6)	—	48,000
Term loan, LIBOR plus 1.60%, due March 2022 (6)	29,500	—
Term loan, LIBOR Plus 1.40%, due March 2022 (6)	19,750	—
Other:		
$250 million senior secured revolving credit facility, LIBOR plus 1.25%-1.75%, due July 2023 (Singapore) (7)	80,000	—
Revolving credit facility, TAIFX plus the applicable bank rate, due November 2020 (Taiwan) (8)	20,000	20,000
	1,315,896	1,334,129
Less: Unamortized premium, discount and deferred debt costs, net	(7,721)	(1,818)
Less: Short-term borrowings and current portion of long-term debt	(198,230)	(114,579)
Long-term debt	$ 1,109,945	$ 1,217,732

(1) In April 2019, we redeemed the outstanding $525 million aggregate principal amount of our 6.375% Senior Notes due 2022 (“2022 Notes”). In accordance with the terms of the indenture governing the 2022 Notes, the redemption price was 101.594% of the principal amount of the 2022 Notes plus accrued and unpaid interest. We recorded an $8.4 million loss on extinguishment related to the call premium paid and other debt related costs associated with the 2022 Notes. The redemption of the 2022 Notes was funded with net proceeds from our issuance of $525 million of 6.625% Senior Notes due September 2027 (“2027 Notes”) in March 2019, together with cash on hand. The 2027 Notes were issued at a discount of 99.5% or $2.6 million and are senior unsecured obligations. Interest is

payable semiannually on March 15 and September 15 of each year, commencing September 15, 2019. We incurred $3.6 million of debt issuance costs associated with the 2027 Notes.

(2) In October 2018, we entered into a revolving credit facility agreement with availability of $30.0 million. Principal will be payable at maturity in October 2019. Interest will be payable monthly in arrears, at LIBOR plus the applicable bank rate. As of June 30, 2019, $30.0 million was available to be drawn.

(3) In May 2017, we entered into a $120.0 million term loan agreement due May 2020 with a fixed interest rate of 3.7%. During the six months ended June 30, 2019, we repaid $80 million.

In July 2019, we entered into a term loan agreement pursuant to which we may borrow up to $180.0 million for purchases of materials. Principal is payable at maturity in July 2022. Interest will be payable quarterly in arrears, at the applicable bank rate plus 2.03%. We borrowed $40.0 million at 3.8% in July 2019 under this term loan to repay the remaining $40.0 million outstanding balance for the term loan due May 2020.

(4) In May 2015, we entered into a term loan agreement pursuant to which we may borrow up to $150.0 million for capital expenditures. Principal is payable at maturity in June 2020. Interest is payable quarterly in arrears, at a fund floating rate plus 1.60% (4.54% as of June 30, 2019). During the six months ended June 30, 2019, we repaid $41.0 million of the outstanding balance of this term loan using the proceeds from our term loan due December 2028.

In December 2018, we entered into a term loan agreement pursuant to which we may borrow up to $90.0 million for capital expenditures. During the six months ended June 30, 2019, we borrowed $42.0 million of this term loan and used the proceeds to repay part of the term loan due June 2020. Principal of this term loan is payable in semiannual installments beginning June 2022 and ending at maturity in December 2028. Interest is payable quarterly in arrears, at the applicable bank rate plus 1.98% (4.50% as of June 30, 2019). As of June 30, 2019, $24.0 million was available to be drawn.

(5) We entered into various short-term term loans which mature semiannually. Principal and interest are payable in monthly installments. Interest as of June 30, 2019 is at TIBOR plus 0.10% to 0.20% (weighted average of 0.20% as of June 30, 2019). As of June 30, 2019, $4.0 million was available to be drawn.

(6) In December 2016, we entered into a $50.0 million term loan agreement. Principal is payable in semiannual installments of $0.5 million, with the remaining balance due at maturity in December 2019. Interest is payable quarterly at a floating rate of LIBOR plus 1.80%. During the six months ended June 30, 2019, we repaid the entire $48.0 million outstanding balance of this term loan using the proceeds from our term loans due March 2022.

In March 2019, we entered into a $30.0 million term loan agreement due March 2022. We borrowed $30.0 million under this term loan and repaid part of the term loan due December 2019. Principal is payable in semiannual installments of $0.5 million, with the remaining balance due at maturity. Interest is payable quarterly at a floating rate of LIBOR plus 1.60% (4.06% as of June 30, 2019).

In April 2019, we entered into a term loan agreement with availability of $20.0 million due March 2022. We borrowed $20.0 million under this term loan and repaid part of the term loan due December 2019. Principal is payable in semiannual installments of $0.5 million, with the remaining balance due at maturity. Interest is payable quarterly at a floating rate of LIBOR plus 1.40% (3.85% as of June 30, 2019).

(7) In July 2018, our subsidiary, Amkor Technology Singapore Holding Pte, Ltd., entered into a $250.0 million senior secured revolving credit facility, which is guaranteed by Amkor Technology, Inc. The availability for our revolving credit facility is based on the amount of eligible accounts receivable. Principal is payable at maturity. Interest is payable monthly at LIBOR plus 1.25% to 1.75% (3.69% as of June 30, 2019). We borrowed $80 million in June 2019, which was repaid in July 2019. As of June 30, 2019, $83.0 million was available to be drawn.

(8) In November 2015, we entered into a $39.0 million revolving credit facility. Principal is payable at maturity. Interest is payable monthly at TAIFX plus the applicable bank rate (3.59% as of June 30, 2019). As of June 30, 2019, $19.0 million was available to be drawn.

Certain of our foreign debt is collateralized by the land, buildings, equipment and accounts receivable in the respective locations. The carrying value of the collateral exceeds the carrying amount of the debt.

The debt of Amkor Technology, Inc. is structurally subordinated in right of payment to all existing and future debt and other liabilities of our subsidiaries. From time to time, Amkor Technology, Inc. also guarantees certain debt of our subsidiaries. The agreements governing our indebtedness contain affirmative and negative covenants which restrict our ability to pay dividends and could restrict our operations. We have never paid a dividend to our stockholders, and we do not have any present plans for doing so. We were in compliance with all debt covenants at June 30, 2019.

13. Pension Plans

Foreign Defined Benefit Pension Plans

Our subsidiaries in Japan, Korea, Malaysia, the Philippines and Taiwan sponsor defined benefit pension plans. Charges to expense are based upon actuarial analyses. The components of net periodic pension cost for these defined benefit pension plans are as follows:

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2019	2018	2019	2018
	(In thousands)			
Service cost	$ 7,789	$ 8,299	$ 15,766	$ 16,715
Interest cost	1,305	1,226	2,629	2,469
Expected return on plan assets	(1,595)	(1,417)	(3,213)	(2,859)
Recognized actuarial gain	(94)	(42)	(188)	(77)
Net periodic pension cost	$ 7,405	$ 8,066	$ 14,994	$ 16,248

The components of net periodic pension cost other than the service cost component are included in other (income) expense, net in our Consolidated Statements of Income.

Defined Contribution Pension Plans

We sponsor defined contribution pension plans in Korea, Malaysia, Taiwan and the U.S. The following table summarizes our defined contribution expense:

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2019	2018	2019	2018
	(In thousands)			
Defined contribution expense	$ 3,352	$ 3,017	$ 7,756	$ 7,013

14. Fair Value Measurements

The accounting framework for determining fair value includes a hierarchy for ranking the quality and reliability of the information used to measure fair value, which enables the reader of the financial statements to assess the inputs used to develop those measurements. The fair value hierarchy consists of three tiers as follows: Level 1, defined as quoted market prices in active markets for identical assets or liabilities; Level 2, defined as inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, model-based valuation techniques for which all significant assumptions are observable in the market or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities and Level 3, defined as unobservable inputs that are not corroborated by market data.

The fair values of cash, accounts receivable, trade accounts payable, capital expenditures payable, and certain other current assets and accrued expenses approximate carrying values because of their short-term nature. The carrying value of certain other non-current assets and liabilities approximates fair value. Our assets and liabilities recorded at fair value on a recurring basis include cash equivalent money market funds and restricted cash money market funds. We also review goodwill for impairment annually during the fourth quarter of each year. Cash equivalent money market funds and restricted cash money market funds are invested in U.S. money market funds and various U.S. and foreign bank operating and time deposit accounts, which are due on demand or carry a maturity date of less than three months when purchased. No restrictions have been imposed on us regarding withdrawal of balances with respect to our cash equivalents as a result of liquidity or other credit market issues affecting the money market funds we invest in or the counterparty financial institutions holding our deposits. Money market funds are valued using quoted market prices in active markets for identical assets.

Recurring fair value measurements consist of the following:

	June 30, 2019	December 31, 2018
	(In thousands)	
Cash equivalent money market funds (Level 1)	$ 58,812	$ 74,407
Restricted cash money market funds (Level 1)	2,590	2,589

We also measure certain assets and liabilities, including property, plant and equipment and goodwill, at fair value on a nonrecurring basis.

We measure the fair value of our debt for disclosure purposes. The following table presents the fair value of financial instruments that are not recorded at fair value on a recurring basis:

	June 30, 2019		December 31, 2018	
	Fair Value	Carrying Value	Fair Value	Carrying Value
	(In thousands)			
Senior notes (Level 1)	$ 522,443	$ 518,930	$ 526,131	$ 524,978
Revolving credit facilities and term loans (Level 2)	795,096	789,245	803,867	807,333
Total debt	$ 1,317,539	$ 1,308,175	$ 1,329,998	$ 1,332,311

The estimated fair value of our senior notes is based primarily on quoted market prices reported on or near the respective balance sheet dates. The estimated fair value of our revolving credit facilities and term loans is calculated using a discounted cash flow analysis, which utilizes market-based assumptions including forward interest rates adjusted for credit risk.

15. Commitments and Contingencies

We generally warrant that our services will be performed in a professional and workmanlike manner and in compliance with our customers' specifications. We accrue costs for known warranty issues. Historically, our warranty costs have been immaterial.

Legal Proceedings

We are involved in claims and legal proceedings and may become involved in other legal matters arising in the ordinary course of our business. We evaluate these claims and legal matters on a case-by-case basis to make a determination as to the impact, if any, on our business, liquidity, results of operations, financial condition or cash flows. Although the outcome of these matters is uncertain, we believe that the ultimate outcome of these claims and proceedings, individually and in the aggregate, will not have a material adverse impact to us. Our evaluation of the potential impact of these claims and legal proceedings on our business, liquidity, results of operations, financial condition or cash flows could change in the future.

In accordance with the accounting guidance for loss contingencies, including legal proceedings, lawsuits, pending claims and other legal matters, we accrue for a loss contingency when we conclude that the likelihood of a loss is probable and the amount of the loss can be reasonably estimated. We adjust our accruals from time to time as we receive additional information, but the loss we incur may be significantly greater than or less than the amount we have accrued. We disclose loss contingencies if we believe they are material and there is at least a reasonable possibility that a loss has been incurred. Attorney fees related to legal matters are expensed as incurred.

Item 2. *Management's Discussion and Analysis of Financial Condition and Results of Operations*

Overview

Amkor is one of the world's leading providers of outsourced semiconductor packaging and test services. Our financial goals are sales growth and improved profitability. To achieve these goals, we are focused on generating increased value from our investments in advanced technologies, improving utilization of existing assets, executing our balanced growth strategy and selectively growing our scale and scope through strategic investments.

We are an industry leader in developing and commercializing cost-effective advanced packaging and test technologies. These advanced technology solutions provide increased value to our customers. This is particularly true in the mobile communications market, where growth generally outpaces the semiconductor industry rate. Advanced packages are now the preferred choice in both the high-end and the mid-range segments of the smartphone market, which together account for a high portion of mobile phone semiconductor value. The demand for advanced packages is also being driven by second-wave mobile device customers, who are transitioning out of wirebond into wafer-level and flip-chip packages. Our sales of advanced packages into the automotive market are growing as well, largely due to new, data-intensive applications, which require increased pin count and performance. We believe that our technology leadership and this technology transition create significant growth opportunities for us.

We typically look for opportunities in the advanced packaging and test area where we can generate reasonably quick returns on investments made for customers seeking leading edge technologies. We also focus on developing a second wave of customers to fill the capacity that becomes available when leading edge customers transition to newer packaging and test equipment and platforms. For example, we are continuing our efforts to expand our sales to Chinese and Taiwanese fabless chip companies that make up a significant portion of the growing mid-tier and entry-level segments of the mobile device market. In addition, we are seeking new customers and deepening our engagement with existing customers. This includes an expanded emphasis on the automotive market where semiconductor content continues to grow and in the analog area for our mainstream wirebond technologies.

From time to time, we identify attractive opportunities to grow our customer base and expand the markets we serve through joint ventures, acquisitions and other strategic investments. For example, in May 2017 we acquired Nanium, which has strengthened our position in the market for wafer-level fan-out packaging. In December 2015 we completed the acquisition of J-Devices, the largest provider of outsourced semiconductor assembly and test services in Japan. J-Devices is primarily focused on the automotive, industrial and consumer end markets. We believe that taking advantage of these opportunities helps diversify our revenue streams, improve our profits, broaden our portfolio of services and maintain our technological leadership.

Our IDM customers include: Intel Corporation; Renesas Electronics Corporation; STMicroelectronics N.V.; Texas Instruments Incorporated and Toshiba Corporation. Our fabless customers include: Broadcom Limited; Qualcomm Incorporated; and Toshiba Memory Corporation. Our contract foundry customers include: Samsung Electronics Company Limited; and Taiwan Semiconductor Manufacturing Company Limited.

As a supplier in the semiconductor industry, our business is cyclical and impacted by broad economic factors. Historically, there has been a strong correlation between world-wide gross domestic product levels, consumer spending and semiconductor industry cycles. The semiconductor industry has experienced significant and sometimes prolonged cyclical upturns and downturns in the past. We believe that there is currently an inventory correction in the smartphone market and that the general semiconductor market is going through a typical cyclical correction. We cannot predict the timing, strength or duration of any correction, economic slowdown or subsequent economic recovery.

Our net sales, gross profit, operating income, cash flows, liquidity and capital resources have historically fluctuated significantly from quarter to quarter as a result of many factors, including the seasonality of our business, the cyclical nature of the semiconductor industry and other factors discussed in Part II, Item 1A of this Quarterly Report on Form 10-Q.

We operate in a capital-intensive industry and have a significant level of debt. Servicing our current and future customers requires that we incur significant operating expenses and continue to make significant capital expenditures, which are generally made in advance of the related revenues and without firm customer commitments. We fund our operations, including capital expenditures and debt service requirements, with cash flows from operations, existing cash and cash equivalents, borrowings under available credit facilities and proceeds from any additional financing. Maintaining an appropriate level of liquidity is important to our business and depends on, among other things, the performance of our business, our capital expenditure levels and our ability to repay debt out of our operating cash flows or proceeds from debt or equity financings.

Financial Summary

Our net sales decreased $170.4 million or 16.0% to $895.3 million for the three months ended June 30, 2019 from $1,065.7 million for the three months ended June 30, 2018. This decrease was attributable to inventory corrections in the smartphone market and a cyclical correction of the general semiconductor market.

Gross margin for the three months ended June 30, 2019 decreased to 13.8% from 15.9% for the three months ended June 30, 2018. The decline in gross margin was primarily due to lower revenue and reduced capacity utilization, partially offset by favorable changes in product mix and foreign currency exchange rates.

Our capital expenditures totaled $273.7 million for the six months ended June 30, 2019, compared to $389.6 million for the six months ended June 30, 2018. The decrease in spending is primarily due to our decision to reduce spending on incremental capacity during a period of reduced demand.

Net cash provided by operating activities was $168.9 million for the six months ended June 30, 2019, compared to $206.4 million for the six months ended June 30, 2018. This decrease was primarily due to lower net income, partially offset by changes in our net working capital.

In March 2019, we issued $525 million aggregate principal amount of our 6.625% Senior Notes due 2027. The net proceeds from this issuance were used, together with cash on hand, to redeem the $525 million aggregate principal amount of our 6.375% Senior Notes due 2022 in April 2019.

Results of Operations

The following table sets forth certain operating data as a percentage of net sales for the periods indicated:

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2019	2018	2019	2018
Net sales	100.0 %	100.0%	100.0 %	100.0%
Materials	38.0 %	38.9%	38.0 %	37.9%
Labor	17.4 %	16.0%	17.4 %	16.8%
Other manufacturing costs	30.8 %	29.2%	31.0 %	29.6%
Gross margin	13.8 %	15.9%	13.6 %	15.7%
Operating income	2.5 %	5.1%	2.0 %	4.3%
Net income attributable to Amkor	(1.1)%	3.1%	(1.8)%	2.0%

Net Sales

	For the Three Months Ended June 30,				For the Six Months Ended June 30,			
	2019	2018	Change		2019	2018	Change	
	(In thousands, except percentages)							
Net sales	$ 895,305	$ 1,065,684	$ (170,379)	(16.0)%	$ 1,790,269	$ 2,091,003	$ (300,734)	(14.4)%

The decrease in net sales for the three and six months ended June 30, 2019, compared to the three and six months ended June 30, 2018, was attributable to inventory corrections in the smartphone market and a cyclical correction of the general semiconductor market.

Gross Margin

	For the Three Months Ended June 30,			For the Six Months Ended June 30,		
	2019	2018	Change	2019	2018	Change
	(In thousands, except percentages)					
Gross profit	$ 123,454	$ 169,717	$ (46,263)	$ 244,215	$ 327,488	$ (83,273)
Gross margin	13.8%	15.9%	(2.1)%	13.6%	15.7%	(2.1)%

Our cost of sales consists principally of materials, labor, depreciation and manufacturing overhead. Since a substantial portion of the costs at our factories is fixed, there tends to be a strong relationship between our revenue levels and gross margin. Accordingly, relatively modest increases or decreases in revenue can have a significant effect on margin, depending upon product mix, utilization and seasonality.

Gross margin decreased for the three months ended June 30, 2019 compared to the three months ended June 30, 2018 primarily due to lower revenue and reduced capacity utilization, partially offset by favorable changes in product mix and foreign currency exchange rates.

Gross margin decreased for the six months ended June 30, 2019 compared to the six months ended June 30, 2018 primarily due to lower revenue and reduced capacity utilization, partially offset by lower employee compensation costs at our factories and favorable changes in foreign currency exchange rates.

Selling, General and Administrative

	For the Three Months Ended June 30,				For the Six Months Ended June 30,			
	2019	2018	Change		2019	2018	Change	
	(In thousands, except percentages)							
Selling, general and administrative	$ 64,758	$ 74,700	$ (9,942)	(13.3)%	$ 136,345	$ 155,423	$ (19,078)	(12.3)%

Selling, general and administrative expenses for the three and six months ended June 30, 2019 decreased compared to the three and six months ended June 30, 2018, primarily due to decreased employee compensation costs, a gain on sale of real estate in Japan and favorable foreign currency exchange rate movements.

Research and Development

	For the Three Months Ended June 30,				For the Six Months Ended June 30,			
	2019	2018	Change		2019	2018	Change	
	(In thousands, except percentages)							
Research and development	$ 36,186	$ 41,076	$ (4,890)	(11.9)%	$ 71,940	$ 82,005	$ (10,065)	(12.3)%

Research and development activities are focused on developing new packaging and test services and improving the efficiency and capabilities of our existing production processes. The costs related to our technology and product development projects are included in research and development expense until the project moves into production. Once production begins, the costs related to production become part of the cost of sales, including ongoing depreciation for the equipment previously held for research and development activities. Research and development expenses for the three and six months ended June 30, 2019 decreased compared to the three and six months ended June 30, 2018. We realized reductions in costs for projects that moved into production, partially offset by new development projects, primarily at K5, our factory and research and development facility in Korea.

Other Income and Expense

	For the Three Months Ended June 30,				For the Six Months Ended June 30,			
	2019	2018	Change		2019	2018	Change	
	(In thousands, except percentages)							
Interest expense	$ 18,653	$ 21,127	$ (2,474)	(11.7)%	$ 37,926	$ 41,138	$ (3,212)	(7.8)%
Interest income	(1,598)	(955)	(643)	67.3 %	(3,662)	(1,943)	(1,719)	88.5 %
Foreign currency (gain) loss, net	606	(7,110)	7,716	>(100)%	(1,407)	(2,397)	990	(41.3)%
Loss on debt retirement	8,356	18	8,338	>100%	8,356	18	8,338	>100%
Other (income) expense, net	(398)	(2,954)	2,556	(86.5)%	(886)	(3,247)	2,361	(72.7)%
Total other expense, net	$ 25,619	$ 10,126	$ 15,493	>100%	$ 40,327	$ 33,569	$ 6,758	20.1 %

Interest expense decreased for the three and six months ended June 30, 2019 compared to the three and six months ended June 30, 2018, primarily due to the redemption of $200 million of our 6.625% Senior Notes due 2021 in August 2018. This redemption was funded with proceeds from a term loan with a significantly lower interest rate. The interest expense decrease was partially offset by the interest incurred under our new $525 million aggregate principal amount of our 6.625% Senior Notes due September 2027 which were issued in March 2019.

The changes in foreign currency (gain) loss, net for the three months ended June 30, 2019 compared to the three months ended June 30, 2018 were due to foreign currency exchange rate movements, mainly the Korean Won, and the associated impact on our net monetary exposure at our foreign subsidiaries.

Loss on debt retirement increased for the three and six months ended June 30, 2019 compared to the three and six months ended June 30, 2018, primarily due to the early redemption in April 2019 of the outstanding $525 million aggregate principal amount of our 6.375% Senior Notes due 2022.

Income Tax Expense

	For the Three Months Ended June 30,			For the Six Months Ended June 30,		
	2019	2018	Change	2019	2018	Change
	(In thousands)					
Income tax expense	$ 5,897	$ 10,631	$ (4,734)	$ 27,277	$ 13,112	$ 14,165

The majority of our income is earned and taxed in foreign jurisdictions in the Asia Pacific region with applicable tax rates similar to the U.S. federal and state combined tax rate of approximately 25%. Income tax expense, which includes foreign withholding taxes and minimum taxes, reflects the applicable tax rates in effect in the various countries where our income is earned and is subject to volatility depending on the relative mix of earnings in each location. Income tax expense for the six months ended June 30, 2019 also includes a $14.9 million non-cash discrete tax expense primarily for the recognition of a valuation allowance for certain deferred tax assets.

During the six months ended June 30, 2019 and 2018, our subsidiaries in Korea, the Philippines and Singapore operated under tax holidays. The tax holidays granted to our Malaysia operations and certain operations in the Philippines expired during 2018. As these tax holidays expire, income earned in these jurisdictions will be subject to higher statutory income tax rates, which may cause our effective tax rate to increase.

Liquidity and Capital Resources

We assess our liquidity based on our current expectations regarding sales, operating expenses, capital spending, debt service requirements and other funding needs. Based on this assessment, we believe that our cash flow from operating activities, together with existing cash and cash equivalents and availability under our credit facilities, will be sufficient to fund our working capital, capital expenditure, debt service and other financial requirements for at least the next twelve months. Our liquidity is affected by, among other factors, volatility in the global economy and credit markets, the performance of our business, our capital expenditure levels, other uses of our cash including any purchases of stock under our stock repurchase program, any acquisitions or investments in joint ventures and our ability to either repay debt out of operating cash flow or refinance it at or prior to maturity with the proceeds of debt or equity offerings. There can be no assurance that we will generate the necessary net income or operating cash flows, or be able to borrow sufficient funds, to meet the funding needs of our business beyond the next twelve months due to a variety of factors, including the cyclical nature of the semiconductor industry and other factors discussed in Part II, Item 1A of this Quarterly Report on Form 10-Q.

Our primary source of cash and the source of funds for our operations are cash flows from operations, current cash and cash equivalents, borrowings under available credit facilities and proceeds from any additional debt or equity financings. In March 2019, we issued $525 million of 6.625% Senior Notes due September 2027 (the “2027 Notes”). Additionally, in April 2019, we redeemed the outstanding $525 million aggregate principal amount of our 6.375% Senior Notes due October 2022 (the “2022 Notes”). The redemption was funded with net proceeds from our issuance of the 2027 Notes, together with cash on hand. We refer you to Note 12 to our Consolidated Financial Statements in Part 1, Item 1 of this Quarterly Report on Form 10-Q for additional information.

As of June 30, 2019, we had cash and cash equivalents of $551.4 million. Included in our cash balance as of June 30, 2019 is $489.3 million held offshore by our foreign subsidiaries. We have the ability to access cash held offshore by our foreign subsidiaries primarily through the repayment of intercompany debt obligations. Due to the changes in the U.S. tax law under the Tax Act, distributions of cash to the U.S. as dividends generally will not be subject to U.S. federal income tax. If we were to distribute this offshore cash to the U.S. as dividends from our foreign subsidiaries, we may be subject to foreign withholding and state income taxes.

The borrowing base under our $250.0 million first lien senior secured revolving credit facility entered into by our subsidiary, Amkor Technology Singapore Holding Pte, Ltd. (“Singapore Revolver”), is limited to the amount of eligible accounts receivable. As of June 30, 2019, we had outstanding borrowings of $80.0 million, additional availability of $83.0 million, and no outstanding standby letters of credit. Our foreign subsidiaries had $132.0 million available to be drawn under revolving credit facilities, including the Singapore Revolver, and $28.0 million available to be borrowed under term loan credit facilities for working capital purposes and capital expenditures.

As of June 30, 2019, we had $1,308.2 million of debt. Our scheduled principal repayments on debt include $43.6 million due over the remainder of 2019, $205.3 million due in 2020, $61.3 million due in 2021, $107.9 million due in 2022, $325.6 million due in 2023, and $572.1 million due thereafter. We were in compliance with all debt covenants at June 30, 2019, and we expect to remain in compliance with these covenants for at least the next twelve months.

For certain accounts receivable, we use non-recourse factoring arrangements with third-party financial institutions to manage our working capital and cash flows. Under this program, we sell receivables to a financial institution for cash at a discount to the face amount. Available capacity under these programs is dependent on the level of our trade accounts receivable eligible to be sold, the financial institutions’ willingness to purchase such receivables and the limits provided by the financial institutions. These factoring arrangements can be reduced or eliminated at any time due to market conditions and changes in the credit worthiness of customers. For the six months ended June 30, 2019 and 2018, we sold receivables totaling $304.8 million and $428.6 million, net of discounts and fees of $2.2 million and $3.8 million, respectively.

In order to reduce our debt and future cash interest payments, we may from time to time repurchase or redeem our outstanding notes for cash or exchange shares of our common stock for our outstanding notes. Any such transaction may be made in the open market, through privately negotiated transactions or otherwise and is subject to the terms of our indentures and other debt agreements, market conditions and other factors.

Certain debt agreements have restrictions on dividend payments and the repurchase of stock and subordinated securities. These restrictions are determined in part by calculations based upon cumulative net income or borrowing availability. We have never paid a dividend to our stockholders, and we do not have any present plans for doing so. From time to time, Amkor Technology, Inc. also guarantees certain debt of our subsidiaries.

We operate in a capital-intensive industry. Servicing our current and future customers may require that we incur significant operating expenses and make significant investments in equipment and facilities, which are generally made in advance of the related revenues and without firm customer commitments.

Our Board of Directors previously authorized the repurchase of up to $300 million of our common stock, exclusive of any fees, commissions or other expenses. At June 30, 2019, approximately $91.6 million was available to repurchase common stock pursuant to the stock repurchase program. The purchase of stock may be made in the open market or through privately negotiated transactions. The timing, manner, price and amount of any repurchases will be determined by us at our discretion and will depend upon a variety of factors including economic and market conditions, the cash needs and investment opportunities for the business, the current market price of our stock, applicable legal requirements and other factors. We have not purchased any stock under the program since 2012.

Investments

We make significant capital expenditures in order to service the demand of our customers. We expect 2019 capital expenditures to be approximately $475 million. During the six months ended June 30, 2019, our capital expenditures totaled $273.7 million. Ultimately, the amount of our 2019 capital expenditures will depend on several factors including, among others, the timing and implementation of any capital projects under review, the performance of our business, economic and market conditions, the cash needs and investment opportunities for the business, the need for additional capacity to service anticipated customer demand and the availability of cash flows from operations or financing.

In addition, we are subject to risks associated with our capital expenditures, including those discussed in Part II, Item 1A of this Quarterly Report on Form 10-Q under the caption “Capital Expenditures - We Make Substantial Investments in Equipment and Facilities To Support the Demand Of Our Customers, Which May Adversely Affect Our Business If the Demand Of Our Customers Does Not Develop As We Expect or Is Adversely Affected.”

Cash Flows

Net cash provided by (used in) operating, investing and financing activities for the six months ended June 30, 2019 and 2018, was as follows:

	For the Six Months Ended June 30,	
	2019	2018
	(In thousands)	
Operating activities	$ 168,928	$ 206,379
Investing activities	(261,023)	(386,318)
Financing activities	(40,181)	(38,494)

Operating activities: Our cash flows provided by operating activities for the six months ended June 30, 2019 decreased by $37.5 million compared to the six months ended June 30, 2018, primarily due to lower net income, partially offset by changes in our net working capital.

Investing activities: Our cash flows used in investing activities, which decreased compared to the six months ended June 30, 2018, are principally for payments for property, plant and equipment. The decrease is primarily due to our initiative to reduce spending on incremental capacity during a period of reduced demand.

Financing activities: The net cash used in financing activities for the six months ended June 30, 2019 was primarily due to the redemption of the 2022 Notes as well as repayments of debt in Japan and Korea, partially offset by our issuance of the 2027 Notes and draw down of our Singapore Revolver. The net cash used in financing activities for the six months ended June 30, 2018 was primarily due to repayments of debt in Japan.

We provide the following supplemental data to assist our investors and analysts in understanding our liquidity and capital resources. 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. Free cash flow is not defined by U.S. GAAP. 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. 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.

	For the Six Months Ended June 30,	
	2019	2018
	(In thousands)	
Net cash provided by operating activities	$ 168,928	$ 206,379
Payments for property, plant and equipment	(273,672)	(389,568)
Proceeds from sale of and insurance recovery for property, plant and equipment	9,785	603
Free cash flow	$ (94,959)	$ (182,586)

Contractual Obligations

The following table summarizes our contractual obligations at June 30, 2019, and the effect such obligations are expected to have on our liquidity and cash flows in future periods.

		Payments Due for Year Ending December 31,					
	Total	2019 - Remaining	2020	2021	2022	2023	Thereafter
	(In thousands)						
Total debt	$ 1,315,896	$ 43,559	$ 205,342	$ 61,342	$ 107,920	$ 325,590	$ 572,143
Scheduled interest payment obligations (1)	375,538	29,240	54,577	50,960	48,684	47,123	144,954
Purchase obligations (2)	102,914	78,444	8,943	7,857	4,883	1,411	1,376
Operating lease obligations (3)	127,921	19,752	34,340	24,658	13,349	9,307	26,515
Finance lease obligations (3)	21,452	4,051	5,557	5,642	1,410	946	3,846
Severance obligations (4)	130,993	6,712	11,260	10,239	9,278	8,437	85,067
Total contractual obligations	$ 2,074,714	$ 181,758	$ 320,019	$ 160,698	$ 185,524	$ 392,814	$ 833,901

(1) Represents interest payment obligations calculated using stated coupon rates for fixed rate debt and interest rates applicable at June 30, 2019 for variable rate debt.

(2) Represents off-balance sheet purchase obligations for capital expenditures, long-term supply contracts and other contractual commitments outstanding at June 30, 2019.

(3) Represents future minimum lease payments including interest payments.

(4) Represents estimated benefit payments for our Korean subsidiary severance plan.

In addition to the obligations identified in the table above, other non-current liabilities recorded in our Consolidated Balance Sheet at June 30, 2019 include:

- $57.0 million of foreign pension plan obligations, for which the timing and actual amount of impact on our future cash flow is uncertain.
- $31.3 million net liability associated with unrecognized tax benefits. Due to the uncertainty regarding the amount and the timing of any future cash outflows associated with our unrecognized tax benefits, we are unable to reasonably estimate the amount and period of ultimate settlement, if any, with the various taxing authorities.

Off-Balance Sheet Arrangements

As of June 30, 2019, we had no off-balance sheet guarantees or other off-balance sheet arrangements as defined in Item 303(a)(4)(ii) of SEC Regulation S-K.

Contingencies, Indemnifications and Guarantees

We refer you to Note 15 to our Consolidated Financial Statements in Part I, Item 1 of this Quarterly Report on Form 10-Q for a discussion of our contingencies related to litigation and other legal matters.

Critical Accounting Policies

Our critical accounting policies are disclosed in our Annual Report on Form 10-K for the year ended December 31, 2018. During the six months ended June 30, 2019, there were no significant changes in our critical accounting policies as reported in our 2018 Annual Report on Form 10-K.

New Accounting Pronouncements

For information regarding recent accounting pronouncements, we refer you to Note 2 to our Consolidated Financial Statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Item 3. ***Quantitative and Qualitative Disclosures about Market Risk***

Market Risk Sensitivity

We are exposed to market risks, primarily related to foreign currency and interest rate fluctuations. In the normal course of business, we employ established policies and procedures to manage the exposure to fluctuations in foreign currency values and changes in interest rates.

Foreign Currency Risk

The U.S. dollar is the reporting and functional currency for us and our subsidiaries, except for J-Devices, where the Japanese Yen is the functional currency. In order to reduce our exposure to foreign currency gains and losses, we generally use natural hedging techniques to reduce foreign currency rate risk. On a limited basis, we use forward contracts to mitigate foreign currency risk of certain monetary liabilities denominated in foreign currencies.

We have foreign currency exchange rate risk associated with the remeasurement of monetary assets and liabilities on our Consolidated Balance Sheets that are denominated in currencies other than the functional currency. We performed a sensitivity analysis of our foreign currency exposure as of June 30, 2019 to assess the potential impact of fluctuations in exchange rates for all foreign denominated assets and liabilities. Assuming that all foreign currencies appreciated 10% against the U.S. dollar, taking into account our foreign currency forward contracts, our income before taxes for the six months ended June 30, 2019 would have been approximately $14 million lower, due to the remeasurement of monetary assets and liabilities. We have a significant net monetary liability at our subsidiary in Korea, principally related to our Korean severance plan.

In addition, we have foreign currency exchange rate exposure for our results of operations. For the six months ended June 30, 2019, approximately 75% of our net sales were denominated in U.S. dollars. Our remaining net sales were principally denominated in Japanese Yen for local country sales. For the six months ended June 30, 2019, approximately 50% of our cost of sales and operating expenses were denominated in U.S. dollars and were largely for raw materials and costs associated with property, plant and equipment. The remaining portion of our cost of sales and operating expenses was principally denominated in the Asian currencies of the country where our production facilities are located and largely consisted of labor. To the extent that the U.S. dollar weakens against these currencies in Asia, similar foreign currency denominated income and expenses in the future will result in higher sales, higher cost of sales and operating expenses, with cost of sales and operating expenses having the greater impact on our financial results. Similarly, our sales, cost of sales and operating expenses will decrease if the U.S. dollar strengthens against these foreign currencies. We performed a sensitivity analysis of our foreign currency exposure as of June 30, 2019 to assess the potential impact of fluctuations in exchange rates for all foreign denominated sales and operating expenses. Assuming that all foreign currencies appreciated 10% against the U.S. dollar, our operating income for the six months ended June 30, 2019 would have been approximately $49 million lower.

There are inherent limitations in the sensitivity analysis presented, primarily the assumption that foreign exchange rate movements across multiple jurisdictions would change instantaneously in an equal fashion. As a result, the analysis is unable to reflect the potential effects of more complex market or other changes that could arise which may positively or negatively affect our results of operations.

Our Consolidated Financial Statements are impacted by changes in exchange rates at the entity where the local currency is the functional currency. The effect of foreign exchange rate translation for these entities was a gain of $3.7 million and $3.9 million for the six months ended June 30, 2019 and 2018, respectively, and was recognized as an adjustment to equity through other comprehensive income (loss).

Interest Rate Risk

We have interest rate risk with respect to our debt. Our fixed and variable rate debt includes foreign borrowings and revolving credit facilities. Our fixed rate debt also consists of senior notes. Changes in interest rates have different impacts on the fixed and variable rate portions of our debt portfolio. A change in interest rates on the fixed portion of the debt portfolio impacts the fair value of the debt instrument but has no impact on interest expense or cash flows. A change in interest rates on the variable portion of the debt portfolio impacts the interest incurred and cash flows but does not generally impact the fair value of the instrument.

The table below presents the interest rates, maturities and fair value of our fixed and variable rate debt as of June 30, 2019:

	2019 - Remaining	2020	2021	2022	2023	Thereafter	Total	Fair Value
	($ in thousands)							
Fixed rate debt	$ 29,671	$ 99,342	$ 59,342	$ 54,242	$ 36,161	$ 525,000	$ 803,758	$ 801,527
Average interest rate	1.2%	2.2%	1.2%	1.2%	1.3%	6.6%	4.9%	
Variable rate debt	$ 13,888	$ 106,000	$ 2,000	$ 53,678	$ 289,429	$ 47,143	$ 512,138	$ 516,012
Average interest rate	0.5%	4.3%	4.0%	4.1%	4.6%	4.5%	4.3%	
Total debt maturities	$ 43,559	$ 205,342	$ 61,342	$ 107,920	$ 325,590	$ 572,143	$ 1,315,896	$ 1,317,539

For information regarding the fair value of our long-term debt, see Note 14 to our Consolidated Financial Statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Item 4. *Controls and Procedures*

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our periodic reports to the Securities and Exchange Commission ("SEC") is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including the Chief Executive Officer and the Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure, based on the definition of "disclosure controls and procedures" in Rule 13a-15(e) and Rule 15d-15(e) under the Securities Exchange Act of 1934, as amended. In designing and evaluating the disclosure controls and procedures, management recognizes that any disclosure controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management necessarily is required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures.

We carried out an evaluation, under the supervision and with the participation of management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of June 30, 2019 and concluded those disclosure controls and procedures were effective as of that date.

Changes in Internal Control Over Financial Reporting

As previously reported, we are implementing an enterprise resource planning system in a multi-year program in certain of our factories. There have been no changes in our internal control over financial reporting that occurred during the three months ended June 30, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. *Legal Proceedings*

Information about legal proceedings is set forth in Note 15 to our Consolidated Financial Statements in Part I, Item 1 of this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K for the year ended December 31, 2018.

Item 1A. *Risk Factors*

The factors discussed below are cautionary statements that identify important factors and risks that could cause actual results to differ materially from those anticipated by the forward-looking statements contained in this report. For more information regarding the forward-looking statements contained in this report, see the Table of Contents of this Quarterly Report on Form 10-Q. You should carefully consider the risks and uncertainties described below, together with all of the other information included in this report, in considering our business and prospects. The risks and uncertainties described below are not the only ones facing Amkor. Additional risks and uncertainties not presently known to us may also impair our business operations. The occurrence of any of the following risks could affect our business, liquidity, results of operations, financial condition or cash flows.

Dependence on the Highly Cyclical Semiconductor Industry - ***We Operate in Volatile Industries and Industry Downturns and Declines in Global Economic and Financial Conditions Could Harm Our Performance.***

Our business is impacted by market conditions in the semiconductor industry, which is cyclical by nature and impacted by broad economic factors, such as world-wide gross domestic product and consumer spending. The semiconductor industry has experienced significant and sometimes sudden and prolonged downturns in the past. If the industry or markets we compete in experience slower, or even negative growth, our business and results of operations may be adversely affected.

Since our business is, and will continue to be, dependent on the requirements of semiconductor companies for outsourced packaging and test services, any downturn in the semiconductor industry or any other industry that uses a significant number of semiconductor devices, such as telecommunications, consumer electronics, or computing, could have a material adverse effect on our business and operating results. During downturns, we have experienced, among other things, reduced demand, excess capacity and reduced sales. For example, generally soft economic conditions and a lack of compelling new mobile products constrained overall demand during 2015. In addition, we believe that there is an inventory correction in the smartphone market and that the general semiconductor market is going through a typical cyclical correction. Macroeconomic uncertainties and a cautious business climate are also expected to constrain the revenue growth in our business. It is difficult to predict the timing, strength or duration of any economic slowdown or subsequent economic recovery, which, in turn, makes it more challenging for us to forecast our operating results, make business decisions and identify risks that may affect our business, sources and uses of cash, financial condition and results of operations. Additionally, if industry conditions deteriorate, we could suffer significant losses, as we have in the past, which could materially impact our business, liquidity, results of operations, financial condition and cash flows.

Fluctuations in Operating Results and Cash Flows - ***Our Operating Results and Cash Flows Have Varied and May Vary Significantly as a Result of Factors That We Cannot Control.***

Many factors, including the impact of adverse economic conditions, could have a material adverse effect on our net sales, gross profit, operating results and cash flows, or lead to significant variability of quarterly or annual operating results. Our profitability and ability to generate cash from operations is principally dependent upon demand for semiconductors, the utilization of our capacity, semiconductor package mix, the average selling price of our services, our ability to manage our capital expenditures and our ability to control our costs including labor, material, overhead and financing costs.

Our net sales, gross profit, operating income and cash flows have historically fluctuated significantly from quarter to quarter as a result of many of the following factors, over which we have little or no control and which we expect to continue to impact our business:

- fluctuation in demand for semiconductors and conditions in the semiconductor industry generally, as well as by specific customers, such as inventory reductions by our customers impacting demand in key markets;

- our ability to achieve our major growth objectives, including: transitioning second-wave customers to advanced packages; expanding our sales to customers in Greater China and, in particular, in the mid-level and entry-level tiers of the mobile device market; and increasing our share of the automotive market;
- changes in our capacity and capacity utilization rates;
- changes in average selling prices which can occur quickly due to the absence of long-term agreements on price;
- changes in the mix of the semiconductor packaging and test services that we sell;
- the development, transition and ramp to high volume manufacture of more advanced silicon nodes and evolving wafer, packaging and test technologies, may cause production delays, lower manufacturing yields and supply constraints for new wafers and other materials;
- absence of backlog, the short-term nature of our customers' commitments, double bookings by customers and deterioration in customer forecasts and the impact of these factors, including the possible delay, rescheduling and cancellation of large orders, or the timing and volume of orders relative to our production capacity;
- changes in costs, quality, availability and delivery times of raw materials, components and equipment;
- changes in labor costs to perform our services;
- wage inflation and fluctuations in commodity prices, including gold, copper and other precious metals;
- the timing of expenditures in anticipation of future orders;
- changes in effective tax rates;
- the availability and cost of financing;
- intellectual property transactions and disputes;
- high leverage and restrictive covenants;
- warranty and product liability claims and the impact of quality excursions and customer disputes and returns;
- costs associated with legal claims, indemnification obligations, judgments and settlements;
- political instability and government shutdowns, civil disturbances or environmental or natural events, such as earthquakes like the recent ones in Japan, that impact our operations, and international events, such as the United Kingdom's ongoing negotiations to leave the European Union;
- pandemic illnesses that may impact our labor force and our ability to travel;
- costs of acquisitions and divestitures and difficulties integrating acquisitions;
- our ability to attract and retain qualified personnel to support our global operations;
- fluctuations in interest rates and currency exchange rates, including the potential impact of the phase-out of LIBOR on our variable rate debt;
- fluctuations in our manufacturing yields;
- our ability to penetrate new end markets or expand our business in existing end markets;
- dependence on key customers or concentration of customers in certain end markets, such as mobile communications and automotive and
- restructuring charges, asset write-offs and impairments.

It is often difficult to predict the impact of these factors upon our results for a particular period. These factors may have a material and adverse effect on our business, liquidity, results of operations, financial condition and cash flows or lead to significant variability of quarterly or annual operating results. In addition, these factors may adversely affect our credit ratings which could make it more difficult and expensive for us to raise capital and could adversely affect the price of our securities.

Risks Associated with International Operations - We Depend on Our Factories and Operations in China, Japan, Korea, Malaysia, the Philippines, Portugal, Singapore and Taiwan. Many of Our Customers' and Vendors' Operations Are Also Located Outside of the U.S.

We provide packaging and test services through our factories and other operations located in China, Japan, Korea, Malaysia, the Philippines, Portugal, Singapore and Taiwan. Substantially all of our property, plant and equipment is located outside of the United States. Moreover, many of our customers and the vendors in our supply chain are located outside the U.S. The following are some of the risks we face in doing business internationally:

- changes in consumer demand resulting from deteriorating conditions in local economies;
- laws, rules, regulations and policies imposed by U.S. or foreign governments, such as tariffs, customs, duties and other restrictive trade barriers, national security, data privacy and cybersecurity, antitrust and competition, tax, currency and banking, labor, environmental, health and safety, and in particular the recent increase in tariffs, customs, duties and other restrictive trade barriers considered or adopted by U.S. and foreign governments;
- laws, rules, regulations and policies within China and other countries that may favor domestic companies over non-domestic companies, including customer- or government-supported efforts to promote the development and growth of local competitors;
- the payment of dividends and other payments by non-U.S. subsidiaries may be subject to prohibitions, limitations or taxes in local jurisdictions;
- fluctuations in currency exchange rates, particularly the dollar/yen exchange rate for J-Devices;
- political and social conditions, and the potential for civil unrest, terrorism or other hostilities;
- disruptions or delays in shipments caused by customs brokers or government agencies;
- difficulties in attracting and retaining qualified personnel and managing foreign operations, including foreign labor disruptions;
- difficulty in enforcing contractual rights and protecting our intellectual property rights;
- potentially adverse tax consequences resulting from tax laws in the U.S. and in foreign jurisdictions in which we operate and
- local business and cultural factors that differ from our normal standards and practices, including business practices that we are prohibited from engaging in by the Foreign Corrupt Practices Act and other anti-corruption laws and regulations.

In particular, we have significant facilities and other investments in South Korea, and there have been heightened security concerns in recent years stemming from North Korea's nuclear weapon and long-range missile programs as well as its military actions in the region. Furthermore, there has been a history of conflict and a recent rise in tensions within and among other countries in the region.

Competition - We Compete Against Established Competitors in the Packaging and Test Business as Well as Internal Customer Capabilities and May Face Competition from New Competitors, Including Foundries.

The outsourced semiconductor packaging and test market is very competitive. We face substantial competition from established and emerging packaging and test service providers primarily located in Asia, including companies with significantly greater processing capacity, financial resources, local presence, research and development operations, marketing, technology and other capabilities. We also may face increased competition from domestic companies located in the People's Republic of China, or the PRC, where there are government-supported efforts to promote the development and growth of the local semiconductor industry. For example, STATS ChipPAC was acquired in 2015 by Jiangsu Electronics Technology Co., Ltd., a local PRC company. We may be at a disadvantage in attempting to compete with entities associated with such government-supported initiatives based on their lower cost of capital, access to government resources and incentives, preferential sourcing practices, stronger local relationships or otherwise. Our competitors may also have established relationships, or enter into new strategic relationships, with one or more of the large semiconductor companies that are our current or potential customers, or key suppliers to these customers. Consolidation among our competitors could also strengthen their competitive position. For example, Advanced Semiconductor Engineering, Inc. and Siliconware Precision Industries Co., Ltd. became sister companies under a new joint holding company, ASE Technology Holding Co. LTD., in April 2018.

We also face competition from the internal capabilities and capacity of many of our current and potential IDM and foundry customers. In addition, we compete with contract foundries, such as Taiwan Semiconductor Manufacturing Company Limited and Samsung Electronics Co., Ltd., which offer full turnkey services from silicon wafer fabrication through packaging and final test. These semiconductor foundries, which are substantially larger and have greater financial resources than we do, have expanded their operations to include packaging and test services, and may continue to expand these capabilities in the future.

We cannot assure you that we will be able to compete successfully in the future against our existing or potential competitors or that our customers will not rely on internal sources for packaging and test services, or that our business, liquidity, results of operations, financial condition and cash flows will not be adversely affected by such increased competition.

Absence of Backlog - The Lack of Contractually Committed Customer Demand May Adversely Affect Our Sales.

Our packaging and test business does not typically operate with any material backlog. Our quarterly net sales from packaging and test services are substantially dependent upon our customers' demand in that quarter. None of our customers have committed to purchase any significant amount of packaging or test services or to provide us with binding forecasts of demand for packaging and test services for any future period, in any material amount. In addition, we sometimes experience double booking by customers and our customers often reduce, cancel or delay their purchases of packaging and test services for a variety of reasons including industry-wide, customer-specific and Amkor-specific reasons. This makes it difficult for us to forecast our capacity utilization and net sales in future periods. Since a large portion of our costs is fixed and our expense levels are based in part on our expectations of future sales, we may not be able to adjust costs in a timely manner to compensate for any sales shortfall. If we are unable to adjust costs in a timely manner, our margins, operating results, financial condition and cash flows would be adversely affected.

High Fixed Costs - Due to Our High Percentage of Fixed Costs, We Will Be Unable to Maintain Satisfactory Gross Margins if We Are Unable to Achieve Relatively High Capacity Utilization Rates.

Our operations are characterized by relatively high fixed costs and the absence of any material backlog. Our profitability depends in part not only on pricing levels for our packaging and test services, but also on the efficient utilization of our human resources and packaging and test equipment. Increases or decreases in our capacity utilization can significantly affect gross margins. In periods of low demand, we experience relatively low capacity utilization in our operations, which leads to reduced margins during that period. Transitions between different packaging technologies, such as the transition from gold wirebond to flip chip and copper wirebond packages, can also impact our capacity utilization if we do not efficiently redeploy our equipment for other packaging and test opportunities. For example, in 2011 the migration of some customer demand from wirebond to flip chip packages resulted in under-utilized wirebond assets which negatively impacted our capacity utilization and gross margin. We cannot assure you that we will be able to achieve consistently high capacity utilization, and if we fail to do so, our gross margins will be negatively impacted. If our gross margins decrease, our business, liquidity, results of operations, financial condition and cash flows could be materially adversely affected.

In addition, our fixed operating costs have increased in recent years in part as a result of our efforts to expand our capacity through significant capital expenditures. Forecasted customer demand for which we have made capital investments may not materialize, especially if industry conditions deteriorate. As a result, our sales may not adequately cover fixed costs resulting in reduced profit levels or causing significant losses, both of which may adversely impact our business, liquidity, results of operations, financial condition and cash flows.

Guidance - Our Failure to Meet Our Guidance or Analyst Projections Could Adversely Impact the Trading Prices of Our Securities.

We periodically provide guidance to investors with respect to certain financial information for future periods. Securities analysts also periodically publish their own projections with respect to our future operating results. As discussed above under “Fluctuations in Operating Results and Cash Flows - Our Operating Results and Cash Flows Have Varied and May Vary Significantly as a Result of Factors That We Cannot Control,” our operating results and cash flows vary significantly and are difficult to accurately predict. Volatility in customer forecasts and fluctuations in global consumer demand make it particularly difficult to predict future results. Further, providing guidance requires us to make estimates and assumptions about such things as revenue, costs and expenses, which may turn out to be incorrect or change. To the extent we fail to meet or exceed our own guidance or the analyst projections for any reason, the trading prices of our securities may be adversely impacted. Moreover, even if we do meet or exceed that guidance or those projections, if analysts and investors do not react favorably, or if analysts were to discontinue providing coverage of our company, the trading prices of our securities may be adversely impacted.

Declining Average Selling Prices - Historically There Has Been Downward Pressure on the Prices of Our Packaging and Test Services.

Prices for packaging and test services have generally declined over time, and sometimes prices can change significantly in relatively short periods of time. We expect downward pressure on average selling prices for our packaging and test services to continue in the future, and this pressure may intensify during downturns in business. If we are unable to offset a decline in average selling prices by developing and marketing new packages with higher prices, reducing our purchasing costs, recovering more of our material cost increases from our customers and reducing our manufacturing costs, our business, liquidity, results of operations, financial condition and cash flows could be materially adversely affected.

Decisions by Our Integrated Device Manufacturer and Foundry Customers to Curtail Outsourcing May Adversely Affect Our Business.

Historically, we have been dependent on the trend in outsourcing of packaging and test services by IDM customers. Our IDM and foundry customers continually evaluate the need for outsourced services against their own in-house packaging and test services. As a result, at any time and for a variety of reasons, IDMs and foundries may decide to shift some or all of their outsourced packaging and test services to internally sourced capacity.

The reasons IDMs and foundries may shift their outsourced business to internal capacity include:

- their desire to realize higher utilization of their existing packaging and test capacity, especially during downturns in the semiconductor industry;
- their unwillingness to disclose proprietary technology;
- their possession of more advanced packaging and test technologies and
- the guaranteed availability of their own packaging and test capacity.

In addition, to the extent we limit capacity commitments for certain customers, these customers may increase their level of in-house packaging and test capabilities, which could make it more difficult for us to regain their business when we have available capacity.

In a downturn in the semiconductor industry, IDMs and foundries could respond by shifting some or all outsourced packaging and test services to internally serviced capacity on a short-term basis. Also, the IDMs and foundries could curtail or reverse the trend of outsourcing packaging and test services. If we experience a significant loss of IDM or foundry business, it could have a material adverse effect on our business, liquidity, results of operations, financial condition and cash flows, especially during a prolonged industry downturn.

Our Substantial Indebtedness Could Adversely Affect Our Financial Condition and Prevent Us from Fulfilling Our Obligations.

We have a significant amount of indebtedness, and the terms of the agreements governing our indebtedness allow us and our subsidiaries to incur more debt, subject to certain limitations. As of June 30, 2019, our total debt balance was $1,308.2 million, of which $198.2 million was classified as a current liability and $539.3 million was collateralized indebtedness at our subsidiaries. We may consider investments in joint ventures, increased capital expenditures, refinancings, or acquisitions which may increase our indebtedness. If new debt is added to our consolidated debt level, the related risks that we face could intensify.

Our substantial indebtedness could:

- make it more difficult for us to satisfy our obligations with respect to our indebtedness, including our obligations under our indentures to purchase notes tendered as a result of a change in control of Amkor;
- increase our vulnerability to general adverse economic and industry conditions;
- limit our ability to fund future working capital, capital expenditures, research and development and other business opportunities, including joint ventures and acquisitions;
- require us to dedicate a substantial portion of our cash flow from operations to service payments of interest and principal on our debt, thereby reducing the availability of our cash flow to fund future working capital, capital expenditures, research and development expenditures and other general corporate requirements;
- increase the volatility of the price of our common stock;
- limit our flexibility to react to changes in our business and the industry in which we operate;
- place us at a competitive disadvantage to any of our competitors that have less debt;
- limit, along with the financial and other restrictive covenants in our indebtedness, among other things, our ability to borrow additional funds;
- limit our ability to refinance our existing indebtedness, particularly during periods of adverse credit market conditions when refinancing indebtedness may not be available under interest rates and other terms acceptable to us or at all and
- increase our cost of borrowing.

In addition, certain of our credit agreements use LIBOR or other reference rates to determine the rate of interest payable on our borrowings. The United Kingdom’s Financial Conduct Authority intends to phase out LIBOR by the end of 2021. Plans for alternative reference rates for other currencies have also been announced. At this time, we cannot predict how markets will respond to proposed alternative rates or the effect of any changes to, or discontinuation of, LIBOR. If reference rates under our credit agreements are no longer available or if our lenders have increased costs due to changes in reference rates, we may experience increases in interest rates on our variable rate debt, which could adversely impact our interest expense, results of operations and cash flows.

We May Have Difficulty Funding Liquidity Needs.

We assess our liquidity based on our current expectations regarding sales, operating expenses, capital spending and debt service requirements and other funding needs. Our liquidity is affected by, among other things, the performance of our business, our capital expenditure and other investment levels and our ability to repay debt and other long-term obligations out of our operating cash flows or with the proceeds of debt or equity financings.

We operate in a capital-intensive industry. We had capital expenditures of $273.7 million during the six months ended June 30, 2019. Servicing our current and future customers requires that we incur significant operating expenses and continue to make significant capital expenditures and other investments, which are generally made in advance of the related revenues and without firm customer commitments. Ultimately the actual amount of our capital expenditures for 2019 and thereafter may vary materially and will depend on several factors. These factors include, among others, the amount, timing and implementation of our capital projects, including those under review and those not yet planned, the performance of our business, economic and market conditions, the cash needs and investment opportunities for the business, the need for additional capacity and facilities and the availability of cash flows from operations or financing.

In addition, we have a significant level of debt, which requires significant scheduled principal and interest payments in the coming years. The sources funding our operations, including making capital expenditures and other investments and servicing principal and interest obligations with respect to our debt, are cash flows from our operations, existing cash and cash equivalents, borrowings under available debt facilities, or proceeds from any additional debt or equity financing.

The health of the worldwide banking system and capital markets affects our liquidity. If financial institutions that have extended credit commitments to us are adversely affected by the conditions of the U.S., foreign or international banking system and capital markets, they may refuse or be unable to fund borrowings under their credit commitments to us. Volatility in the banking system and capital markets, as well as rising interest rates or adverse economic, political and other global conditions, could also make it difficult or more expensive for us to maintain our existing credit facilities or refinance our debt.

The trading price of our common stock has been, and is likely to continue to be, highly volatile and could be subject to wide fluctuations. Such fluctuations could impact our decision or ability to utilize the equity markets as a potential source of our funding needs in the future.

In addition, there is a risk that we could fail to generate the necessary net income or operating cash flows to meet the funding needs of our business due to a variety of factors, including the other factors discussed in this “Risk Factors” section. If we fail to generate the necessary cash flows or we are unable to access the capital markets when needed, our liquidity may be adversely impacted.

Restrictive Covenants in the Indentures and Agreements Governing Our Current and Future Indebtedness Could Restrict Our Operating Flexibility.

The indentures and agreements governing our existing debt, and debt we may incur in the future, contain, or may contain, affirmative and negative covenants that materially limit our ability to take certain actions, including our ability to incur debt, pay dividends and repurchase stock, make certain investments and other payments, enter into certain mergers and consolidations, engage in sale leaseback transactions and encumber and dispose of assets. In addition, certain of our debt agreements contain, and our future debt agreements may contain financial covenants and ratios.

The breach of any of these covenants by us or the failure by us to meet any of the financial ratios or conditions could result in a default under any or all of such indebtedness. If a default occurs under any such indebtedness, all of the outstanding obligations thereunder could become immediately due and payable, which could result in a default under our other outstanding debt and could lead to an acceleration of obligations related to other outstanding debt. The existence of such a default or event of default could also preclude us from borrowing funds under our revolving credit facilities. Our ability to comply with the provisions of the indentures, credit facilities and other agreements governing our outstanding debt and indebtedness we may incur in the future can be affected by events beyond our control and a default under any debt instrument, if not cured or waived, could have a material adverse effect on us.

We Have Significant Severance Plan Obligations Associated With Our Manufacturing Operations in Korea Which Could Reduce Our Cash Flow and Negatively Impact Our Financial Condition.

Our subsidiary in Korea maintains an unfunded severance plan, under which we have an accrued liability of $131.0 million as of June 30, 2019. The plan covers certain employees that were employed prior to August 1, 2015. In the event of a significant layoff or other reduction in our labor force in Korea, our subsidiary in Korea would be required to make lump-sum severance payments under the plan, which could have a material adverse effect on our liquidity, financial condition and cash flows.

If We Fail to Maintain an Effective System of Internal Controls, We May Not be Able to Accurately Report Financial Results or Prevent Fraud.

Effective internal controls are necessary to provide reliable financial reports and to assist in the effective prevention of fraud. We must annually evaluate our internal procedures to satisfy the requirements of Section 404 of the Sarbanes-Oxley Act of 2002, which requires management and our independent registered public accounting firm to assess the effectiveness of internal control over financial reporting.

Internal controls may not prevent or detect misstatements because of their inherent limitations, including the possibility of human error, the circumvention or overriding of controls, fraud or corruption. Therefore, even effective internal controls can provide only reasonable assurance with respect to the preparation and fair presentation of financial statements. In addition, projections of any evaluation of effectiveness of internal controls to future periods are subject to the risk that the internal controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

We assess our internal controls and systems on an ongoing basis, and from time-to-time, we update and make modifications to our global enterprise resource planning system. We have implemented several significant enterprise resource planning modules and expect to implement additional enterprise resource planning modules in the future. In addition, we have implemented new shop floor management systems in certain of our factories. In December 2015, we acquired the operations of J-Devices, and we integrated those operations into our overall internal control over financial reporting. Although we continue to monitor and assess our internal controls for these systems and operations, there is a risk that deficiencies may occur that could constitute significant deficiencies or, in the aggregate, a material weakness.

If we fail to remedy any deficiencies or maintain the adequacy of our internal controls, we could be subject to regulatory scrutiny, civil or criminal penalties or shareholder litigation. In addition, failure to maintain adequate internal controls could result in financial statements that do not accurately reflect our operating results or financial condition.

We Face Warranty Claims, Product Return and Liability Risks, the Risk of Economic Damage Claims and the Risk of Negative Publicity if Our Packages Fail.

Our packages are incorporated into a number of end products, and our business is exposed to warranty claims, product return and liability risks, the risk of economic damage claims and the risk of negative publicity if our packages fail.

We receive warranty claims from our customers which occur from time to time in the ordinary course of our business. If we were to experience an unusually high incidence of warranty claims, we could incur significant costs and our business could be adversely affected. In addition, we are exposed to the product and economic liability risks and the risk of negative publicity affecting our customers. Our sales may decline if any of our customers are sued on a product liability claim. We also may suffer a decline in sales from the negative publicity associated with such a lawsuit or with adverse public perceptions in general regarding our customers' products. Further, if our packages are delivered with defects, we could incur additional development, repair or replacement costs or suffer other economic losses, and our credibility and the market's acceptance of our packages could be harmed.

We Face Risks in Connection with the Continuing Development and Implementation of Changes to, and Maintenance and Security of, Our Information Technology Systems.

We depend on our information technology systems for many aspects of our business. Our systems may be susceptible to damage, disruptions or shutdowns due to failures during the process of upgrading, replacing or maintaining software, databases or components thereof, power outages, hardware failures, interruption or failures of third-party provider systems, computer viruses, attacks by computer hackers, telecommunication failures, user errors, malfeasance or catastrophic events. In addition, security breaches could result in unauthorized disclosure of confidential information. Some of our key software has been developed by our own programmers, and this software may not be easily integrated with other software and systems. From time to time we make additions or changes to our information technology systems. For example, we have implemented new shop floor systems in certain of our factories, and we are integrating J-Devices' information technology systems with our existing systems and processes. In addition, in May 2017, we completed our acquisition of Nanium and continue to integrate its information technology systems into our existing systems and processes. We face risks in connection with current and future projects to install or integrate new information technology systems or upgrade our existing systems. These risks include:

- we may face delays in the design and implementation of the system;
- the cost of the systems may exceed our plans and expectations and
- disruptions resulting from the implementation or integration of the systems may impact our ability to process transactions and delay shipments to customers, impact our results of operations or financial condition or harm our control environment.

Our business could be materially and adversely affected if our information technology systems are disrupted or if we are unable to successfully install new systems or improve, upgrade, integrate or expand upon our existing systems.

We Face Risks Trying to Attract, Retain or Replace Qualified Employees to Support Our Operations.

Our success depends to a significant extent upon the continued service of our key senior management, sales and technical personnel, any of whom may be difficult to replace. Competition for qualified employees is intense, and our business could be adversely affected by the loss of the services of any of our existing key personnel, including senior management, as a result of competition or for any other reason. We do not have employment agreements with our key employees, including senior management or other contracts that would prevent our key employees from working for our competitors in the event they cease working for us. We cannot assure you that we will be successful in our efforts to retain or replace key employees or in hiring and properly training sufficient numbers of qualified personnel and in effectively managing our growth. Our inability to attract, retain, motivate and train qualified new personnel could have a material adverse effect on our business.

Difficulties Consolidating and Integrating Our Operations - We Face Challenges as We Integrate Diverse Operations.

We have experienced, and expect to continue to experience, change in the scope and complexity of our operations resulting primarily from existing and future facility and operational consolidations, strategic acquisitions, joint ventures and other partnering arrangements. Some of the risks from these activities include those associated with the following:

- increasing the scope, geographic diversity and complexity of our operations;
- conforming an acquired company's standards, practices, systems and controls with our operations;
- increasing complexity from combining recent acquisitions of an acquired business;
- unexpected losses of key employees or customers of an acquired business; other difficulties in the assimilation of acquired operations, technologies or products and
- diversion of management and other resources from other parts of our operations and adverse effects on existing business relationships with customers.

In connection with these activities, we may:

- use a significant portion of our available cash;
- issue equity securities, which may dilute the ownership of current stockholders;
- incur substantial debt;
- incur or assume known or unknown contingent liabilities and
- incur large, immediate accounting write offs and face antitrust or other regulatory inquiries or actions.

For example, the businesses we have acquired had, at the time of acquisition, multiple systems for managing their own production, sales, inventory and other operations. Migrating these businesses to our systems typically is a slow, expensive process requiring us to divert significant resources from other parts of our operations. We may continue to face these challenges in the future. For example, in May 2017, we completed the purchase of Nanium, which we are now integrating with our existing operations. As a result of the risks discussed above, the anticipated benefits of these or other future acquisitions, consolidations and partnering arrangements may not be fully realized, if at all, and these activities could have a material adverse effect on our business, financial condition and results of operations.

Dependence on Materials and Equipment Suppliers - Our Business May Suffer If the Cost, Quality or Supply of Materials or Equipment Changes Adversely Including Any Disruption that May Occur in the Supply of Certain Materials due to Regulations and Customer Requirements.

We obtain from various vendors the materials and equipment required for the packaging and test services performed by our factories. We source most of our materials, including critical materials such as leadframes, laminate substrates and gold wire, from a limited group of suppliers. A disruption to the operations of one or more of our suppliers could have a negative impact on our business. For example, the severe earthquake and tsunami in Japan in 2011 had a significant adverse effect on the electronics industry supply chain by impacting the supply of specialty chemicals, substrates, silicon wafers, equipment and other supplies to the electronics industry. In addition, we purchase the majority of our materials on a purchase order basis. Our business may be harmed if we cannot obtain materials and other supplies from our vendors in a timely manner, in sufficient quantities, at acceptable quality or at competitive prices. Some of our customers are also dependent on a limited number of suppliers for certain materials and silicon wafers. Shortages or disruptions in our customers' supply channels could have a material adverse effect on our business, financial condition, results of operations and cash flows. For example, the shortage in the supply of 28 nanometer wafers to some of our customers in 2012 delayed or otherwise adversely impacted the demand for certain of our advanced packaging and test services.

Rules adopted by the SEC implementing the Dodd-Frank Wall Street Reform and Consumer Protection Act impose diligence and disclosure requirements regarding the use of certain minerals originating from the conflict zones of the Democratic Republic of Congo and adjoining countries in our products. Industry associations and many of our customers have implemented initiatives to improve transparency and accountability concerning the supply of these materials and, in some cases, requiring us to certify that the covered materials we use in our packages do not come from the conflict areas. We may incur additional costs associated with complying with these requirements and customer initiatives, and we may be required to increase our efforts in the future to cover additional materials and geographic areas. These requirements and customer initiatives could affect the pricing, sourcing and availability of materials used in the manufacture of semiconductor devices, and we cannot assure you that we will be able to obtain conflict-free materials in sufficient quantities and at competitive prices or that we will be able to verify the origin of all of the materials we use in our manufacturing process. If we are unable to meet these requirements and customer initiatives, it could adversely affect our business as some customers may move their business to other suppliers. Our reputation could also be adversely affected.

We purchase new packaging and test equipment to maintain and expand our operations. From time to time, increased demand for new equipment may cause lead times to extend beyond those normally required by equipment vendors. For example, in the past, increased demand for equipment caused some equipment suppliers to only partially satisfy our equipment orders in the normal time frame or to increase prices during market upturns for the semiconductor industry. The unavailability of equipment or failures to deliver equipment on a timely basis could delay or impair our ability to meet customer orders. If we are unable to meet customer orders, we could lose potential and existing customers. Generally, we acquire our equipment on a purchase order basis and do not enter into long-term equipment agreements. As a result, we could experience adverse changes in pricing, currency risk and potential shortages in equipment in a strong market, which could have a material adverse effect on our results of operations.

We are a large buyer of gold and other commodity materials including substrates and copper. The prices of gold and other commodities used in our business fluctuate. Historically, we have been able to partially offset the effect of commodity price increases through price adjustments to some customers and changes in our product designs that reduce the material content and cost, such as the use of shorter, thinner, gold wire and migration to copper wire. However, we typically do not have long-term contracts that permit us to impose price adjustments, and market conditions may limit our ability to do so. Significant price increases may adversely impact our gross margin in future periods to the extent we are unable to pass along past or future commodity price increases to our customers.

Customer Concentration and Loss of Customers** - **The Loss of Certain Customers or Reduced Orders or Pricing from Existing Customers May Have a Significant Adverse Effect on Our Operations and Financial Results.

We have derived and expect to continue to derive a large portion of our revenues from a small group of customers during any particular period due in part to the concentration of market share in the semiconductor industry. Our ten largest customers together accounted for 62% of our net sales for the year ended December 31, 2018, and one customer accounted for more than 10% of our consolidated net sales during the period. In addition, we have significant customer concentration within our end markets. The loss of a significant customer, a business combination among our customers, a reduction in orders or decrease in price from a significant customer or disruption in any of our significant strategic partnerships or other commercial arrangements may result in a decline in our sales and profitability and could have a material adverse effect on our business, liquidity, results of operations, financial condition and cash flows.

The demand for our services from each customer is directly dependent upon that customer's financial health, level of business activity and purchasing decisions, the quality and price of our services, our cycle time and delivery performance, the customer's qualification of additional competitors on products we package or test and a number of other factors. Each of these factors could vary significantly from time to time resulting in the loss or reduction of customer orders. Our business is likely to remain subject to this variability in order levels, and we cannot assure you that our key customers or any other customers will continue to place orders with us in the future at the same levels as in past periods.

For example, if a key customer decides to purchase wafers from a semiconductor foundry that provides packaging and test services, our business could be reduced if the customer also engages that foundry for related packaging and test services. We cannot assure that customer decisions regarding the purchase of semiconductor wafers will not significantly and adversely impact customer demand for our packaging and test services.

In addition, from time to time we may acquire or build new facilities, such as K5, or migrate existing business among our facilities. In connection with these facility changes, our customers require us to re-qualify the new facilities even though we have already qualified to perform the services at our other facilities. We cannot assure that we will successfully re-qualify or that our customers will not qualify our competitors and move the business for such services.

Capital Expenditures** - **We Make Substantial Investments in Equipment and Facilities To Support the Demand Of Our Customers, Which May Adversely Affect Our Business If the Demand Of Our Customers Does Not Develop As We Expect or Is Adversely Affected.

We make significant investments in equipment and facilities in order to service the demand of our customers. For example, we expect that our 2019 capital expenditures will be approximately $475 million. The amount of our capital expenditures depends on several factors, including the performance of our business, our assessment of future industry and customer demand, our capacity utilization levels and availability, our liquidity position and the availability of financing. Our ongoing capital expenditure requirements may strain our cash and short-term asset balances, and, in periods when we are expanding our capital base, we expect that depreciation expense and factory operating expenses associated with our capital expenditures to increase production capacity will put downward pressure on our gross margin, at least over the near term. From time to time, we also make significant capital expenditures based on specific business opportunities with one or a few key customers, and the additional equipment purchased may not be readily usable to support other customers. If demand is insufficient to fill our capacity, or we are unable to efficiently redeploy such equipment, our capacity utilization and gross margin could be negatively impacted. Our capital expenditures or cost per square foot may increase as we transition to new or more advanced packaging and test technologies because, among other things, new equipment used for these technologies is generally more expensive and often our existing equipment cannot be redeployed in whole or part for these technologies.

Furthermore, if we cannot generate or raise additional funds to pay for capital expenditures, particularly in some of the advanced packaging and bumping areas, as well as research and development activities, our growth and future profitability may be adversely affected. Our ability to obtain external financing in the future is subject to a variety of uncertainties, including:

- our future financial condition, results of operations and cash flows;
- general market conditions for financing;
- volatility in fixed income, credit and equity markets and
- economic, political and other global conditions.

The lead time needed to order, install and put into service various capital investments is often significant, and, as a result, we often need to commit to capital expenditures in advance of our receipt of firm orders or advance deposits based on our view of anticipated future demand with only very limited visibility. Although we seek to limit our exposure in this regard, in the past we have from time to time expended significant capital for additional equipment or facilities for which the anticipated demand did not materialize for a variety of reasons, many of which were outside of our control. To the extent this occurs in the future, our business, liquidity, results of operations, financial condition and cash flows could be materially adversely affected.

In addition, during periods where customer demand exceeds our capacity, customers may transfer some or all of their business to other suppliers who are able to support their needs. To the extent this occurs, our business, liquidity, results of operations, financial condition and cash flows could be materially adversely affected.

While we completed the initial phase of construction of K5 in December 2016, there can be no assurance regarding when the facility will be fully utilized, or that the actual scope, costs, timeline or benefits of the project will be consistent with our expectations.

Impairment Charges - Any Impairment Charges Required Under U.S. GAAP May Have a Material Adverse Effect on Our Net Income.

Under U.S. GAAP, we review our long-lived assets including property, plant and equipment, intellectual property, goodwill and other intangibles for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. In addition, we review goodwill for impairment annually during the fourth quarter of each year. Factors we consider include significant under-performance relative to expected historical or projected future operating results, significant negative industry or economic trends and our market capitalization relative to net book value. We may be required in the future to record a significant charge to earnings in our financial statements during the period in which any impairment of our long-lived assets is determined. Such charges have had and could have a significant adverse impact on our results of operations and our operating flexibility under our debt covenants.

Litigation Incident to Our Business Could Adversely Affect Us.

We have been a party to various legal proceedings, including those described from time to time in our reports filed with the SEC, and may be a party to legal proceedings in the future. These proceedings could require significant management time and resources and, if an unfavorable ruling or outcome were to occur in these legal proceedings, there could be a material adverse impact on our business, liquidity, results of operations, financial condition, cash flows and the trading price of our securities.

We Could Suffer Adverse Tax and Other Financial Consequences if There Are Changes in Tax Laws or Taxing Authorities Do Not Agree with Our Interpretation of Applicable Tax Laws, Including Whether We Continue to Qualify for Tax Holidays, or if We Are Required to Establish or Adjust Valuation Allowances on Deferred Tax Assets.

We earn a substantial portion of our income in foreign countries and our operations are subject to tax in multiple jurisdictions with complicated and varied tax regimes. Tax laws and income tax rates in these jurisdictions are subject to change due to economic and political conditions. In addition, organizations such as the Organisation for Economic Co-operation and Development may, from time to time, propose guidelines regarding transfer pricing and other international tax matters relating to multinational companies like Amkor. Changes in U.S. or foreign tax laws arising out of such proposals or otherwise could have a material adverse impact on our liquidity, results of operations, financial condition and cash flows.

Our tax liabilities are based, in part, on our corporate structure, interpretations of various U.S. and foreign tax laws, including withholding tax, compliance with tax holiday requirements, application of changes in tax law to our operations and other relevant laws of applicable taxing jurisdictions. From time to time, taxing authorities may conduct examinations of our income tax returns and other regulatory filings. We cannot assure you that the taxing authorities will agree with our interpretations, including whether we continue to qualify for tax holidays. If they do not agree, we may seek to enter into settlements with the taxing authorities. We may also appeal a taxing authority's determination to the appropriate governmental authorities, but we cannot be sure we will prevail. If we do not prevail or if we enter into settlements with taxing authorities, we may have to make significant payments or otherwise record charges (or reduce tax assets) that adversely affect our results of operations, financial condition and cash flows. Additionally, certain of our subsidiaries operate under tax holidays, which will expire in whole or in part at various dates in the future. As those tax holidays expire, we expect that our tax expense will increase as income from those jurisdictions becomes subject to higher statutory income tax rates, thereby reducing our liquidity and cash flow.

We monitor on an ongoing basis our ability to utilize our deferred tax assets and whether there is a need for a related valuation allowance. In evaluating our ability to recover our deferred tax assets, in the jurisdiction from which they arise, we consider all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax-planning strategies and results of recent operations. For most of our foreign deferred tax assets, we believe that we will have sufficient taxable income to allow us to realize these deferred tax assets. In the event taxable income falls short of current expectations, we may need to establish a valuation allowance against such deferred tax assets that, if required, could materially affect our results of operations.

The Enactment of Recent Tax Reform Could Materially Impact Our Financial Position and Results of Operations.

On December 22, 2017, the Tax Act was signed into law. The Tax Act made significant changes to the U.S. tax code. Changes include a reduction of the U.S. federal corporate tax rate from 35% to 21%, a one-time transition tax on unremitted foreign earnings and profits applicable for our fiscal year ended December 31, 2017, limitations on tax deductions for interest expense for the period beginning January 1, 2018, and changes to other existing deductions and business-related exclusions in future periods. As a result, in the fourth quarter of 2017, we recognized a one-time net tax benefit of approximately $41.6 million, primarily due to the release of a valuation allowance against U.S. deferred tax assets that we expected to realize as a result of the change to the U.S. tax law limiting the deductibility of interest expense. We also incurred charges for the one-time transition tax on our unremitted foreign earnings and profits offset by the anticipated utilization of foreign tax credits. We were also required to re-measure our deferred tax assets based on the new U.S. federal corporate tax rate of 21%. In 2018, we updated our provisional estimate of the impact of the Tax Act, and recorded a $22.3 million income tax expense to complete the accounting for the impact of the Tax Act, reducing our estimated net tax benefit of $41.6 million from 2017. Our accounting for the impact of the Tax Act is now complete in accordance with SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118"). However, there is uncertainty in the application of many aspects of the Tax Act and additional guidance with respect to the Tax Act may affect our estimates and could have a material impact on our income tax expense.

Intellectual Property - Our Business Will Suffer if We Are Not Able to Develop New Proprietary Technology, Protect Our Proprietary Technology and Operate Without Infringing the Proprietary Rights of Others.

The complexity and breadth of semiconductor packaging and test services are rapidly increasing. As a result, we expect that we will need to develop, acquire and implement new manufacturing processes and packaging technologies and tools in order to respond to competitive industry conditions and customer requirements. Technological advances also typically lead to rapid and significant price erosion and may make our existing packages less competitive or our existing inventories obsolete. If we cannot achieve advances in packaging design or obtain access to advanced packaging designs developed by others, our business could suffer.

The need to develop and maintain advanced packaging capabilities and equipment could require significant research and development, capital expenditures and acquisitions in future years. In addition, converting to new packaging designs or process methodologies could result in delays in producing new package types, which could adversely affect our ability to meet customer orders and adversely impact our business.

The process of seeking patent protection takes a long time and is expensive. There can be no assurance that patents will issue from pending or future applications or that, if patents are issued, the rights granted under the patents will provide us with meaningful protection or any commercial advantage. Any patents we do obtain will eventually expire, may be challenged, invalidated or circumvented and may not provide meaningful protection or other commercial advantage to us.
Some of our technologies are not covered by any patent or patent application. The confidentiality agreements on which we rely to protect these technologies may be breached and may not be adequate to protect our proprietary technologies. There can be no assurance that other countries in which we market our services will protect our intellectual property rights to the same extent as the U.S.

Our competitors may develop, patent or gain access to know-how and technology similar or superior to our own. In addition, many of our patents are subject to cross licenses, several of which are with our competitors. The semiconductor industry is characterized by frequent claims regarding the infringement of patent and other intellectual property rights. If any third party makes an enforceable infringement claim against us or our customers, we could be required to:

- discontinue the use of certain processes or cease to provide the services at issue, which could curtail our business;
- pay substantial damages;
- develop non-infringing technologies, which may not be feasible or
- acquire licenses to such technology, which may not be available on commercially reasonable terms or at all.

We may need to enforce our patents or other intellectual property rights, including our rights under patent and intellectual property licenses with third parties, or defend ourselves against claimed infringement of the rights of others through litigation, which could result in substantial cost and diversion of our resources and may not be successful. Furthermore, if we fail to obtain necessary licenses, our business could suffer, and we could be exposed to claims for damages and injunctions from third parties, as well as claims from our customers for indemnification. In the past, we have been involved in legal proceedings involving the acquisition and license of intellectual property rights, the enforcement of our existing intellectual property rights or the enforcement of the intellectual property rights of others, including settled legal proceedings described in more detail in Note 15 to the Consolidated Financial Statements in Part II, Item 8 of our Annual Report on Form 10-K. Unfavorable outcomes in any legal proceedings involving intellectual property could result in significant liabilities or loss of commercial advantage and could have a material adverse effect on our business, liquidity, results of operations, financial condition and cash flows. The potential impact from the legal proceedings referred to in this Quarterly Report on Form 10-Q on our results of operations, financial condition and cash flows could change in the future.

Packaging and Test Processes Are Complex and Our Production Yields and Customer Relationships May Suffer from Defects in the Services We Provide or if We Do Not Successfully Implement New Technologies.

Semiconductor packaging and test services are complex processes that require significant technological and process expertise. Defective packages primarily result from:

- contaminants in the manufacturing environment;
- human error;
- equipment malfunction;
- changing processes to address environmental requirements;

- defective raw materials or
- defective plating services.

Test is also complex and involves sophisticated equipment and software. Similar to many software programs, these software programs are complex and may contain programming errors or "bugs." The test equipment is also subject to malfunction. In addition, the test process is subject to operator error.

These and other factors have, from time to time, contributed to lower production yields. They may also do so in the future, particularly as we adjust our capacity, change our processing steps or ramp new technologies. In addition, we must continue to develop and implement new packaging and test technologies and expand our offering of packages to be competitive. Our production yields on new packages, particularly those packages which are based on new technologies, typically are significantly lower than our production yields on our more established packages.

Our failure to maintain quality standards or acceptable production yields, if significant and prolonged, could result in loss of customers, increased costs of production, delays, substantial amounts of returned goods and claims by customers relating thereto. Any of these problems could have a material adverse effect on our business, liquidity, results of operations, financial condition and cash flows.

In addition, in line with industry practice, new customers usually require us to pass a lengthy and rigorous qualification process that may take several months. If we fail to qualify packages with potential customers or existing customers, such failure could have a material adverse effect on our business, results of operations, financial condition and cash flows.

Environmental, Health & Safety Laws and Industry and Customer Initiatives - Future Environmental, Health & Safety Laws and Industry and Customer Sustainability Initiatives Could Place Additional Burdens on Our Manufacturing Operations.

The semiconductor packaging process generates byproducts that are subject to extensive governmental regulations. For example, at our foreign facilities we produce liquid waste when semiconductor wafers are diced into chips with the aid of diamond saws, then cooled with running water. In addition, semiconductor packages have historically utilized metallic alloys containing lead (Pb) within the interconnect terminals typically referred to as leads, pins or balls. Environmental, health and safety laws and regulations in places we do business, impose various controls on the use, storage, handling, discharge and disposal of chemicals used in our production processes and on the factories we occupy and are increasingly imposing restrictions on the materials contained in semiconductor products. For example, the European Union's Restriction of Hazardous Substances in Electrical and Electronic Equipment directive and similar laws in other jurisdictions, including China, impose strict restrictions on the placement into the market of electrical and electronic equipment containing lead and certain other hazardous substances. We may become liable under these and other environmental, health and safety laws and regulations, including for the cost of compliance and cleanup of any disposal or release of hazardous materials arising out of our former or current operations, or otherwise as a result of the existence of hazardous materials on our properties or hazardous substances in the products we manufacture. We could also be held liable for damages, including fines, penalties and the cost of investigations and remedial actions, we could be subject to revocation of permits negatively affecting our ability to maintain or expand our operations, and we could suffer reputational harm.

There has also been an increase in public attention and industry and customer focus on the materials contained in semiconductor products, the environmental impact of semiconductor operations and the risk of chemical releases from such operations, climate change, sustainability and related environmental concerns. This increased focus on sustainability and the environmental impact of semiconductor operations and products has caused industry groups and customers to impose additional requirements on us and our suppliers, sometimes exceeding regulatory standards. These industry and customer requirements include increased tracking and reporting of greenhouse gas emissions, reductions in waste and wastewater from operations, additional reporting on the materials and components used in the products we manufacture, and the use of renewable energy sources in our factory operations. To comply with these additional requirements, we may need to procure additional equipment or make factory or process changes and our manufacturing costs may increase.

Our Business and Financial Condition Could be Adversely Affected by Natural Disasters and Other Calamities, Political Instability, Hostilities, or Other Disruptions.

We have significant packaging and test and other operations in China, Japan, Korea, Malaysia, the Philippines, Portugal, Singapore, and Taiwan which are or could be subject to natural disasters, such as earthquakes, tsunamis, typhoons, floods, droughts, volcanoes and other severe weather and geological events, and other calamities, such as fire; the outbreak of infectious diseases (such as Ebola, SARS or flu); industrial strikes; breakdowns of equipment; difficulties or delays in obtaining materials, equipment, utilities and services; political events or instability; acts of war, armed conflict, terrorist incidents and other hostilities, including any such events that may arise out of increased tensions involving North Korea or in other regions where we have facilities; industrial accidents and other events, that could disrupt or even shutdown our operations. In addition, our suppliers and customers also have significant operations in such locations. In the event of such a disruption or shutdown, we may be unable to reallocate production to other facilities in a timely or cost-effective manner (if at all) and we may not have sufficient capacity to service customer demands in our other facilities. A natural disaster or other calamity, political instability, the occurrence of hostilities or other event that results in a prolonged disruption to our operations, or the operations of our customers or suppliers, could have a material adverse effect on our business, financial condition, results of operations and cash flows.

For example, in April 2016, our Kumamoto factory was damaged by earthquakes in Japan. As a result of these earthquakes, our sales were reduced due to the temporary disruption in operations. We also incurred earthquake related costs for damaged inventory, buildings and equipment.

In addition, some of the processes that we utilize in our operations place us at risk of fire and other damage. For example, highly flammable gases are used in the preparation of wafers holding semiconductor devices for flip chip packaging.

Although we maintain insurance policies for various types of property, casualty and other risks, we do not carry insurance for all the above referred risks, and with regard to the insurance we do maintain, we cannot assure you that it would be sufficient to cover all of our potential losses. As a result, our business, financial condition, results of operations and cash flows could be adversely affected by natural disasters and other calamities.

Mr. James J. Kim and Members of His Family Can Effectively Determine or Substantially Influence The Outcome of All Matters Requiring Stockholder Approval.

As of June 30, 2019, Mr. James J. Kim, the Executive Chairman of our Board of Directors, Mr. John T. Kim, the Vice Chairman of our Board of Directors, Ms. Susan Y. Kim, a member of our Board of Directors, and members of the Kim family and affiliates owned approximately 141.7 million shares, or approximately 59%, of our outstanding common stock. The Kim family also has options to acquire approximately 0.4 million shares. If the options are exercised, the Kim family's total ownership would be an aggregate of approximately 142.1 million shares of our outstanding common stock or approximately 59% of our outstanding common stock.

In June 2013, the Kim family exchanged their convertible notes issued by Amkor for approximately 49.6 million shares of common stock (the "Convert Shares"). The Convert Shares are subject to a voting agreement. The agreement requires the Kim family to vote these shares in a "neutral manner" on all matters submitted to our stockholders for a vote, so that such Convert Shares are voted in the same proportion as all of the other outstanding securities (excluding the other shares owned by the Kim family) that are actually voted on a proposal submitted to Amkor's stockholders for approval. The Kim family is not required to vote in a "neutral manner" any Convert Shares that, when aggregated with all other voting shares held by the Kim family, represent 41.6% or less of the total then-outstanding voting shares of our common stock. The voting agreement for the Convert Shares terminates upon the earliest of (i) such time as the Kim family no longer beneficially owns any of the Convert Shares, (ii) consummation of a change of control (as defined in the voting agreement) or (iii) the mutual agreement of the Kim family and Amkor.

Mr. James J. Kim and his family and affiliates, acting together, have the ability to effectively determine or substantially influence matters submitted for approval by our stockholders by voting their shares or otherwise acting by written consent, including the election of our Board of Directors. There is also the potential, through the election of members of our Board of Directors, that the Kim family could substantially influence matters decided upon by our Board of Directors. This concentration of ownership may also have the effect of impeding a merger, consolidation, takeover or other business consolidation involving us, or discouraging a potential acquirer from making a tender offer for our shares, and could also negatively affect our stock's market price or decrease any premium over market price that an acquirer might otherwise pay. Concentration of ownership also reduces the public float of our common stock. There may be less liquidity and higher price volatility for the stock of companies with a smaller public float compared to companies with broader public ownership. Also, the sale or the prospect of the sale of a substantial portion of the Kim family shares may adversely affect the market price of our stock.

Item 2. ***Unregistered Sales of Equity Securities and Use of Proceeds***

Issuer Repurchase of Equity Securities

The following table provides information regarding repurchases of our common stock during the three months ended June 30, 2019.

Period	Total Number of Shares Purchased (a)	Average Price Paid Per Share ($)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (b)	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs ($) (b)
April 1 - April 30	—	$ —	—	$ 91,586,032
May 1 - May 31	5,425	6.55	—	91,586,032
June 1 - June 30	—	—	—	91,586,032
Total	5,425	$ 6.55	—	

(a) Represents shares of common stock surrendered to us to satisfy tax withholding obligations associated with the vesting of restricted shares issued to employees.

(b) Our Board of Directors previously authorized the repurchase of up to $300.0 million of our common stock, $150.0 million was approved in August 2011 and $150.0 million was approved in February 2012, exclusive of any fees, commissions or other expenses. For the three months ended June 30, 2019, we made no common stock purchases, and at June 30, 2019, approximately $91.6 million was available pursuant to the stock repurchase program.

Item 3. ***Defaults Upon Senior Securities***

None.

Item 4. ***Mine Safety Disclosures***

Not applicable.

Item 5. ***Other Information***

None.

Table of Contents

Item 6. ***Exhibits***

		Incorporated by Reference				Filed Herewith
Exhibit Number	**Exhibit Description**	**Form**	**Period Ending**	**Exhibit**	**Filing Date**	
10.1	Retirement and Release Agreement, dated May 15, 2019, between Amkor Technology, Inc. and Gil C. Tily.					X
10.2	Amendment One to Second Amended and Restated 2007 Equity Incentive Plan.					X
10.3	Amendment to Loan and Security Agreement, dated as of July 8, 2019, by and amount Amkor Technology Singapore Holding Pte, Ltd., Bank of America, N.A. and other financial institutions.					X
31.1	Certification of Stephen D. Kelley, President and Chief Executive Officer of Amkor Technology, Inc., pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Megan Faust, Corporate Vice President and Chief Financial Officer of Amkor Technology, Inc., pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.					X
101.SCH	XBRL Taxonomy Extension Schema Document					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					X

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AMKOR TECHNOLOGY, INC.

By:	/s/ Megan Faust
	Megan Faust Corporate Vice President and Chief Financial Officer

Date: August 1, 2019

RETIREMENT AGREEMENT AND RELEASE

I am retiring from Amkor Technology, Inc. ("Company") and in order to settle as fully as possible all known and unknown claims I, Gil C. Tily, might have against the Company and all related parties, the Company and I enter into this Retirement Agreement and Release ("Agreement"). My retirement date and last day of employment will be in June 2019, on such date as I determine with notice to the Company (the "Retirement Date"), and (whether I sign this Agreement or not) I will be paid my accrued, unpaid salary, any accrued, unused paid time off, and any unreimbursed business expenses through such date.

(a) Retirement Payments and Benefits: The payments that constitute the entire monetary consideration for this Agreement are as follows:

(i) **Payments**: Starting on the first payroll date following the Effective Date (as defined below), the Company will make retirement payments by direct deposit to my designated account in accordance with the Company's regular payroll practices of the bi-weekly amount of $23,461.54 (which annualizes to $610,000.00), less all relevant taxes and other withholdings, for a period of eighteen (18) months (such period, the "Payment Period"). In the event of my death prior to the end of the Payment Period, any unpaid amount of such payments will be accelerated and will be paid to my estate within 10 business days following the date of my death. I understand and agree that all of the payments referenced in this Paragraph (a) are payments to which I am not otherwise entitled and that they will not be taken into account in determining my rights or benefits under any benefit program. The Company will deduct applicable federal and state tax withholding and other amounts from these amounts as it determines it is required to do.

(ii) **COBRA**: Upon my enrollment in COBRA continuation coverage, and provided I remain eligible for such coverage, the Company will pay directly the cost of my COBRA premium for my elected coverage (including spousal coverage) for a period of eighteen (18) months.

(iii) **Sufficient Consideration**: I acknowledge that the compensation and benefits described in this Paragraph (a) are good, valuable, and sufficient consideration. I further acknowledge that this consideration exceeds that to which I would be entitled under the Company's policies, procedures, benefit plans, and practices.

(b) Release: (i) I, for myself, my heirs, and my legal representatives and assigns, release (*i.e.*, give up) and forever discharge the Company and its subsidiaries, their current and former, direct and indirect owners, officers, directors, employees, agents, successors, predecessors, assigns and affiliates, as well as the Company's employee benefit plans (and any administrators, insurers, or fiduciaries thereof), and all persons acting by, through, under, or in concert with any of them (collectively, the "Released Parties"), from all known and unknown claims, demands, actions, causes of action, rights, damages, costs, expenses, compensation, wages, vacation pay, sick or paid time off, or commissions, whether arising under common law or statute, whether local, state, or federal, including without limitation Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000e, et seq.; Sections 1981 and 1983 of the Civil Rights Act of 1866; the Age Discrimination in Employment Act (ADEA), as amended, 29 U.S.C. § 621, et seq.; the Employee Retirement Income Security Act of 1974 (ERISA), as amended, 29 U.S.C. § 1001, et seq.; the Americans with Disabilities Act of 1990 (ADA), 42 U.S.C. § 12101, et seq.; the Family and Medical Leave Act (FMLA), 29 U.S.C. § 2601, et seq.; the Worker Adjustment & Retraining Notification Act (WARN Act); and any similar state or local laws, such as the Arizona Civil Rights Act and the Arizona Equal Pay Law, that I now have, or which were or could have been made, on account of my employment with the Company, including my retirement therefrom and any transaction or occurrence between me and the Released Parties at any time during such employment and after retirement up to the time I execute this Agreement. The Company and I agree that I have waived all claims against the Company except (i) in respect of any obligation of the Company arising under this Agreement, (ii) vested benefits under any of the Company's employee benefit plans in which I participate, (iii) in respect of equity awards (including any options, RSUs, restricted stock, or any other form of equity) that I have been granted pursuant to the Company's Second Amended and Restated 2007 Equity Incentive Plan (the "2007 Equity Plan"), (iv) all rights to indemnification, including rights pursuant to the Indemnification Agreement between me and the Company dated June 26, 2007, under the Company's directors' and officers' insurance coverage for acts performed or omissions while I was an employee or officer of the Company, and (v) those claims that as a matter of law are not waivable by an employee against his or her employer. It is my intention that the language relating to the description of claims in this section shall be given the broadest possible interpretation permitted by law.

(ii) Except as specified in this Agreement, I represent and affirm that I have been paid and received from the Company all leave (paid or unpaid), compensation, wages, bonuses, commissions, incentive pay, and benefits to which I may be entitled, and that no other leave (paid or unpaid), compensation, wages, bonuses, commissions, incentive pay, or benefits are due to me.

(c) Applicable Law and Venue: This Agreement is governed by Federal law and the laws of Arizona, without regard to the conflicts of law principles of any jurisdiction. I agree that any action to enforce or interpret this Agreement shall be brought exclusively in a court of competent jurisdiction in the State of Arizona, and I hereby waive any challenge to venue or exercise of jurisdiction by such courts.

(d) Effective Date: The "Effective Date" of this Agreement shall be the date the second revocation period described in Section (g)(v) below expires, provided that I have not revoked this Agreement.

(e) Covenant Not to Sue; Challenge to Validity and Communication with Government Agency:

(i) I promise that I will not file, cause to be filed, join, or accept any relief in any lawsuit (either individually, with others, or as part of a class) pleading, raising, or asserting any claims released by this Agreement. I agree that if I breach this promise, then I will reimburse each of the Released Parties for his, her, or its attorneys' fees and costs (or the applicable proportions thereof) incurred in defending against any such released claims.

(ii) Nothing in this Agreement shall be construed to prohibit me from filing a charge with or participating in an investigation or proceeding conducted by the Equal Employment Opportunity Commission (EEOC), National Labor Relations Board (NLRB), Securities and Exchange Commission (SEC), or any federal, state, or local agency. I understand that I have waived and released any and all claims for money damages and equitable relief that I may recover from the Released Parties pursuant to the filing or prosecution of any administrative charge against the Released Parties by me, or any resulting civil proceeding or lawsuit brought on my behalf for the recovery of such relief, and which arises out of the matters that are and may be released or waived by this Agreement. I also understand, however, that this Agreement does not limit my ability to communicate with any government agencies or otherwise participate in any investigation or proceeding that may be conducted by any government agency, including providing documents or other information, without notice to the Company. This Agreement also does not limit my right to receive an award for information provided to any government agencies.

(iii) Nothing in this Agreement shall be interpreted or applied to affect or limit my otherwise lawful ability to challenge, under the Age Discrimination in Employment Act (ADEA) or Older Worker Benefit Protection Act (OWBPA), the knowing and voluntary nature of my release of any age claims in this Agreement before a court, the EEOC, or any other federal, state, or local agency, and I shall not be required to pay the attorneys' fees or costs of any Released Party in connection with such challenge. Notwithstanding the foregoing, unless the release is set aside by a court of law, I understand that the release applies to and covers any claim that I may have under the ADEA and OWBPA.

(iv) Except as set forth in this Agreement, I understand, acknowledge, and voluntarily agree that this Agreement is a total and complete release by me of any and all claims which I have against the Released Parties as of the date I sign this Agreement, both known or unknown, even though there may be facts or consequences of facts which are unknown to me.

(f) **Representations and Promises**: The Company and I acknowledge and agree that:

(i) **Retirement**: On my Retirement Date in June 2019, I will be retired and cease to be employed by the Company and each subsidiary and affiliate of the Company in any capacity. However, I will continue my service on the Company's Board of Directors.

(ii) **Equity Vesting**: The terms of my outstanding equity awards granted pursuant to the 2007 Equity Plan will remain in effect without modification. For the avoidance of doubt, during my service on the Company's Board of Directors, any equity (including any options, RSUs, restricted stock, or any other form of equity) that has been granted to me and has not yet vested will continue to vest and be exercisable as provided under the terms of the applicable equity award agreement.

(iii) **Complete Agreement**: This Agreement is the entire agreement relating to any claims or future rights that I might have with respect to the Company and the Released Parties, except for my obligations under my Memorandum of Agreement dated June 12, 2007. Once in effect, this Agreement is a legally admissible and binding agreement.

(iv) **Amendments; Successors and Assigns**: This Agreement only may be amended by a written agreement that the Company and I both sign. The rights and obligations of the Company under this Agreement shall inure to the benefit of and shall be binding upon the successors and assigns of the Company. I shall not be entitled to assign any of my rights or obligations under this Agreement.

(v) **Representations**: When I decided to sign this Agreement, I was not relying on any representations that are not in this Agreement. I have not suffered any job-related wrongs or injuries, such as any type of discrimination, for which I might still be entitled to compensation or relief now or in the future.

(vi) **No Wrongdoing**: This Agreement is not an admission of wrongdoing by the Company or any other Released Party; neither this Agreement nor any drafts shall be admissible evidence of wrongdoing.

(vii) **Unknown Claims**: I am intentionally releasing claims that I do not know that I might have and that, with hindsight, I might regret having released. I have not assigned or given away any of the claims I am releasing.

(viii) **Effect of Void Provision**: If the Company or I successfully assert that any provision in this Agreement is void or otherwise unenforceable, the rest of the Agreement shall remain valid and enforceable to the maximum extent permitted by law, unless the non-asserting party elects to cancel it. If this Agreement is cancelled, I will repay the consideration I received for signing it.

(ix) **Consideration of Agreement**: If I initially did not think any representation I am making in this Agreement was true or if I initially was uncomfortable making it, I resolved all my doubts and concerns before signing this Agreement. I have carefully read this Agreement, I fully understand what it means, I am entering into it knowingly and voluntarily, and all my representations in it are true. The Company would not have agreed to pay me the consideration I am getting in exchange for this Agreement but for my representations and promises I am making by signing it.

(x) **Confidentiality**: I agree that I will not disclose voluntarily or allow anyone else to disclose the existence, reason for, or contents of this Agreement without the Company's prior written consent, unless required to do so by law. Notwithstanding this provision, I am authorized to disclose this Agreement to my spouse, attorneys, and tax advisors on a "need to know" basis, on the condition that they agree to hold the terms of the Agreement, including the payment terms, in strictest confidence; provided that I may disclose any information that has been publicly disclosed by the Company. Any disclosure to any third party by my spouse, attorneys, or tax advisors will be treated as a breach by me of the non-disclosure provisions of this paragraph. I am further authorized to make appropriate disclosures as required by law, provided that, unless prohibited by law, I agree to provide the Company with sufficient advance notice prior to disclosure such that the Company may oppose disclosure and to cooperate with the Company in any such efforts. Because it would be difficult or impossible to calculate the actual damages the Company would suffer if I violate my confidentiality obligations, which would be substantial, I agree to pay the Company $5,000 in damages for each violation. For the avoidance of doubt, nothing in this Agreement shall be construed to prohibit or prevent the Company from disclosing this Agreement or the circumstances relating thereto, including without limitation as required by securities law or stock exchange rule. I further agree and acknowledgment that I remain subject to the confidentiality obligations set forth in my Memorandum of Agreement dated June 13, 2007 and my Confidentiality and Intellectual Property Obligation Agreement dated June 13, 2007.

(xi) **Return of Property**: I have returned to the Company all files, memoranda, documents, records, copies of the foregoing, Company-provided credit cards, keys, building passes, security passes, access or identification cards, and any other Company property in my possession or control. To the extent I subsequently discover that any property or data identified above is still in my possession, custody or control, I agree to return all such property and data to the Company as soon as practicable, but in no event later than ten (10) days after making such discovery. I have cleared all expense accounts, repaid everything I owe to the Company or any Released Party, paid all amounts I owe on Company-provided credit cards or accounts (such as cell phone accounts), and canceled or personally assumed any such credit cards or accounts. I agree not to incur any expenses, obligations, or liabilities on behalf of the Company. Notwithstanding the foregoing, I shall be permitted to retain such Company property as is appropriate during my service on the Board of Directors.

(xii) **Non-Competition**: I agree that beginning on my Retirement Date and for eighteen (18) months thereafter (the "Restriction Period"), I will not, without the prior written consent of the Company, engage in or carry on, directly or indirectly, whether as an advisor, principal, agent, partner, officer, director, employee, stockholder, associate or consultant to any person, partnership, corporation or any other business entity, the business of outsourced semiconductor packaging and test services anywhere in the United States or any other country in which the Company conducts business; provided that ownership by me of Company securities or of less than a five percent equity interest in a publicly held company shall not be a breach of this paragraph; and further provided that the practice of law by me shall not be a breach of this paragraph.

(xiii) **Non-Solicitation**. I agree that during the Restriction Period, I will not, without the express prior written consent of the Company, directly or indirectly, for myself or on behalf of any other person or entity, (i) solicit or encourage any customer, vendor, client or prospective customer, vendor or client (or anyone who was a customer, vendor or client during the Restriction Period) to cease any relationship with the Company or its affiliates or (ii) solicit or encourage any employee or consultant of the Company or its affiliates (or anyone who was an employee or consultant of the Company or its affiliates during the Restriction Period) to leave the employment of or cease to perform services for the Company or its affiliates; provided that this paragraph shall not prohibit any general public advertisement or general solicitation for personnel not specifically directed at any employee or consultant of the Company or its affiliates.

(xiv) **Nondisparagement**: I agree that at all times following my Retirement Date, I will not publish or otherwise transmit any disparaging, derogatory or defamatory remarks, comments or statements, whether written or oral, regarding the Company, its affiliates, any of the Released Parties or their respective officers, directors, employees, consultants, reputations, products, operations, procedures, policies or services, which are reasonably likely to

(i) damage materially the reputation of the Company or its affiliates or any of the Released Parties or (ii) interfere materially with the contracts or business relationships of the Company or its affiliates or any of the Released Parties. However, nothing in this subsection shall prohibit me from testifying truthfully in any forum or contacting, cooperating with or providing information to any government agency or commission.

(xv) **Cooperation:** I agree that following my Retirement Date, I will provide reasonable assistance to and cooperate with the Company and its affiliates as to any claims, controversies, disputes, or complaints of which I have knowledge or that may relate to me or my employment or other relationships with the Company or its affiliates. Such cooperation includes but is not limited to providing the Company and its affiliates with all information known to me related to the foregoing, meeting with counsel, and appearing and giving testimony in any forum. Company will reimburse me for any reasonable out-of-pocket expenses incurred by me in providing assistance under this Agreement.

(xvi) **Section 409A:** I acknowledge that I and the Company intend that this Agreement be interpreted and administered so that any amount or benefit paid hereunder shall be exempt from or compliant with Section 409A of the Internal Revenue Code of 1986, as amended, and the regulations thereunder ("Section 409A"). If the period between the date I receive this Agreement and the expiration of the revocation period described in Section (g)(v) below begins in one taxable year and ends in another taxable year, payment shall not be made until the beginning of the second taxable year. Notwithstanding the foregoing, neither the Company nor its affiliates nor any of their respective directors, officers, employees and advisors shall be held liable for any taxes, interest or other amounts owed by me as a result of Section 409A. Notwithstanding anything herein to the contrary: (i) any "deferred compensation" (as defined in Section 409A) payable hereunder as a result of my retirement shall not be paid unless and until I have undergone a "separation from service" (as defined in Section 409A), and (ii) if I am a "specified employee" within the meaning of Section 409A, and a payment or benefit provided for in this Agreement would be subject to additional tax under Section 409A if such payment or benefit is paid within six months after my separation from service, then such payment or benefit shall not be paid (or commence) during the six-month period immediately following my separation from service except as provided in the immediately following sentence. In such event, any payments or benefits that would otherwise have been made or provided during such six-month period and which would have incurred such additional tax under Section 409A shall instead be paid to me in a lump-sum cash payment on the earlier of (i) the first regular payroll date of the seventh month following my separation from service or (ii) the 10^{th} business day following my death. If any right to payment hereunder is deemed a right to an installment payment, such right shall be treated as a right to a series of separate payments and, accordingly, each installment payment shall at all times be considered a separate and distinct payment for purposes of Section 409A.

(xvii) **Re-employment.** I agree that the Company and its subsidiaries and affiliates are under no obligation to re-employ or engage me in the future in any capacity and that the denial of such re-employment or engagement shall be considered legitimate, proper, and non-discriminatory, as well as an exercise of the Company's, its subsidiaries, or its affiliates' rights under this Agreement.

(xviii) **Headings**: I understand that the headings appearing in this Agreement are for convenience only and are not to be considered in interpreting this Agreement.

(g) Acceptance of Agreement

(i) I HAVE CAREFULLY READ AND FULLY UNDERSTAND AND VOLUNTARILY AGREE TO ALL THE TERMS OF THIS AGREEMENT. IN EXCHANGE FOR MY AGREEMENT TO THE TERMS OF THIS AGREEMENT, I WILL RECEIVE BENEFITS TO WHICH I WOULD OTHERWISE NOT BE ENTITLED.

(ii) THIS IS AN IMPORTANT LEGAL DOCUMENT AND I HAVE BEEN ADVISED TO CONSULT WITH AN ATTORNEY BEFORE SIGNING IT. I UNDERSTAND THAT I COULD TAKE UP TO TWENTY-ONE (21) DAYS TO CONSIDER THIS AGREEMENT BEFORE DECIDING WHETHER TO SIGN IT AND BY SIGNING IT I UNDERSTAND THAT I WILL BE WAIVING ALL KNOWN AND UNKNOWN CLAIMS. I ACKNOWLEDGE THAT CHANGES MADE TO THIS AGREEMENT, WHETHER MATERIAL OR IMMATERIAL, DO NOT RESTART THE AFOREMENTIONED TWENTY-ONE (21) DAY PERIOD.

(iii) I ALSO UNDERSTAND THAT I MAY CHOOSE TO VOLUNTARILY SIGN THIS AGREEMENT WITHOUT TAKING THE FULL 21-DAY PERIOD. THE EXPIRATION OF THAT PERIOD IS THE DEADLINE FOR ME TO DELIVER A SIGNED COPY OF THIS AGREEMENT BY E-MAILING A PDF COPY TO LIZZETTE.ZUBEY@AMKOR.COM. IF I FAIL TO DO SO, I UNDERSTAND THAT I WILL NOT RECEIVE THE RETIREMENT PAYMENTS OR BENEFITS DESCRIBED IN IT.

(iv) THE CONSIDERATION PERIOD DESCRIBED IN PARAGRAPH (g)(ii) STARTED WHEN I FIRST WAS GIVEN THIS AGREEMENT.

(v) I MAY REVOKE THIS AGREEMENT IF I REGRET HAVING SIGNED IT. TO DO SO, I MUST DELIVER A WRITTEN NOTICE OF REVOCATION TO LIZZETTE ZUBEY AT 2045 EAST INNOVATION CIRCLE, TEMPE, ARIZONA 85284, BEFORE SEVEN (7) DAYS EXPIRE FROM THE TIME I SIGNED IT. IN ADDITION, AS A FURTHER CONDITION OF RECEIVING THE RETIREMENT PAYMENTS OR BENEFITS DESCRIBED IN THIS AGREEMENT, I AGREE TO SIGN THIS AGREEMENT FOR A SECOND TIME AS OF MY RETIREMENT DATE SO THAT THE RELEASE CONTAINED IN THIS AGREEMENT WILL RUN THROUGH THE DATE OF MY SECOND SIGNATURE. I WILL AGAIN HAVE A PERIOD OF SEVEN (7) DAYS TO REVOKE MY SECOND SIGNATURE. IF I REVOKE EITHER OF MY SIGNATURES, THIS AGREEMENT WILL NOT GO INTO EFFECT AND I WILL NOT RECEIVE THE RETIREMENT PAYMENTS OR BENEFITS DESCRIBED IN THIS AGREEMENT.

Dated: May 15, 2019

Gil C. Tily

Gil C. Tily

TO BE SIGNED FOR A SECOND TIME AS OF MY RETIREMENT DATE:

Dated: June 7, 2019

Gil C. Tily

AMKOR TECHNOLOGY, INC:

By: ______________________

FIRST AMENDMENT
to
LOAN AND SECURITY AGREEMENT

THIS FIRST AMENDMENT TO LOAN AND SECURITY AGREEMENT ("Amendment"), dated as of July 8, 2019 (the "Amendment Date"), is among **AMKOR TECHNOLOGY SINGAPORE HOLDING PTE. LTD.**, a company incorporated under the laws of Singapore (together with other parties executing this Amendment as a borrower, each a "Borrower" and collectively, the "Borrowers"), the undersigned Lenders (as defined by the Loan Agreement referenced below), and **BANK OF AMERICA, N.A.**, as administrative agent for the Lenders (in such capacity, the "Agent").

RECITALS:

The Borrowers, the Lenders and the Agent have entered into the certain Loan and Security Agreement, dated as of July 13, 2018 (the "Loan Agreement"). The undersigned parties have agreed to amend the Loan Agreement as provided hereinbelow.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned parties hereby agree as follows:

ARTICLE I
Definitions

Section 1.1 Definitions. Unless otherwise defined in this Amendment, terms defined by the Loan Agreement, where used in this Amendment, shall have the same meanings in this Amendment as are prescribed by the Loan Agreement.

ARTICLE II
Amendments

Section 2.1 Amendments to the Loan Agreement. Effective as of the Amendment Date, the Loan Agreement (including all Schedules and Exhibits thereto) is hereby amended as follows:

(a) Section 1.1 of the Loan Agreement is hereby amended by adding the following definitions thereto in alphabetical order:

Acceptable Factoring Agreement: a written agreement (in form and substance satisfactory to Agent) between a Borrower and a third party, pursuant to which a Borrower has agreed to sell certain Accounts to such third party.

Approved Foreign Debtors: (i) subsidiaries or Affiliates of ON Semiconductor Corporation and Microchip Technology Incorporated which are formed under the laws of a jurisdiction other than (x) an Account Debtor Approved Country or (y) the U.S. or a state or territory thereof and (ii) NXP.

Factored Accounts: Accounts of a Borrower which have been sold or assigned to a third party pursuant to an Acceptable Factoring Agreement so long as: (i) at the time of the sale, no Default or Event of Default exists,

(ii) Agent has issued a Factored Account Acknowledgement with respect to the Account and the purchaser of such Account, (iii) the sale price of each Account sold is greater than 85% of the Value of such Account, (iv) promptly upon the consummation of the sale, 100% of the Net Proceeds of such sale are directed by the applicable purchaser to a Deposit Account of Borrower, (v) such sale is made on a non-recourse basis except with respect to certain customary representations made by such Borrower with respect to the applicable Account and such Borrower shall have no obligation to repurchase the Account subject to such sale (except for any customary repurchase obligations for the failure to satisfy the customary representations by Borrower with respect to such Account), repay to the applicable purchaser any amounts not paid by the applicable Account Debtor or otherwise guaranty payment of such Account, (vi) the Accounts sold pursuant to the terms of an Acceptable Factoring Agreement shall be identified as Accounts which are not Eligible Accounts on Borrowing Base Reports delivered to Agent until such Accounts are no longer outstanding, and (vii) all collections from Account Debtors on such Accounts are paid to segregated Deposit Accounts (into which no other sums are deposited other than such collections) which is subject to the Lien of the Person purchasing the Account.

Factored Account Acknowledgement: a written acknowledgement issued by Agent with respect to each Acceptable Factoring Agreement and each Factored Account pursuant to which Agent acknowledges and agrees that upon confirmation by Agent that 100% of the Net Proceeds of the sale of Factored Accounts have been received in a Deposit Account of Borrower, Agent's Lien on the applicable Factored Account is automatically released.

NXP: NXP Semiconductor, BV. and its subsidiaries or Affiliates which are formed under the laws of a jurisdiction other than (x) an Account Debtor Approved Country or (y) the U.S. or a state or territory thereof

TSMC: Taiwan Semiconductor Manufacturing Company and its subsidiaries or Affiliates which are formed under the laws of a jurisdiction other than (x) an Account Debtor Approved Country or (y) the U.S. or a state or territory thereof.

(b) The definition of "Eligible Accounts" as set forth in Section 1.1 of the Loan Agreement is hereby amended by replacing clause (a) thereof with the following:

(a) (x) with respect to the Approved Foreign Debtors, it is unpaid for more than 30 days after the original due date, or more than 60 days after the original invoice date and (y) with respect to all other Account Debtors, it is unpaid for more than 60 days after the original due date, or more than 90 days after the original invoice date,

(c) The definition of "Eligible Accounts" as set forth in Section 1.1 of the Loan Agreement is hereby amended by (i) replacing the "or" at the end of clause (p) thereof with ";"; (ii) replacing the "." at the end of clause (q) thereof with "; or"; and (iii) adding the following as a new clause (r) immediately after clause (p):

(r) it has been purchased by a factor or other Person (including pursuant to an Acceptable Factoring Agreement) or it is subject to purchase (even if it has not yet been purchased) pursuant to a factoring arrangement or supply chain finance arrangement; provided, that effectively immediately upon the sale of an Account pursuant to any factoring arrangement, supply change finance arrangement or Acceptable Factoring Agreement, the definition of Eligible Accounts shall exclude any such Account and the Accounts Formula Amount shall be adjusted accordingly by excluding such Accounts under the most recently delivered Borrowing Base Report.

(d) The following definitions as set forth in Section 1.1 of the Loan Agreement are hereby amended and restated in their entirety to read as follows:

Borrowing Base: on any date of determination, an amount equal to the lesser of (a) the aggregate amount of Revolver Commitments, or (b) the result of (i) up to 85.0% of the Value of Eligible Accounts and Eligible Foreign Accounts (other than Eligible Foreign Accounts owed by the Approved Foreign Debtors), plus (ii) up to 75.0% of the Value of Eligible Foreign Accounts owed by Approved Foreign Debtors, minus (iii) Availability Reserves.

Eligible Foreign Account: an Account owing to a Borrower from an Account Debtor that is organized or has its principal offices or assets outside the United States or Canada, that (a) arises in the Ordinary Course of Business from the sale of goods or rendition of services, (b) is payable in Dollars, (c) is owing from an Account Debtor that is organized or has its principal offices in an Account Debtor Approved Country, (d) is owing from an Account Debtor (other than TSMC or the Approved Foreign Debtors) that is organized or has its principal offices outside of an Account Debtor Approved Country; provided that such Account Debtor is a subsidiary of a parent company that is organized and has its principal offices within the United States and such parent company has an investment grade debt rating of BBB- or better by S&P or Baa3 or better by Moody's; provided, further that the Accounts owing from Account Debtors and their Affiliates under this clause (d) when aggregated with other Accounts owing by other Account Debtors and their respective Affiliated under this clause (d) shall not exceed 20% of the sum of all Eligible Accounts and all Eligible Foreign Accounts, (e) is owing from an Account Debtor (including TSMC and the Approved Foreign Debtors) that is organized or has its principal offices outside of an Account Debtor Approved Country which is not deemed to be an Eligible Foreign Account under clause (d) above but is deemed to be an Eligible Foreign Account by Agent in its Permitted Discretion; provided that (x) such Account Debtor (other than NXP and TSMC) is a subsidiary of a parent company that is organized and has its principal offices within the United States and (y) in the case of the Approved Foreign Debtors, its parent company (and in the case of NXP and TSMC, each such company) has an investment grade debt rating of BB- or better by S&P or Ba3 or better by Moody's; provided, further that the Accounts owing from Account Debtors and their Affiliates under this clause (e) when aggregated with other Accounts owing by other Account Debtors and their respective Affiliated under this clause (e) shall not exceed 20% (or such lesser percentage as determined by Agent) of the sum of all Eligible Accounts and all Eligible Foreign Accounts and (f) meets all of the requirements in clause (a) through clause (p) of the definition of Eligible Accounts other than clause (g) thereof; provided, that the Accounts owed by the Approved Foreign Debtors and TSMC shall not be deemed Eligible Foreign Accounts at any time Availability is less than 50% of the Borrowing Base calculated after giving effect to the inclusion of such Accounts in the Borrowing Base.

Excluded Account: any Deposit Account (a) that is used for the sole purpose of making payroll and withholding tax payments related thereto and other employee wage and benefits payments and accrued and unpaid employee compensation payments (including salaries, wages, benefits and expense reimbursements, 401(k) and other retirement plans and employee benefits, including rabbi trusts for deferred compensation and health care benefits); (b) that is used for the sole purpose of paying taxes, including sales taxes; (c) that is used solely as an escrow account, a fiduciary or a trust account or otherwise held exclusively for the benefit of an unaffiliated third party; (d) that is used solely to receive collections from Account Debtors on Factored Accounts and which is subject to the Lien of the Person purchasing the Account, or (e) that is not otherwise subject to the provisions of this definition and, individually or together with any other Deposit Account, has an average daily balance for any fiscal month of less than $500,000 in the aggregate for all such Deposit Accounts under this clause (d).

Permitted Liens: the following Liens on property of any Obligor (a) Liens on the assets, excluding the Collateral, of any such Obligor securing Permitted Bank Debt that was permitted by the terms of this Agreement to be incurred; (b) Liens in favor of any Person purchasing a Factored Account on Deposit Accounts which are established to receive collections on the applicable Factored Accounts and hold no other assets; (c) Liens in favor of an Obligor; provided that any such Lien on property of any Borrower shall not extend to any Collateral; (d) Liens on property of a Person or any of its Subsidiaries existing at the time such Person is merged with or into or consolidated with any Obligor; provided, that such Liens were not incurred in contemplation of such merger or consolidation and do not extend to any assets which constitute Collateral; (e) Liens on property existing at the time of acquisition thereof by any Obligor; provided that such Liens were not incurred in contemplation of such acquisition and do not extend to any assets which constitute Collateral; (f) Liens to secure the performance of statutory obligations, letters of credit, surety or appeal bonds, performance bonds, or other obligations of a like nature incurred in the Ordinary Course of Business; (g) Liens to secure obligations in respect of Debt (including obligations under Capital Lease) permitted by **Section 10.2.4(b)(iv)** covering only the assets acquired with such Debt, including accessions, additions, parts, attachments, improvements, fixtures, leasehold improvements, or proceeds, if any, related thereto; (h) Liens existing on the effective date of any of the Senior Notes Indentures, excluding Liens on Collateral; (i) Liens for taxes, assessments, or governmental charges or claims that are not yet delinquent or that are being Properly Contested; (j) Liens imposed by law or arising by operation of law, including, landlords', mechanics', carriers', warehousemen's, materialmen's, suppliers', and vendors' Liens, Liens for master's and crew's wages and other similar Liens, in each case which are incurred in the Ordinary Course of Business for sums not yet delinquent or being Properly Contested; (k) Liens incurred or pledges and deposits made in the Ordinary Course of Business in connection with workers' compensation and unemployment insurance, health, disability or other employee benefits or property, casualty or liability insurance or self-insurance and other types of social security; (l) Liens to secure any extension, renewal, refinancing, or refunding (or successive extensions, renewals, refinancings, or refundings), in whole or in part, of any Debt secured by Liens referred to in clause (d), clause (e), clause (g), and clause (h) of this definition; provided that such Liens do not extend to any other property of any Obligor and the principal amount of the Debt secured by such Lien is not increased; (m) judgment Liens not giving rise to an Event of Default so long as such Lien is adequately bonded and any appropriate legal proceedings that may have been initiated for the review of such judgment, decree, or order shall not have been finally terminated or the period within which such proceedings may be initiated shall not have expired; (n) Liens on property of a Obligor other than Collateral securing obligations of an Obligor under Hedging Agreements permitted by **Section 10.2.4(b)(vii)** or any collateral for the Debt to which such Hedging Agreements relate; (o) Liens upon specific items of Inventory or other goods and proceeds securing such Obligor's obligations in respect of banker's acceptances issued or credited for the account of such Obligor to facilitate the purchase, shipment, or storage of such inventory or goods; (p) Liens securing reimbursement obligations with respect to commercial letters of credit, banker's acceptances or other sureties which encumber documents and other property relating to such letters of credit, banker's acceptances or other sureties and products and proceeds thereof; (q) Liens arising out of consignment or similar arrangements for the sale of goods in the Ordinary Course of Business; (r) Liens in favor of customs or revenue authorities arising as a matter of law to secure payment of duties in connection with the importation of goods; (s) Liens on property of a Obligor, other than the Collateral, securing other Debt not exceeding the greater of (A) $200,000,000 and (B) an amount equal to 7.5% of Parent's Total Tangible Assets determined as of Parent's most recent fiscal quarter, at any time outstanding; (t) Liens securing Permitted Refinancing Indebtedness, provided that such Liens do not extend to any other property of such Obligor and the principal amount of such Debt secured by such Lien is not increased; (u) Liens on the Equity Interests of Subsidiaries securing obligations of Obligor not otherwise prohibited by this Agreement; (v) survey exceptions, easements or reservations of, or rights of others for, licenses, rights-of-way, sewers, electric lines, telegraph and telephone lines and other similar purposes, or zoning or other restrictions as to the use of real property that were not incurred in connection with Debt and that do not, individually or in the aggregate, materially adversely affect the value of said properties or materially impair their use in the operation of the business of such Person; (w) any provision for the retention of title to an asset by the vendor or transferor of such asset (including any lessor) which transaction is otherwise permitted under this Agreement; (x) leases, licenses, subleases or sublicenses granted to others in the Ordinary Course of Business that do not (A) interfere in any material respect with the business of any Obligor or (B) secure any Debt; (y) Liens (A) of a collection bank arising under Section 4-210 of the Uniform Commercial Code on items in the course of collection or (B) in favor of a banking institution arising as a matter of law encumbering deposits (including the right of set-off) and which are within the general parameters customary in the banking industry; (z) Liens encumbering reasonable customary initial deposits and margin deposits and similar Liens attaching to brokerage accounts incurred in the ordinary course of business and not for speculative purposes; (aa) Liens solely on any cash earnest money deposits made by any Obligor in connection with any letter of intent or purchase agreement permitted under this Agreement; (bb) Liens arising from Uniform Commercial Code (or equivalent statute) financing statement filings regarding operating leases entered into in the ordinary course of business; and (cc) the Liens specified in **Schedule 10.2.2**.

(e) Section 10.2.4(b)(xiii) of the Loan Agreement is hereby amended and restated in its entirety to read as follows:

(xiii) to the extent characterized as Indebtedness, Indebtedness of the Borrowers and/or any Subsidiary relating to any Acceptable Factoring Agreement entered into in the Ordinary Course of Business;

(f) Section 10.2.5(c) of the Loan Agreement is hereby amended and restated in its entirety to read as follows:

(c) Notwithstanding any other provision of this Agreement to the contrary, no Obligor will enter into any Asset Sale or other sale, transfer, conveyance, or disposition of any asset or other property, in each such case if such Asset Sale, sale, transfer, conveyance, or disposition is of assets or other property which constitutes Collateral; provided that Obligors may (i) sell Inventory in the Ordinary Course of Business, (ii) sell, transfer, convey or dispose of property and assets, including Collateral, among Borrowers, (iii) if no Event of Default exists, sell, transfer, convey, or dispose of Collateral consisting of Equipment and Inventory in an aggregate amount not in excess of $25,000,000 during the term of this Agreement, (iv) make Permitted Investments, (v) grant licenses of Intellectual Property in the Ordinary Course of Business or on commercially reasonable terms, provided that the owner of any such Intellectual Property which is the subject of any such license retains ownership of such Intellectual Property and any such license granted is subject to Agent's Liens, (vi) (A) sell, transfer, convey or dispose of obsolete, surplus, discontinued, damaged, excess or worn out Equipment or other property that is no longer useful in an Obligor's business or (B) allow the lapse of registered patents, trademarks and other intellectual property approved by Agent or the termination of license agreements related thereto, to the extent not economically desirable in the conduct of the business with approval by Agent, (vii) dispose of cash or Cash Equivalents in the ordinary course of business, (viii) surrender or waive litigation rights or settle, release or surrender tort or other litigation claims of any kind if it is for the benefit of an Obligor (as determined in good faith by the board of directors of Parent), (ix) sell or otherwise dispose of any patents approved by Agent, and (x) sell Factored Accounts pursuant to an Acceptable Factoring Agreement.

(g) Section 12.2.1(a) of the Loan Agreement is hereby amended and restated in its entirety to read as follows:

(a) Secured Parties authorize Agent to release any Lien on any Collateral (i) upon Full Payment of the Obligations; (ii) that is the subject of a disposition or Lien that Borrowers certify in writing is an Asset Sale permitted hereunder or a Permitted Lien entitled to priority over Agent's Liens (and Agent may rely conclusively on such certificate without further inquiry); (iii) that does not constitute a material part of the Collateral; and (iv) subject to **Section 14.1**, with the consent of Required Lenders. Secured Parties authorize the automatic release of any Lien on Collateral which constitutes a Factored Account sold pursuant to an Acceptable Factoring Agreement, upon the applicable sale thereof and confirmation by Agent that the proceeds of such sale are received by Borrower. Secured Parties authorize Agent to subordinate its Liens to any Lien entitled to priority hereunder. Agent has no obligation to assure that any Collateral exists or is owned by an Obligor, or is cared for, protected or insured, nor to assure that Agent's Liens have been properly created, perfected or enforced, or are entitled to any particular priority, nor to exercise any duty of care with respect to any Collateral. Agent shall execute and deliver to Borrowers releases and other instruments as may be necessary to terminate Agent's Lien in the Collateral pursuant to clauses (i), (ii), (iii) or (iv) of this **Section 12.2.1** and deliver to Borrowers, or such other Person as Borrowers may reasonably request of Agent, any Collateral, if any, that is held in Agent's possession.

ARTICLE III
Conditions

Section 3.1 Conditions Precedent. The effectiveness of this Amendment is subject to the receipt by Agent of (i) a fully executed copy of this Amendment, (ii) a fully executed amendment to the Singapore Debenture and (iii) each other agreement, document, certificate or instrument reasonably requested by the Agent in connection with this Amendment, in each case in form and substance satisfactory to the Agent;

ARTICLE IV
Ratifications, Representations, and Warranties

Section 4.1 Ratifications. The terms and provisions set forth in this Amendment (including without limitation as incorporated pursuant to Section 2.1) shall modify and supersede all inconsistent terms and provisions set forth in the Loan Agreement and the other Loan Documents and, except as expressly modified and superseded by this Amendment, the terms and provisions of the Loan Agreement and the other Loan Documents are ratified and confirmed and shall continue in full force and effect. The Borrowers, the Agent, and the Lenders agree that the Loan Agreement and the other Loan Documents, as amended hereby, shall continue to be legal, valid, binding, and enforceable in accordance with their respective terms.

Section 4.2 Representations and Warranties. The Borrowers hereby represent and warrant to the Agent and the Lenders that (a) the execution, delivery, and performance of this Amendment and any and all other Loan Documents executed and/or delivered in connection herewith have been authorized by all requisite action on the part of the Borrowers and will not violate the certificate of incorporation or bylaws of any Borrower, (b) the representations and warranties of the Borrowers contained in the Loan Agreement, as amended hereby, and any other Loan Document are true and correct in all material respects on and as of the Amendment Date as though made on and as of the Amendment Date (except (i) to the extent that such representations and warranties were expressly made only in reference to a specific date and (ii) to the extent that such representations and warranties contain a materiality or Material Adverse Effect qualifier, in which case such representations and warranties shall be true and correct in all respects), and (c) after giving effect to this Amendment, no Default or Event of Default has occurred and is continuing.

ARTICLE V
Other Agreements

Section 5.1 Survival of Representations and Warranties. All representations and warranties made in this Amendment or any other Loan Document including any Loan Document furnished in connection with this Amendment shall survive the execution and delivery of this Amendment and the other Loan Documents, and no investigation by the Agent or any Lender shall affect the representations and warranties or the right of the Agent or any Lender to rely upon them.

Section 5.2 Reference to Loan Agreement and Other Loan Documents. Each of the Loan Documents, including the Loan Agreement and any and all other agreements, documents, or instruments now or hereafter executed and delivered pursuant to the terms hereof or pursuant to the terms of the Loan Agreement and the other Loan Documents as amended hereby, are hereby amended so that any reference in such Loan Documents to the Loan Agreement or any other Loan Document shall mean a reference to the Loan Agreement and the other Loan Documents as amended hereby.

Section 5.3 Severability. Any provision in this Amendment that is held to be inoperative, unenforceable, or invalid in any jurisdiction shall, as to that jurisdiction, be inoperative, unenforceable, or invalid without affecting the remaining provisions in that jurisdiction or the operation, enforceability, or validity of that provision in any other jurisdiction, and to this end the provisions of this Amendment are declared to be severable.

Section 5.4 Reserved.

Section 5.5 Applicable Law. THIS AMENDMENT SHALL BE GOVERNED BY THE LAWS OF THE STATE OF NEW YORK, PROVIDED THAT IN THE EVENT ANY COURT DETERMINES THAT NEW YORK LAW DOES NOT GOVERN THE LAWS OF THE STATE OF TEXAS SHALL GOVERN, IN ANY SUCH CASE WITHOUT GIVING EFFECT TO ANY CONFLICT OF LAW PRINCIPLES (BUT GIVING EFFECT TO FEDERAL LAWS RELATING TO NATIONAL BANKS).

Section 5.6 Successors and Assigns. This Amendment is binding upon and shall inure to the benefit of the Borrowers, the Agent, and the Lenders and their respective successors and assigns, except the Borrowers may not assign or transfer any of their respective rights or obligations hereunder without the prior written consent of the Lenders and any assignment by the Lenders shall be made only in accordance with the terms of the Loan Agreement.

Section 5.7 Effect of Amendment. No consent or waiver, express or implied, by the Agent or any Lender to or for any breach of or deviation from any covenant, condition, or duty by the Borrowers shall be deemed a consent or waiver to or of any other breach of the same or any other covenant, condition, or duty. The Loan Agreement, as amended by this Amendment, and each of the other Loan Documents to which the Borrowers are a party remain in full force and effect and are hereby ratified and confirmed.

Section 5.8 Further Assurances. The Borrowers shall execute and deliver, or cause to be executed and delivered, to the Agent such documents and agreements, and shall take or cause to be taken such actions as the Agent may, from time to time, reasonably request to carry out the terms of this Amendment and the other Loan Documents.

Section 5.9 Headings. The headings, captions, and arrangements used in this Amendment are for convenience only and shall not affect the interpretation of this Amendment.

Section 5.10 Counterparts. This Amendment may be executed in any number of counterparts, all of which taken together shall constitute one agreement, and any of the parties hereto may execute this Amendment by signing any such counterpart and a telecopy of any such executed signature page shall be valid as an original. This Amendment shall be effective when it has been executed by the Borrowers, the Agent, and the Lenders.

Section 5.11 Entire Agreement. THIS AMENDMENT AND ALL OTHER INSTRUMENTS, DOCUMENTS, AND AGREEMENTS EXECUTED AND DELIVERED IN CONNECTION WITH THIS AMENDMENT EMBODY THE FINAL, ENTIRE AGREEMENT AMONG THE PARTIES HERETO AND SUPERSEDE ANY AND ALL PRIOR COMMITMENTS, AGREEMENTS, REPRESENTATIONS, AND UNDERSTANDINGS, WHETHER WRITTEN OR ORAL, RELATING TO THIS AMENDMENT, AND MAY NOT BE CONTRADICTED OR VARIED BY EVIDENCE OF PRIOR, CONTEMPORANEOUS, OR SUBSEQUENT ORAL AGREEMENTS OR DISCUSSIONS OF THE PARTIES HERETO. THERE ARE NO ORAL AGREEMENTS AMONG THE PARTIES HERETO.

Section 5.12 Amendment as a Loan Document. This Amendment constitutes a Loan Document.

The remainder of this page is blank.

IN WITNESS WHEREOF, the parties have entered into this Amendment on the date first above written.

BORROWERS:

AMKOR TECHNOLOGY SINGAPORE HOLDING PTE. LTD.,
a company incorporated under
the laws of Singapore

By: Megan Faust
Name: Megan Faust
Title: Director

AGENT:

BANK OF AMERICA, N.A.,
as administrative agent

By: ______________________________
Name: Ron Bornstein
Title: Senior Vice President

LENDERS:

BANK OF AMERICA. N.A.,
as a Lender

By: ______________________
Name: Ron Bornstein
Title: Senior Vice President

DBS BANK LTD.,
as a Lender

By: ______________ 08/07/19
Name: Loy Hwee Chuan
Title: Senior Vice President

JPMORGAN CHASE BANK, N.A.,
as a Lender

By: Bruce Robert Cohenour Jr.
Name: Bruce Robert Cohenour, Jr.
Title: Authorized Officer

THE HONGKONG AND SHANGHAI BANK CORPORATION LIMITED, SINGAPORE BRANCH
as a Lender

By: ______________________
Name: S.P. MOHANTY
Title: SENIOR VICE PRESIDENT
COMMERCIAL BANKING.

AMENDMENT ONE
TO THE
AMKOR TECHNOLOGY, INC.
SECOND AMENDED AND RESTATED 2007 EQUITY INCENTIVE PLAN

Pursuant to the authority reserved to it in Section 21 of the Amkor Technology, Inc. Second Amended and Restated 2007 Equity Incentive Plan (the "Plan"), the Board of Directors of Amkor Technology, Inc. (the "Board") hereby amends the Plan as follows, effective May 15, 2019:

Section 12(d) of the Plan is hereby amended in its entirety to read as follows:

(d) Initial Award. Each person who first becomes an Outside Director will be automatically granted: (i) an Option to purchase a number of Shares equal to the product of (I) 20,000 multiplied by (II) a fraction, the numerator of which is the number of days in the period beginning on the date such person first becomes an Outside Director and ending on the date of the first annual meeting of the stockholders of the Company thereafter, and the denominator of which is 365 (the "Fraction") rounded down to the nearest whole number (the "Initial Option") and (ii) an Award of Restricted Stock equal to the product of (I) $60,000 divided by the Fair Market Value of a Share on the date such person first becomes an Outside Director multiplied by (II) the Fraction rounded down to the nearest whole number (the "Initial Restricted Stock Award"). The Initial Option and the Initial Restricted Stock Award shall be granted on or about the date on which such person first becomes an Outside Director, whether through election by the stockholders of the Company or appointment by the Board to fill a vacancy; provided, however, that an Inside Director who ceases to be an Inside Director, but who remains a Director, will not receive an Initial Option or an Initial Restricted Stock Award.

Section 12(g) of the Plan is hereby amended in its entirety to read as follows:

(g) Annual Restricted Stock Award. Each Outside Director will be automatically granted Restricted Stock having a Fair Market Value of sixty thousand dollars ($60,000) (an "Annual Restricted Stock Award") on each date of the annual meeting of the stockholders of the Company.

Exhibit 31.1

SECTION 302 CERTIFICATION

I, Stephen D. Kelley, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Amkor Technology, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls over financial reporting.

/s/ Stephen D. Kelley

Stephen D. Kelley
President and Chief Executive Officer

August 1, 2019

Exhibit 31.2

SECTION 302 CERTIFICATION

I, Megan Faust, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Amkor Technology, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls over financial reporting.

/s/ Megan Faust

Megan Faust

Corporate Vice President and
Chief Financial Officer

August 1, 2019

Exhibit 32

CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Amkor Technology, Inc. (the “Company”) on Form 10-Q for the period ended June 30, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Stephen D. Kelley, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Stephen D. Kelley
Stephen D. Kelley
President and Chief Executive Officer

August 1, 2019

In connection with the Quarterly Report of Amkor Technology, Inc. (the “Company”) on Form 10-Q for the period ended June 30, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Megan Faust, Corporate Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Megan Faust
Megan Faust
Corporate Vice President and
Chief Financial Officer

August 1, 2019