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 March 31, 2022

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 April 29, 2022 was 244,779,154.

QUARTERLY REPORT ON FORM 10-Q
For the Quarter Ended March 31, 2022

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Forward-Looking Statements

This Quarterly Report on Form 10-Q (this “Form 10-Q”) 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 2022, including expenditures in support of our announced expansion into Vietnam and our 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 impact of the Covid-19 pandemic on our operations, financial results and supply chain, (5) the focus of our research and development activities, (6) the anticipated impact of tax law changes in the jurisdictions in which we operate, (7) 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, (8) the creation or release of valuation allowances related to taxes in the future, (9) our repurchase or repayment of outstanding debt, (10) payment of dividends, (11) compliance with restrictive covenants in the indentures and agreements governing our current and future indebtedness, (12) expected contributions to foreign pension plans and potential future conversion of our unfunded severance plan in Korea to a defined contribution plan, (13) liability for unrecognized tax benefits and the potential impact of our unrecognized tax benefits on our effective tax rate, (14) the effect of foreign currency exchange rate exposure on our financial results, (15) the volatility of the trading price of our common stock, (16) changes to our internal controls related to integration of acquired operations and implementation of an enterprise resource planning system, (17) our efforts to enlarge our customer base in certain geographic areas and markets, (18) demand for advanced packages in mobile and automotive devices and our technology leadership and potential growth in this market, (19) projects to install or integrate new information technology systems or upgrade our existing systems, (20) our expected revenue recognition, (21) the anticipated schedule for our new manufacturing facility in Vietnam and (22) other statements that are not historical facts. You are cautioned not to place undue reliance on forward-looking statements, which are often characterized by terminology such as “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential,” “continue,” or “intend,” by the negative of these terms or other comparable terminology or by discussions of strategy, plans or intentions. All forward-looking statements in this Form 10-Q are made based on our current expectations, forecasts, estimates and assumptions. 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 Part II, Item 1A and other sections of this Form 10-Q, in our Annual Report on Form 10-K for the year ended December 31, 2021 (the "2021 Form 10-K") and from time to time in our other reports filed with or furnished to the Securities and Exchange Commission ("SEC"). You should carefully consider the trends, risks and uncertainties described in this Form 10-Q, the 2021 Form 10-K, and other reports filed with or furnished to the SEC before making any investment decision with respect to our securities. If any of the following trends, risks or uncertainties actually occurs or continues, our business, financial condition or operating results could be materially and adversely affected, the trading prices of our securities could decline, and you could lose part or all of your investment. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by this cautionary statement. We assume no obligation to update such information, except as may be required by law.

PART I. FINANCIAL INFORMATION

Item 1. *Financial Statements*

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

	For the Three Months Ended March 31,	
	2022	2021
	(In thousands, except per share data)	
Net sales	$ 1,596,816	$ 1,326,150
Cost of sales	1,271,486	1,060,616
Gross profit	325,330	265,534
Selling, general and administrative	76,959	76,768
Research and development	38,363	44,318
Total operating expenses	115,322	121,086
Operating income	210,008	144,448
Interest expense	14,148	12,673
Other (income) expense, net	(5,096)	89
Total other expense, net	9,052	12,762
Income before taxes	200,956	131,686
Income tax expense	29,728	11,667
Net income	171,228	120,019
Net income attributable to non-controlling interests	(565)	(210)
Net income attributable to Amkor	$ 170,663	$ 119,809
Net income attributable to Amkor per common share:		
Basic	$ 0.70	$ 0.49
Diluted	$ 0.69	$ 0.49
Shares used in computing per common share amounts:		
Basic	244,403	243,267
Diluted	246,000	245,129

The accompanying notes are an integral part of these statements.

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

	For the Three Months Ended March 31,	
	2022	2021
	(In thousands)	
Net income	$ 171,228	$ 120,019
Other comprehensive income (loss), net of tax:		
Adjustments to net unrealized gains (losses) on available-for-sale debt investments	(1,077)	(32)
Adjustments to unrealized components of defined benefit pension plans	4	25
Foreign currency translation	(8,409)	(11,440)
Total other comprehensive income (loss)	(9,482)	(11,447)
Comprehensive income	161,746	108,572
Comprehensive income attributable to non-controlling interests	(565)	(210)
Comprehensive income attributable to Amkor	$ 161,181	$ 108,362

The accompanying notes are an integral part of these statements.

AMKOR TECHNOLOGY, INC.
CONSOLIDATED BALANCE SHEETS
(Unaudited)

	March 31, 2022	December 31, 2021
	(In thousands, except per share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 854,802	$ 826,744
Restricted cash	637	962
Short-term investments (amortized cost of $308,591 and $251,959 in 2022 and 2021, respectively)	307,016	251,530
Accounts receivable, net of allowances	1,201,007	1,258,767
Inventories	516,437	484,959
Other current assets	59,656	33,601
Total current assets	2,939,555	2,856,563
Property, plant and equipment, net	2,938,742	2,871,058
Operating lease right of use assets	180,883	159,742
Goodwill	23,182	24,516
Restricted cash	3,692	3,815
Other assets	139,733	122,860
Total assets	$ 6,225,787	$ 6,038,554
LIABILITIES AND EQUITY		
Current liabilities:		
Short-term borrowings and current portion of long-term debt	$ 156,692	$ 153,008
Trade accounts payable	753,279	828,727
Capital expenditures payable	267,598	210,875
Short-term operating lease liability	71,229	64,233
Accrued expenses	374,319	422,892
Total current liabilities	1,623,117	1,679,735
Long-term debt	1,087,408	984,988
Pension and severance obligations	116,138	120,472
Long-term operating lease liabilities	86,300	83,937
Other non-current liabilities	186,002	196,876
Total liabilities	3,098,965	3,066,008
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; 290,687 and 290,466 shares issued; and 244,532 and 244,315 shares outstanding in 2022 and 2021, respectively	291	290
Additional paid-in capital	1,982,113	1,977,134
Retained earnings	1,322,370	1,163,939
Accumulated other comprehensive income (loss)	10,496	19,978
Treasury stock, at cost, 46,155 and 46,151 shares in 2022 and 2021, respectively	(219,147)	(219,065)
Total Amkor stockholders' equity	3,096,123	2,942,276
Non-controlling interests in subsidiaries	30,699	30,270
Total equity	3,126,822	2,972,546
Total liabilities and equity	$ 6,225,787	$ 6,038,554

The accompanying notes are an integral part of these statements.

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

	Common Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock		Total Amkor Stockholders' Equity	Noncontrolling Interest in Subsidiaries	Total Equity
	Shares	Par Value				Shares	Cost			
					(In thousands)					
Balance at December 31, 2021	290,466	$ 290	$ 1,977,134	$ 1,163,939	$ 19,978	(46,151)	$ (219,065)	$ 2,942,276	$ 30,270	$ 2,972,546
Net income	—	—	—	170,663	—	—	—	170,663	565	171,228
Other comprehensive income (loss)	—	—	—	—	(9,482)	—	—	(9,482)	—	(9,482)
Treasury stock acquired through surrender of shares for tax withholding	—	—	—	—	—	(4)	(82)	(82)	—	(82)
Issuance of stock through share-based compensation plans	221	1	1,482	—	—	—	—	1,483	—	1,483
Share-based compensation	—	—	3,497	—	—	—	—	3,497	—	3,497
Cash dividends declared ($0.05 per common share)	—	—	—	(12,232)	—	—	—	(12,232)	—	(12,232)
Subsidiary dividends to non-controlling interests	—	—	—	—	—	—	—	—	(136)	(136)
Balance at March 31, 2022	290,687	$ 291	$ 1,982,113	$ 1,322,370	$ 10,496	(46,155)	$ (219,147)	$ 3,096,123	$ 30,699	$ 3,126,822
Balance at December 31, 2020	288,923	$ 289	$ 1,953,378	$ 562,502	$ 27,270	(46,094)	$ (217,740)	$ 2,325,699	$ 28,260	$ 2,353,959
Net income	—	—	—	119,809	—	—	—	119,809	210	120,019
Other comprehensive income (loss)	—	—	—	—	(11,447)	—	—	(11,447)	—	(11,447)
Treasury stock acquired through surrender of shares for tax withholding	—	—	—	—	—	(57)	(1,321)	(1,321)	—	(1,321)
Issuance of stock through share-based compensation plans	942	1	8,560	—	—	—	—	8,561	—	8,561
Share-based compensation	—	—	2,393	—	—	—	—	2,393	—	2,393
Cash Dividends declared ($0.04 per common share)	—	—	—	(9,777)	—	—	—	(9,777)	—	(9,777)
Subsidiary dividends to non-controlling interests	—	—	—	—	—	—	—	—	(150)	(150)
Balance at March 31, 2021	289,865	$ 290	$ 1,964,331	$ 672,534	$ 15,823	(46,151)	$ (219,061)	$ 2,433,917	$ 28,320	$ 2,462,237

The accompanying notes are an integral part of these statements.

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

	For the Three Months Ended March 31,	
	2022	2021
	(In thousands)	
Cash flows from operating activities:		
Net income	$ 171,228	$ 120,019
Depreciation and amortization	148,192	135,390
Other operating activities and non-cash items	11,061	2,370
Changes in assets and liabilities	(164,303)	(80,991)
Net cash provided by operating activities	166,178	176,788
Cash flows from investing activities:		
Payments for property, plant and equipment	(158,154)	(110,351)
Proceeds from sale of property, plant and equipment	416	547
Proceeds from foreign exchange forward contracts	1,828	2,960
Payments for foreign exchange forward contracts	(29,803)	(28,306)
Payments for short-term investments	(125,693)	(92,879)
Proceeds from sale of short-term investments	4,246	19,838
Proceeds from maturities of short-term investments	66,694	43,790
Other investing activities	457	29
Net cash used in investing activities	(240,009)	(164,372)
Cash flows from financing activities:		
Proceeds from short-term debt	18,112	3,679
Payments of short-term debt	(3,790)	(7,803)
Proceeds from issuance of long-term debt	150,000	50,000
Payments of long-term debt	(35,973)	(79,684)
Payments of finance lease obligations	(7,538)	(3,216)
Payments of dividends	(12,228)	(19,457)
Other financing activities	653	7,037
Net cash provided by (used in) financing activities	109,236	(49,444)
Effect of exchange rate fluctuations on cash, cash equivalents and restricted cash	(7,795)	(10,397)
Net increase (decrease) in cash, cash equivalents and restricted cash	27,610	(47,425)
Cash, cash equivalents and restricted cash, beginning of period	831,521	702,197
Cash, cash equivalents and restricted cash, end of period	$ 859,131	$ 654,772
Non-cash investing and financing activities:		
Property, plant and equipment included in capital expenditures payable	$ 268,146	$ 273,971
Right of use assets acquired through finance lease liabilities	6,438	—
Right of use assets acquired through operating lease liabilities	27,246	8,109

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 March 31, 2022, and for the three months ended March 31, 2022 and 2021, contained in this Form 10-Q (the “Consolidated Financial Statements”) are unaudited, pursuant to the rules and regulations of the SEC. The December 31, 2021 Consolidated Balance Sheet data contained in this Form 10-Q 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. GAAP”). Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted pursuant to SEC rules and regulations. In our opinion, the Consolidated Financial Statements include all adjustments (consisting only of normal recurring adjustments) necessary for the fair statement of the results for the interim periods and should be read in conjunction with the financial statements included in the 2021 Form 10-K. The results of operations for the three months ended March 31, 2022 are not necessarily indicative of the results to be expected for the full year ending December 31, 2022. Unless the context otherwise requires, all references to “Amkor,” “we,” “us” or “our” are to Amkor Technology, Inc. and its wholly and majority-owned 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, as a result of, for example, the impact of the Covid-19 pandemic and any worsening of the global business and economic environment.

Goodwill. The balance of goodwill in the Consolidated Balance Sheets contained in this Form 10-Q reflects adjustments for foreign currency translation.

Unbilled Receivables. Total unbilled receivables as of March 31, 2022 and December 31, 2021 were $220.4 million and $224.7 million, respectively.

Contract Liabilities. Contract liabilities were $175.1 million and $187.2 million as of March 31, 2022 and December 31, 2021, respectively. As of March 31, 2022 and December 31, 2021, the short-term portions of the liabilities were $112.8 million and $117.7 million, respectively. The remainder of the March 31, 2022 contract liability balance is expected to be recognized in revenue over the next 1-3 years. Revenue recognized during the three months ended March 31, 2022 and 2021 that was included in the contract liabilities balance at the beginning of the period was $28.9 million and $8.1 million, respectively.

2. Net Sales by Product Group and End Market

The following table presents our net sales by product group.

	For the Three Months Ended March 31,	
	2022	2021
	(In thousands)	
Advanced products (1)	$ 1,156,508	$ 920,655
Mainstream products (2)	440,308	405,495
Total net sales	$ 1,596,816	$ 1,326,150

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

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

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

	For the Three Months Ended March 31,	
	2022	2021
Communications (smart phones, tablets)	41 %	40 %
Automotive, industrial and other (ADAS, electrification, infotainment, safety)	21 %	22 %
Consumer (AR & gaming, connected home, home electronics, wearables)	19 %	21 %
Computing (data center, infrastructure, PC/laptop, storage)	19 %	17 %
Total net sales	100 %	100 %

3. Other Income and Expense

Other income and expense consist of the following:

	For the Three Months Ended March 31,	
	2022	2021
	(In thousands)	
Interest income	$ (603)	$ (279)
Foreign currency (gain) loss, net	(4,301)	619
Loss on debt retirement	97	—
Other	(289)	(251)
Other (income) expense, net	$ (5,096)	$ 89

4. Income Taxes

Income tax expense of $29.7 million for the three months ended March 31, 2022 reflects income taxes, foreign withholding taxes and minimum taxes.

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.

We maintain a valuation allowance on certain U.S. and foreign deferred tax assets. 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 decreased from $37.3 million as of December 31, 2021 to $36.7 million as of March 31, 2022, primarily due to settlement of examinations offset by increases related to income attribution. 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 2011-2021. 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. In certain circumstances where we elect to appeal the results of an examination, we may be required to make tax assessment payments to proceed with the administrative appeal process.

5. 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, performance-vested restricted stock units, time-vested restricted stock units and unvested restricted shares.

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

	For the Three Months Ended March 31,	
	2022	2021
	(In thousands, except per share data)	
Net income attributable to Amkor common stockholders	$ 170,663	$ 119,809
Weighted-average number of common shares outstanding - basic	244,403	243,267
Effect of dilutive securities:		
Share-based awards	1,597	1,862
Weighted-average number of common shares outstanding - diluted	246,000	245,129
Net income attributable to Amkor per common share:		
Basic	$ 0.70	$ 0.49
Diluted	0.69	0.49

There were no anti-dilutive shares for the three months ended March 31, 2022 and 2021.

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

6. Accumulated Other Comprehensive Income (Loss)

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

	Unrealized Gains (Losses) on Available-for-Sale Debt Investments (1)	Defined Benefit Pension (2)	Foreign Currency Translation	Total
	(In thousands)			
Accumulated other comprehensive income (loss) at December 31, 2021	$ (348)	$ 5,616	$ 14,710	$ 19,978
Other comprehensive income (loss) before reclassifications	(1,087)	—	(8,409)	(9,496)
Amounts reclassified from accumulated other comprehensive income (loss)	10	4	—	14
Other comprehensive income (loss)	(1,077)	4	(8,409)	(9,482)
Accumulated other comprehensive income (loss) at March 31, 2022	$ (1,425)	$ 5,620	$ 6,301	$ 10,496

	Unrealized Gains (Losses) on Available-for-Sale Debt Investments (1)	Defined Benefit Pension (2)	Foreign Currency Translation	Total
	(In thousands)			
Accumulated other comprehensive income (loss) at December 31, 2020	$ 21	$ (4,218)	$ 31,467	$ 27,270
Other comprehensive income (loss) before reclassifications	(59)	—	(11,440)	$ (11,499)
Amounts reclassified from accumulated other comprehensive income (loss)	27	25	—	$ 52
Other comprehensive income (loss)	(32)	25	(11,440)	(11,447)
Accumulated other comprehensive income (loss) at March 31, 2021	$ (11)	$ (4,193)	$ 20,027	$ 15,823

(1) Amounts reclassified out of accumulated other comprehensive income (loss) are included as other (income) expense, net (Note 3).

(2) Amounts reclassified out of accumulated other comprehensive income (loss) are included as a component of net periodic pension cost (Note 12) or other (income) expense, net (Note 3).

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

7. Investments

All of our available-for-sale debt investments as of March 31, 2022 are available to fund current operations and are recorded at fair value (Note 14).

The following table summarizes our cash equivalents and available-for-sale debt investments:

	March 31, 2022					
					Fair Value Level	
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses (1)	Total Fair Value	Level 1	Level 2
	(In thousands)					
Cash equivalents						
Commercial paper	$ 53,513	$ —	$ —	$ 53,513	$ —	$ 53,513
Corporate bonds	12,686	4	(4)	12,686	—	12,686
Foreign government bonds	2,000	—	—	2,000	—	2,000
Money market funds	122,048	—	—	122,048	122,048	—
Municipal bonds	750	—	—	750	—	750
U.S. government bonds	13,298	—	—	13,298	13,298	—
U.S. government agency bonds	6,000	—	—	6,000	—	6,000
Total cash equivalents	210,295	4	(4)	210,295	135,346	74,949
Short-term investments						
Asset-backed securities	20,503	1	(59)	20,445	—	20,445
Certificate of deposits	17,525	—	—	17,525	17,525	—
Commercial paper	24,736	—	—	24,736	—	24,736
Corporate bonds	229,958	3	(1,485)	228,476	—	228,476
Foreign government bonds	458	—	(3)	455	—	455
Municipal bonds	5,101	—	(5)	5,096	—	5,096
U.S. government bonds	5,164	—	(27)	5,137	5,137	—
Variable rate demand notes	500	—	—	500	—	500
Total short-term investments	303,945	4	(1,579)	302,370	22,662	279,708
Total	$ 514,240	$ 8	$ (1,583)	$ 512,665	$ 158,008	$ 354,657

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

	December 31, 2021					
					Fair Value Level	
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses (1)	Total Fair Value	Level 1	Level 2
	(In thousands)					
Cash equivalents						
Commercial paper	$ 5,499	$ —	$ —	$ 5,499	$ —	$ 5,499
Corporate bonds	4,921	—	(5)	4,916	—	4,916
Money market funds	269,251	—	—	269,251	269,251	—
Municipal bonds	500	—	—	500	—	500
U.S. government bonds	4,000	—	—	4,000	4,000	—
Total cash equivalents	284,171	—	(5)	284,166	273,251	10,915
Short-term investments						
Asset-backed securities	12,915	1	(11)	12,905	—	12,905
Certificate of deposits	12,076	—	—	12,076	12,076	—
Commercial paper	30,691	—	—	30,691	—	30,691
Corporate bonds	179,235	1	(410)	178,826	—	178,826
Foreign government bonds	458	—	(1)	457	—	457
Municipal bonds	8,418	1	(2)	8,417	—	8,417
U.S. government bonds	2,966	—	(8)	2,958	2,958	—
Variable rate demand notes	500	—	—	500	—	500
Total short-term investments	247,259	3	(432)	246,830	15,034	231,796
Total	$ 531,430	$ 3	$ (437)	$ 530,996	$ 288,285	$ 242,711

(1) All unrealized losses have been in a continuous loss position for less than 12 months. We do not intend to sell the investments in an unrealized loss position, and it is not more likely than not that we will be required to sell these investments before recovery of their amortized cost bases.

The following table summarizes the contractual maturities of our cash equivalents and available-for-sale debt investments as of March 31, 2022:

	Amortized Cost	Fair Value
	(In thousands)	
Within 1 year	$ 468,815	$ 467,572
After 1 year through 5 years	43,525	43,195
After 5 years through 10 years	572	570
After 10 years	1,328	1,328
Total	$ 514,240	$ 512,665

Actual maturities can differ from contractual maturities due to various factors including the issuers may have the right to call or prepay obligations without call or prepayment penalties.

As of March 31, 2022, the amortized cost and the fair market value of our held-to-maturity government bond (Level 1) maturing within a year was $4.6 million. As of December 31, 2021, the amortized cost and the fair market value of our held-to-maturity government bond (Level 1) maturing within a year was $4.7 million.

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 these arrangements, 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 months ended March 31, 2022 and 2021, we sold receivables totaling $92.2 million and $106.3 million, respectively, net of discounts and fees of $0.2 million for each period.

9. Property, Plant and Equipment

Property, plant and equipment consist of the following:

	March 31, 2022	December 31, 2021
	(In thousands)	
Land	$ 216,639	$ 218,140
Buildings and improvements	1,744,892	1,711,560
Machinery and equipment	6,432,040	6,277,684
Finance lease assets	110,452	105,294
Software and computer equipment	233,581	232,251
Furniture, fixtures and other equipment	22,585	22,125
Construction in progress	68,670	74,662
Total property, plant and equipment	8,828,859	8,641,716
Accumulated depreciation and amortization	(5,890,117)	(5,770,658)
Total property, plant and equipment, net	$ 2,938,742	$ 2,871,058

The following table summarizes our depreciation expense:

	For the Three Months Ended March 31,	
	2022	2021
	(In thousands)	
Depreciation expense	$ 148,040	$ 135,232

10. Accrued Expenses

Accrued expenses consist of the following:

	March 31, 2022	December 31, 2021
	(In thousands)	
Deferred revenue and customer advances	$ 112,806	$ 117,741
Payroll and benefits	107,835	150,883
Income taxes payable	48,972	38,957
Short-term finance lease liabilities	34,406	30,919
Accrued severance plan obligations	8,492	8,194
Accrued interest	2,194	10,789
Other accrued expenses	59,614	65,409
Total accrued expenses	$ 374,319	$ 422,892

11. Debt

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

	March 31, 2022	December 31, 2021
	(In thousands)	
Debt of Amkor Technology, Inc.:		
Senior notes:		
6.625% Senior notes, due September 2027	$ 525,000	$ 525,000
Debt of subsidiaries:		
Amkor Technology Korea, Inc.:		
$30 million revolving credit facility, applicable bank rate plus 1.11% (1)	—	—
Term loan, applicable bank rate plus 1.77%, due April 2023	46,207	47,064
Term loan, fixed rate at 1.85%, due April 2024 (2)	—	—
Term loan, applicable bank rate plus 1.98%, due December 2028	50,000	50,000
Term loan, fixed rate at 2.12% , due December 2028 (3)	200,000	50,000
Amkor Technology Japan, Inc.:		
Short-term term loans, variable rate (4)	17,666	3,789
Term loan, fixed rate at 0.86%, due June 2022	2,054	4,345
Term loan, fixed rate at 0.60%, due July 2022	822	1,303
Term loan, fixed rate at 1.30%, due July 2023	64,092	79,075
Term loan, fixed rate at 1.35%, due December 2024	128,800	148,592
Term loan, fixed rate at 1.20%, due December 2025	67,173	75,773
Term loan, fixed rate at 1.23%, due December 2026	102,260	113,834
Other:		
Term loans, LIBOR plus 1.10%, due March 2024 (China) (5)	48,000	48,000
$250.0 million senior secured revolving credit facility, LIBOR plus 1.25% - 1.75%, due July 2023 (Singapore) (6)	—	—
Credit facility, TAIFX plus the applicable bank rate, due December 2024 (Taiwan) (7)	—	—
$600.0 million senior secured revolving credit facility, applicable bank rate plus 1.75%, due March 2027 (Singapore) (6)	—	—
	1,252,074	1,146,775
Less: Unamortized discount and deferred debt costs, net	(7,974)	(8,779)
Less: Short-term borrowings and current portion of long-term debt	(156,692)	(153,008)
Long-term debt	$ 1,087,408	$ 984,988

(1) In October 2021, we renewed our revolving credit facility agreement for a one-year term with availability of $30.0 million. Principal is payable at maturity or six months after draw of funds, whichever is sooner, and interest is payable monthly in arrears. As of March 31, 2022, $30.0 million was available to be drawn.

(2) In April 2021, we entered into a ₩80 billion term loan agreement with the option to borrow and re-borrow the funds up to six times per year through April 2024. Principal is payable at maturity, and interest is payable monthly, at a fixed rate of 1.85%. As of March 31, 2022, ₩80.0 billion, or approximately $66 million, was available to be drawn.

(3) In October 2021, we entered into a term loan agreement with availability of $200.0 million. The loan will mature seven years from the date of the first drawdown, which occurred in December 2021 for $50.0 million. Principal is payable in semiannual installments after a three-year grace period from the date of the first drawdown. Interest is payable quarterly at a fixed rate of 2.12%. During the three months ended March 31, 2022, we borrowed the remaining $150.0 million under this loan.

(4) We entered into various short-term term loans which mature semiannually. Principal and interest are payable in monthly installments. Interest as of March 31, 2022 is at an annual base rate equal to the Tokyo Interbank Offered Rate plus 0.15% to 0.30% (weighted average of 0.28% as of March 31, 2022). As of March 31, 2022, $4.1 million was available to be drawn.

(5) In March 2021, we entered into a borrowing arrangement which includes a $20.0 million term loan and a $30.0 million term loan. For each term loan, principal is payable in semiannual installments of $0.5 million, with the remaining balance due at maturity. Interest is payable quarterly at an annual base rate equal to the London Interbank Offered Rate, as administered by the International Exchange Benchmark Administration ("LIBOR"), plus 1.10% (weighted average of 2.01% as of March 31, 2022).

(6) In July 2018, our subsidiary, Amkor Technology Singapore Holding Pte. Ltd. ("ATSH"), entered into a $250.0 million senior secured revolving credit facility. In March 2022, this agreement was terminated and replaced with a $600.0 million senior secured revolving credit facility entered into by ATSH in March 2022 (the "2022 Singapore Revolver"). The 2022 Singapore Revolver is guaranteed by Amkor Technology, Inc. ("ATI"), Amkor Technology Taiwan Ltd. ("ATT") and Amkor Advanced Technology Taiwan, Inc. ("AATT"). The borrowing availability for the 2022 Singapore Revolver is limited to a base amount equal to $250.0 million plus a variable amount equal to 37.5% of our consolidated accounts receivable balance. As of March 31, 2022, $600.0 million was available for future borrowings under the 2022 Singapore Revolver.

(7) In December 2019, our subsidiary, ATT, entered into a $56.0 million borrowing arrangement (the "ATT Loan"). This arrangement included a $20.0 million term loan and a $36.0 million revolving credit facility. In March 2022, in connection with our entry into the 2022 Singapore Revolver, the ATT Loan was amended to reduce the availability of the revolving credit facility from $36.0 million to $15.0 million. As of March 31, 2022, $15.0 million was available for future borrowings under such credit facility.

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

The debt of ATI is structurally subordinated in right of payment to all existing and future debt and other liabilities of our subsidiaries. From time to time, ATI, ATT, AATT and ATSH guarantee 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. These restrictions are determined in part by calculations based upon cumulative net income and do not currently have a material impact on our ability to make dividend payments or stock repurchases.

We were in compliance with all debt covenants at March 31, 2022.

12. 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 March 31,	
	2022	2021
	(In thousands)	
Service cost	$ 5,418	$ 6,787
Interest cost	1,258	1,242
Expected return on plan assets	(1,493)	(1,429)
Recognized actuarial loss	13	31
Net periodic pension cost	$ 5,196	$ 6,631

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 March 31,	
	2022	2021
	(In thousands)	
Defined contribution expense	$ 7,948	$ 6,756

13. Derivatives

We use foreign currency forward contracts to mitigate foreign currency risk of certain monetary assets and liabilities denominated in foreign currencies. We do not enter into such contracts for trading or speculative purposes. These derivative instruments are not designated as hedging instruments.

As of March 31, 2022 and December 31, 2021, our foreign exchange forward contracts consisted of the following:

	March 31, 2022			December 31, 2021		
	Notional Value	Fair Value (Level 2)	Balance Sheet Location	Notional Value	Fair Value (Level 2)	Balance Sheet Location
	(In thousands)					
Japanese yen	$ 349,288	$ 5,159	Other current assets	$ 396,946	$ (901)	Accrued expenses
Korean won	117,707	(157)	Accrued expenses	125,321	(492)	Accrued expenses
Philippine peso	7,519	25	Other current assets	4,001	7	Other current assets
Singapore dollar	21,497	86	Other current assets	—	—	
Total forward contracts	$ 496,011	$ 5,113		$ 526,268	$ (1,386)	

For the three months ended March 31, 2022 and 2021, the derivatives resulted in a net loss of $22.3 million and $34.9 million, respectively, which were offset by the foreign currency gains associated with the underlying net liabilities.

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. For our Level 2 short-term investments, we consider factors such as actual trade data, benchmark yields, broker/dealer quotes, and other similar data obtained from quoted market prices and independent pricing vendors to determine the fair value of these assets and liabilities.

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 restricted cash money market funds and short-term investments, including investments classified as cash equivalents. 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.

Our derivative financial instruments are valued using quoted market prices for similar assets. Counterparties to these derivative contracts are highly rated financial institutions.

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:

	March 31, 2022		December 31, 2021	
	Fair Value	Carrying Value	Fair Value	Carrying Value
	(In thousands)			
Senior notes (Level 1)	$ 542,729	$ 520,601	$ 555,655	$ 520,436
Revolving credit facilities and term loans (Level 2)	719,368	723,499	627,883	617,560
Total debt	$ 1,262,097	$ 1,244,100	$ 1,183,538	$ 1,137,996

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.

Lease Commitments

As of March 31, 2022 we have entered into additional lease agreements that have not yet commenced of approximately $48 million.

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 goal is profitable sales growth. To achieve this goal, we are focused on leveraging our leadership position in services for advanced technologies, optimizing utilization of existing assets, broadening our customer base and selectively growing our scale and scope through strategic investments.

We are an industry leader in developing and commercializing advanced packaging and test technologies. We believe these advanced technology solutions provide substantial value to our customers, particularly in the mobile communications market, where growth generally outpaces the overall semiconductor industry. 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. Interest in advanced packages for automotive applications is 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 areas 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. In addition, we are seeking to add new customers and to deepen our engagement with existing customers. This includes an expanded emphasis on the automotive and industrial end 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 broaden the markets we serve through expansion of our operations, joint ventures, acquisitions and other strategic investments. For example, we have recently announced plans to expand our operations to Vietnam through the construction of a new factory. We believe that taking advantage of these opportunities helps to diversify our revenue streams, improve our profits, broaden our portfolio of services and maintain our technological leadership.

As a supplier in the semiconductor industry, our business is cyclical and impacted by broad economic factors. Historical trends indicate there has been a strong correlation between worldwide 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 cannot predict the timing, strength or duration of any correction, economic slowdown or subsequent economic recovery.

The full effect of the ongoing Covid-19 pandemic is unknown, and there remains uncertainty related to the prolonged impact that the Covid-19 pandemic will have on the global economy, the semiconductor industry and our business, results of operations and financial condition. In March 2022, the Chinese government, as part of a broad effort to mitigate a rising number of Covid-19 cases in Shanghai, mandated a temporary lockdown of our Shanghai factory. Although we anticipate that our Shanghai facility will return to normal operating levels during the second quarter, we do not expect our regular seasonal trend of higher net sales for the second quarter compared to the first quarter to hold in the current year. Additionally, other national, regional and local governments have implemented, and may continue to implement, restrictions to mitigate the spread of Covid-19, the emergence of new variants or the re-emergence of Covid-19 in jurisdictions in which we, our customers and our suppliers operate, and such restrictions may materially and adversely impact our operations and the operations of our customers and suppliers. We also remain subject to industry-wide supply constraints and inflationary price pressures, which have resulted in long lead times, rising prices and supply chain disruptions, and we expect these industry constraints and external pressures to persist throughout 2022. For additional information regarding the potential impact of macroeconomic factors, the Covid-19 pandemic and other risks on our business, results of operations and financial condition, please refer to the "Risk Factors" section in Part II, Item 1A.

We operate in a capital-intensive industry. 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, short-term investments, 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 considerations, the performance of our business, our capital expenditure levels, our ability to repay debt out of our operating cash flows or proceeds from debt or equity financings and our investment strategy. As of March 31, 2022, we had cash and cash equivalents and short-term investments of $854.8 million and $307.0 million, respectively.

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

Financial Summary

Our net sales increased $270.7 million, or 20.4%, to $1,596.8 million for the three months ended March 31, 2022, compared to $1,326.2 million for the three months ended March 31, 2021. The increase was attributable to higher sales of advanced products primarily in the communications and computing end markets.

Gross margin for the three months ended March 31, 2022 increased to 20.4%, compared to 20.0% for the three months ended March 31, 2021. The increase in gross margin was primarily due to the increase in net sales and high factory utilization, partially offset by an increase in the mix of products sold with higher material content.

Operating income margin expanded 230 basis points to 13.2% for the three months ended March 31, 2022 from 10.9% for the three months ended March 31, 2021. The increase in our operating income margin was primarily due to our increase in net sales and expansion in gross margin discussed above along with disciplined cost control and a decrease in research and development expenses due to projects that moved into production.

Our capital expenditures totaled $158.2 million for the three months ended March 31, 2022, compared to $110.4 million for the three months ended March 31, 2021. Our spending was primarily focused on investments in advanced packaging and test equipment.

Net cash provided by operating activities was $166.2 million for the three months ended March 31, 2022, compared to $176.8 million for the three months ended March 31, 2021. This decrease was primarily due to changes in working capital, partially offset by higher net sales and operating profit.

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 March 31,	
	2022	**2021**
Net sales	100.0 %	100.0 %
Materials	46.7 %	43.2 %
Labor	11.5 %	13.8 %
Other manufacturing costs	21.4 %	23.0 %
Gross margin	20.4 %	20.0 %
Operating income	13.2 %	10.9 %
Net income attributable to Amkor	10.7 %	9.0 %

Net Sales

	For the Three Months Ended March 31,			
	2022	2021	Change	
	(In thousands, except percentages)			
Net sales	$ 1,596,816	$ 1,326,150	$ 270,666	20.4 %

The $270.7 million increase in net sales for the three months ended March 31, 2022 compared to the three months ended March 31, 2021 was due to higher sales of advanced products primarily in the communications and computing markets. Sales in the communications end market represented 43% of the increase, driven primarily by the further adoption of 5G smartphones. The increase in the computing end market, which represented 29% of the increase, is primarily due to the shift in cloud computing needs.

Gross Profit and Gross Margin

	For the Three Months Ended March 31,		
	2022	2021	Change
	(In thousands, except percentages)		
Gross profit	$ 325,330	$ 265,534	$ 59,796
Gross margin	20.4 %	20.0 %	0.4 %

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 and on labor and other manufacturing costs as a percentage of revenue, depending upon product mix, utilization and seasonality. We have expanded our business in advanced system-in-package ("SiP") modules, which tend to have higher material costs when compared to our other products. As we continue to increase production of these higher material cost modules, there could be an impact on our profitability, depending on overall utilization.

Gross profit and gross margin increased for the three months ended March 31, 2022 compared to the three months ended March 31, 2021, primarily due to the increase in net sales and high factory utilization, partially offset by an increase in the mix of products sold with higher material content.

Selling, General and Administrative

	For the Three Months Ended March 31,			
	2022	2021	Change	
	(In thousands, except percentages)			
Selling, general and administrative	$ 76,959	$ 76,768	$ 191	0.2 %

Selling, general and administrative expenses have remained consistent between the three months ended March 31, 2022 and the three months ended March 31, 2021.

Research and Development

	For the Three Months Ended March 31,			
	2022	2021	Change	
	(In thousands, except percentages)			
Research and development	$ 38,363	$ 44,318	$ (5,955)	(13.4)%

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 relating 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 months ended March 31, 2022 decreased compared to the three months ended March 31, 2021 due to projects that moved into production, partially offset by new development projects in advanced packaging technologies, primarily advanced SiP modules.

Other Income and Expense

	For the Three Months Ended March 31,			
	2022	2021	Change	
	(In thousands, except percentages)			
Interest expense	$ 14,148	$ 12,673	$ 1,475	11.6 %
Interest income	(603)	(279)	(324)	>100%
Foreign currency (gain) loss, net	(4,301)	619	(4,920)	>(100)%
Loss on debt retirement	97	—	97	100 %
Other (income) expense, net	(289)	(251)	(38)	15.1 %
Total other expense, net	$ 9,052	$ 12,762	$ (3,710)	(29.1)%

Interest expense increased for the three months ended March 31, 2022 compared to the three months ended March 31, 2021, primarily due to the increase in our average outstanding debt throughout the period.

The changes in foreign currency (gain) loss, net for the three months ended March 31, 2022 compared to the three months ended March 31, 2021 were due to foreign currency exchange rate movements, mainly the Japanese yen, and the associated impact on our net monetary exposure at our foreign subsidiaries.

Income Tax Expense

	For the Three Months Ended March 31,		
	2022	2021	Change
	(In thousands)		
Income tax expense	$ 29,728	$ 11,667	$ 18,061

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 increased for the three months ended March 31, 2022 compared to the three months ended March 31, 2021, primarily due to the increase in income before tax.

During the three months ended March 31, 2022 and 2021, our subsidiaries in Korea and Singapore operated under various tax holidays. The tax holiday granted in the Philippines expired in December 2021. 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

We assess our liquidity based on our current expectations regarding sales and operating expenses, capital spending, dividend payments, stock repurchases, 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, short-term investments and availability under our credit facilities, will be sufficient to fund our working capital, capital expenditures, dividend payments, 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 dividends and purchases of stock under any stock repurchase program, any acquisitions, joint ventures or other investments and our ability to either repay debt out of operating cash flow or refinance it at or prior to maturity with the proceeds from 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 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, short-term investments, borrowings under available credit facilities and proceeds from any additional debt or equity financings. Please refer to Note 7 and Note 11 to our Consolidated Financial Statements in Part 1, Item 1 of this Form 10-Q for additional information on our investments and borrowings, respectively.

As of March 31, 2022, we had cash and cash equivalents and short-term investments of $1,161.8 million. Included in our cash and short-term investments balances as of March 31, 2022, is $996.0 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. If we were to distribute this offshore cash to the U.S. as dividends from our foreign subsidiaries, the dividends generally would not be subject to U.S. federal income tax, but the distributions may be subject to foreign withholding and state income taxes.

As of March 31, 2022, our net liability associated with unrecognized tax benefits is $37.7 million. Due to the uncertainty regarding the amount and 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.

For certain accounts receivable, we use non-recourse factoring arrangements with third-party financial institutions to manage our working capital and cash flows. Under these arrangements, we sell receivables to a financial institution for cash at a discount to the face amount. Available capacity under these arrangements 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 three months ended March 31, 2022 and 2021, we sold accounts receivable totaling $92.2 million and $106.3 million, respectively, net of discounts and fees of $0.2 million for each period.

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.

The availability under the 2022 Singapore Revolver is limited to a base amount equal to $250.0 million plus a variable amount equal to 37.5% of our consolidated accounts receivable balance. As of March 31, 2022, we had availability of $600.0 million and no outstanding standby letters of credit. As of March 31, 2022, our foreign subsidiaries had $645.0 million available for future borrowings under revolving credit facilities, including the 2022 Singapore Revolver, and $70.1 million available to be borrowed under term loan credit facilities for working capital purposes and capital expenditures. For additional information regarding the 2022 Singapore Revolver, please refer to Note 11 to our Consolidated Financial Statements in Part 1, Item 1 of this Form 10-Q.

As of March 31, 2022, we had debt of $1,244.1 million, with $156.7 million payable within 12 months. As of March 31, 2022, the interest payment obligations, based on stated coupon rates for fixed rate debt and interest rates applicable at March 31, 2022 for variable rate debt, were $232.3 million during the remaining term of the debt. Interest payment obligations payable within 12 months is $47.4 million. We were in compliance with all debt covenants as of March 31, 2022, and we expect to remain in compliance with these covenants for at least the next twelve months. For additional information regarding our debt arrangements, please refer to Note 11 to our Consolidated Financial Statements in Part 1, Item 1 of this Form 10-Q.

Certain of our debt agreements have restrictions on dividend payments and the repurchase of stock and subordinated securities. These restrictions are determined in part by our covenant compliance and on calculations based upon cumulative net income and do not currently have a material impact on our ability to make dividend payments or stock repurchases.

The debt of ATI is structurally subordinated in right of payment to all existing and future debt and other liabilities of our subsidiaries. From time to time, ATI, ATT, AATT and ATSH guarantee certain debt of our subsidiaries.

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 would be subject to the terms of our indentures and other debt agreements, market conditions and other factors.

Our subsidiary in Korea maintains an unfunded severance plan that covers certain employees that were employed prior to August 1, 2015. As of March 31, 2022, the severance liability was $70.3 million, with $8.5 million payable within 12 months. Accrued severance benefits are estimated assuming all eligible employees were to terminate their employment at the balance sheet date. For service periods subsequent to August 1, 2015, employees participate in either a defined benefit pension plan or a defined contribution pension plan. From time to time, we may offer employees the option to convert from the severance plan to the defined contribution plan, which would require us to fund the converted portion of the liability. In addition, as of March 31, 2022, we had foreign pension plan obligations of $54.0 million, for which the timing and actual amount of impact on our future cash flow is uncertain. For additional information regarding our pension and severance plans, please refer to Note 12 to our Consolidated Financial Statements in Part 1, Item 1 of this Form 10-Q and in Note 12 to the 2021 Form 10-K.

We lease certain machinery and equipment, office space, and manufacturing facilities. As of March 31, 2022, our total remaining operating lease obligations and finance lease obligations were $170.5 million and $89.7 million, respectively, with $75.6 million and $36.7 million payable within 12 months, respectively. The lease obligations represent our future minimum lease payments including interest payments.

We had off-balance sheet purchase obligations for capital expenditures, long-term supply contracts and other contractual commitments. As of March 31, 2022, the purchase obligations were $470.3 million, with $434.0 million payable within 12 months.

During the three months ended March 31, 2022, we paid total quarterly cash dividends of $12.2 million. We currently anticipate that we will continue to pay quarterly cash dividends in the future. However, the payment, amount and timing of future dividends remain within the discretion of our Board of Directors and will depend upon our results of operations, financial condition, cash requirements, debt restrictions and other factors.

Our Board of Directors previously adopted a stock repurchase program (the "Stock Repurchase Program") authorizing the repurchase of up to $300.0 million of our common stock, exclusive of any fees, commissions or other expenses. Under 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 Stock Repurchase Program since 2012. At March 31, 2022, approximately $91.6 million was available to repurchase common stock pursuant to the Stock Repurchase Program.

Capital Resources

We make significant capital expenditures in order to service the demand of our customers, which are primarily focused on investments in advanced packaging and test equipment. During the three months ended March 31, 2022, our capital expenditures totaled $158.2 million.

We expect that our 2022 capital expenditures will be approximately $950 million, approximately $100 million of which we expect to spend on construction of our new Vietnam factory. Ultimately, the amount of our 2022 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, equipment lead times 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 the "Risk Factors" section in Part II, Item 1A of this 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 three months ended March 31, 2022 and 2021, was as follows:

	For the Three Months Ended March 31,	
	2022	2021
	(In thousands)	
Operating activities	$ 166,178	$ 176,788
Investing activities	(240,009)	(164,372)
Financing activities	109,236	(49,444)

Operating activities: Our cash flow provided by operating activities for the three months ended March 31, 2022 decreased by $10.6 million compared to the three months ended March 31, 2021, primarily due to changes in working capital, partially offset by higher net sales and operating profit.

Investing activities: Our cash flow used in investing activities for the three months ended March 31, 2022 increased by $75.6 million compared to the three months ended March 31, 2021, primarily due to increased purchases of property, plant, and equipment and increased net payments for investment activities. Payments for property, plant and equipment can fluctuate based on timing of purchase, receipt and acceptance of equipment.

Financing activities: The net cash provided by financing activities for the three months ended March 31, 2022 was primarily due to a borrowing in Korea, offset by net debt repayments in Japan and the payment of our quarterly dividends. The net cash used in financing activities for the three months ended March 31, 2021 was primarily due to net debt repayments in Japan and the payment of our quarterly dividends.

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, our ability to fund capital expenditures and our ability to pay dividends and the amount of dividends to be paid. 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 Three Months Ended March 31,	
	2022	2021
	(In thousands)	
Net cash provided by operating activities	$ 166,178	$ 176,788
Payments for property, plant and equipment	(158,154)	(110,351)
Proceeds from sale of property, plant and equipment	416	547
Free cash flow	$ 8,440	$ 66,984

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 our reporting and functional currency for our subsidiaries, except for our Japan operations, 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. We also use forward contracts to mitigate foreign currency risk of certain monetary assets or 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 March 31, 2022 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 three months ended March 31, 2022 would have been approximately $15 million lower, due to the remeasurement of monetary assets and liabilities.

In addition, we have foreign currency exchange rate exposure on our results of operations. For the three months ended March 31, 2022, approximately 85% of our net sales were denominated in U.S. dollars. Our remaining net sales were principally denominated in Japanese yen. For the three months ended March 31, 2022, 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 where our production facilities are located and largely consisted of labor. To the extent that the U.S. dollar weakens against these Asian-based currencies, 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 March 31, 2022 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 three months ended March 31, 2022 would have been approximately $30 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 loss of $8.4 million and $11.4 million for the three months ended March 31, 2022 and 2021, 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 available-for-sale debt investments. Our investment portfolio consists of various security types and maturities, with a significant portion of our portfolio having maturity of one year or less. Our primary objective with our investment portfolio is to invest available cash while preserving capital and meeting liquidity needs. These securities are subject to interest rate risk and will decrease in value if market interest rates increase. Due to the relatively short-term nature of our investment portfolio, we believe that an immediate increase in interest rates will not have a material impact on the fair value of our available-for-sale debt investments. For information regarding our available-for-sale debt investments, see Note 7 to our Consolidated Financial Statements in Part I, Item 1 of this Form 10-Q.

In addition, we have interest rate risk with respect to our debt. Our fixed and variable rate debt includes foreign borrowings, revolving credit facilities and 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 March 31, 2022:

	2022 - Remaining	2023	2024	2025	2026	Thereafter	Total	Fair Value
				($ in thousands)				
Fixed rate debt	$ 104,775	$ 123,466	$ 91,420	$ 95,727	$ 80,957	$ 643,856	$ 1,140,201	$ 1,146,692
Average interest rate	1.4 %	1.4 %	1.4 %	1.9 %	2.1 %	5.8 %	4.0 %	
Variable rate debt	$ 19,666	$ 48,207	$ 44,000	$ —	$ —	$ —	$ 111,873	$ 115,405
Average interest rate	0.5 %	3.2 %	2.0 %	— %	— %	— %	2.2 %	
Total debt maturities	$ 124,441	$ 171,673	$ 135,420	$ 95,727	$ 80,957	$ 643,856	$ 1,252,074	$ 1,262,097

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 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 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 our Chief Executive Officer and 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 (the "Exchange Act"). 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 March 31, 2022 and concluded those disclosure controls and procedures were effective as of that date.

Changes in Internal Control Over Financial Reporting

We carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of changes to our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) that occurred during the quarter ended March 31, 2022. There have been no changes in our internal control over financial reporting that occurred during the three months ended March 31, 2022 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 Form 10-Q and in Note 17 to the 2021 Form 10-K.

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 Form 10-Q. For more information, see the “Forward-Looking Statements” section of this Form 10-Q. You should carefully consider the risks and uncertainties described below, together with all of the other information included in this Form 10-Q, in considering our business and prospects. Many of the following risks and uncertainties have been, and may continue to be, exacerbated by the Covid-19 pandemic and any worsening of the global business and economic environment as a result. The risks and uncertainties described below are not the only ones facing Amkor. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also adversely affect our business operations. The occurrence of any of the risks and uncertainties described below could materially and adversely affect our business, liquidity, results of operations, financial condition or cash flows.

Summary of Risk Factors

An investment in our common stock involves various risks, and you are urged to carefully consider all of the matters discussed in Part II, Item 1A of this Form 10-Q under the caption “Risk Factors” (in addition to those discussed under this “Summary of Risk Factors” section) in considering our business and prospects. The following is a list of some of these risks:

Company-Specific Risk Factors

- dependence on the cyclical and volatile semiconductor industry and vulnerability to industry downturns and declines in global economic and financial conditions;
- changes in costs, quality, availability and delivery times of raw materials, components and equipment;
- fluctuations in operating results and cash flows;
- dependence on international factories and operations, and risks relating to our customers’ and vendors’ international operations;
- competition with established competitors in the packaging and test business, the internal capabilities of integrated device manufacturers (“IDMs”), and new competitors, including foundries;
- our substantial investments in equipment and facilities to support the demand of our customers;
- difficulty achieving the relatively high-capacity utilization rates necessary to realize satisfactory gross margins given our high percentage of fixed costs;
- our absence of backlog and the short-term nature of our customers’ commitments;
- the historical downward pressure on the prices of our packaging and test services;
- fluctuations in our manufacturing yields;
- our ability to develop new proprietary technology, protect our proprietary technology, operate without infringing the proprietary rights of others, and implement new technologies;
- warranty claims, product return and liability risks, and the risk of negative publicity if our products fail, as well as the risk of litigation incident to our business;
- restrictive covenants in the indentures and agreements governing our current and future indebtedness;
- the possibility that we may decrease or suspend our quarterly dividend;

- significant severance plan obligations associated with our manufacturing operations in Korea; and
- the ability of certain of our stockholders to effectively determine or substantially influence the outcome of matters requiring stockholder approval.

General Risk Factors

- health conditions or pandemics, such as the Covid-19 pandemic, impacting labor availability and operating capacity, capital availability, the supply chain and consumer demand for our customers' products and services;
- our substantial indebtedness;
- fluctuations in interest rates and changes in credit risk;
- difficulty funding our liquidity needs;
- dependence on key customers or concentration of customers in certain end markets, such as mobile communications and automotive;
- difficulty attracting, retaining or replacing qualified personnel;
- maintaining an effective system of internal controls;
- our continuing development and implementation of changes to, and maintenance and security of, our information technology systems;
- challenges with integrating diverse operations;
- any changes in tax laws, taxing authorities not agreeing with our interpretation of applicable tax laws, including whether we continue to qualify for tax holidays, or any requirements to establish or adjust valuation allowances on deferred tax assets;
- laws, rules, regulations and policies imposed by U.S. or other governments, such as tariffs, customs, duties, other restrictive trade barriers and national security, data privacy and cybersecurity, antitrust and competition, tax, currency and banking, labor and environmental, health and safety laws; and
- natural disasters and other calamities, health conditions or pandemics, political instability, hostilities or other disruptions.

Company-Specific Risk Factors

Our packaging and test services are used 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 worldwide 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 in which we compete experience slower, or even negative growth, our business and results of operations may be materially and 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, automotive, 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, the Covid-19 pandemic disrupted demand in the automotive and industrial end market in 2020, and during 2019, there was weakness in the general market and an inventory correction in the smartphone market.

In addition, declines in global economic and financial conditions have harmed our business in the past, and future global downturns could materially and adversely affect our business. The Covid-19 pandemic and the effects of governmental initiatives to control the pandemic have adversely affected, and may continue to adversely affect, the economies and financial markets of many countries. Although the magnitude of any potential future impact of the Covid-19 pandemic on our business and operations remains uncertain, the continued spread, new variants or potential re-emergence of the

Covid-19 pandemic or the occurrence of other epidemics or pandemics, and the imposition of related public health measures and travel and business restrictions may materially and adversely impact our business, financial condition, operating results and cash flows. In addition, we have experienced, and will continue to experience, disruptions to our business operations resulting from quarantines, self-isolations, or other movement and restrictions on the ability of our employees to perform their jobs that may impact our ability to meet customer commitments. Most recently, in March 2022, the Chinese government, as part of a broad effort to mitigate a rising number of Covid-19 cases in Shanghai, mandated a temporary lockdown of our Shanghai factory. Although we anticipate that our Shanghai facility will return to normal operating levels during the second quarter, we do not expect our regular seasonal trend of higher net sales for the second quarter compared to the first quarter to hold in the current year. Additionally, other national, regional, and local governments have implemented, and may continue to implement, restrictions to mitigate the spread of Covid-19, the emergence of new variants, or the re-emergence of Covid-19 in jurisdictions in which we, our customers, and our suppliers operate, and such restrictions may materially and adversely impact our operations and the operations of our customers and suppliers. We also remain subject to industry-wide supply constraints and inflationary price pressures, which have resulted in long lead times, rising prices and supply chain disruptions, and we expect these industry constraints and external pressures to persist throughout 2022.

It is difficult to predict the timing, strength or duration of any economic slowdown caused by the Covid-19 pandemic or which end markets will experience a 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 materially 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, that could materially and adversely impact our business, liquidity, results of operations, financial condition and cash flows.

Our business may suffer if the cost, quality or supply of materials or equipment changes adversely.

We obtain the materials and equipment required for the packaging and test services performed by our factories from various vendors. 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 extend lead times for materials and equipment and have a negative impact on our business, and the Covid-19 pandemic has created extended lead times for some materials and equipment. To the extent the impact of the Covid-19 pandemic continues or worsens, we anticipate having greater difficulty obtaining, or waiting longer to obtain, certain equipment, supplies and other materials necessary for performance of our services or necessary to increase the services we provide to customers. Furthermore, fire, severe weather, earthquakes, flooding and tsunamis in the past have impacted 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 or are unable to increase our prices sufficiently to recover inflationary price increases in materials or supplies. 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, including any disruptions arising out of the conflict in Ukraine, could have a material adverse effect on our business, financial condition, results of operations and cash flows.

SEC rules and related industry initiatives require diligence and disclosure regarding the use of certain minerals originating from the conflict zones of the Democratic Republic of Congo and adjoining countries. Many of our customers' initiatives require us to certify that the covered materials we use in our packages do not come from the conflict areas. We incur 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 or other materials covered by customer initiatives in sufficient quantities and at competitive prices or that we will be able to verify the origin of all of the materials we procure. If we are unable to meet these requirements and customer initiatives, some customers may move their business to other suppliers, and our reputation and business could be materially and 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, and the Covid-19 pandemic has created extended lead times for some equipment. In periods of increased demand and reduced availability, equipment suppliers may delay orders or only partially satisfy our equipment orders in the normal time frame. 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, any of 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 materially and 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.

Our operating results and cash flows have varied and may vary significantly as a result of factors that we cannot control.

Many factors 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 margin, gross profit, operating income, net 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:

- fluctuations 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;
- changes in cost, quality, availability and delivery times of raw materials, components, equipment and labor;
- inflation, including wage inflation, and fluctuations in commodity prices, including gold, copper and other precious metals;
- our ability to achieve our major growth objectives, including transitioning second-wave customers to advanced packages and increasing our share of the automotive and industrial end market;
- changes in our capacity and capacity utilization rates;
- fluctuations in interest rates and currency exchange 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;
- fluctuations in our manufacturing yields;
- 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;
- the 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;

- the timing of expenditures in anticipation of future orders;
- changes in effective tax rates;
- the availability and cost of financing;
- leverage and debt covenants;
- intellectual property transactions and disputes;
- 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, conflicts and government shutdowns, civil disturbances or international events;
- environmental or natural disasters such as earthquakes, typhoons and volcanic eruptions;
- pandemics or other widespread illnesses that may impact our labor force, operations, liquidity, supply chain and end-user demand for products which incorporate semiconductors, such as the Covid-19 pandemic;
- costs of acquisitions and divestitures and difficulties integrating acquisitions;
- our ability to attract and retain qualified personnel to support our global operations;
- 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.

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 volatility in our quarterly or annual operating results. In addition, these factors may materially and adversely affect our credit ratings, which could make it more difficult and expensive for us to raise capital and could materially and adversely affect the price of our securities.

We depend on our factories and operations in various foreign jurisdictions and 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. Additionally, we recently announced that we plan to expand our operations into Vietnam. 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:

- health and safety concerns, including widespread outbreak of infectious diseases, such as Covid-19, and governmental responses thereto;
- changes in consumer demand resulting from current or expected inflation or other variations in local economies;
- laws, rules, regulations and policies imposed by U.S. or foreign governments in areas such as data privacy, cybersecurity, antitrust and competition, tax, currency and banking, labor, and environmental;
- restrictive trade barriers considered or adopted by U.S. and foreign governments applicable to the semiconductor supply chain, including laws, rules, regulations and policies in areas such as national security, licensing requirements for exports, tariffs, customs and duties;
- 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 U.S. dollar to Japanese yen exchange rate for our operations in Japan;
- 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 other jurisdictions; 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 U.S. Foreign Corrupt Practices Act and other anti-corruption laws and regulations.

The Covid-19 pandemic has impacted, and may continue to impact, our operations and the operations of our customers and suppliers as a result of illness, quarantines, facility closures and travel and logistics restrictions in connection with the outbreak. For example, quarantine orders and orders restricting movement have affected, and may in the future affect, our operations in China, the Philippines and Malaysia. Additionally, other national, regional, and local governments have implemented, and may continue to implement, restrictions to mitigate the spread of Covid-19, the emergence of new variants, or the re-emergence of Covid-19 in jurisdictions in which we, our customers, and our suppliers operate, and such restrictions may materially and adversely impact our operations and the operations of our customers and suppliers. Such restrictions may also affect end-user demand in each geography where our customers sell their products and services, which may materially and adversely affect demand for our services, our operating results and financial condition. We also remain subject to industry-wide supply constraints and inflationary price pressures, which have resulted in long lead times, rising prices and supply chain disruptions, and we expect these industry constraints and external pressures to persist throughout 2022.

In addition, we have significant facilities and other investments in 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 tension within and among other countries in the region.

We compete against established competitors in the packaging and test business as well as internal capabilities of IDMs and face competition from new competitors, including foundries.

The outsourced semiconductor packaging and test services 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. In addition, we may compete with electronics manufacturing service providers or contract electronics manufacturers that also provide advanced integrated device solutions. We also may face increased competition from domestic companies located in China, where there are government-supported efforts to promote and subsidize the development and growth of the local semiconductor industry. 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.

Historically, we have also been dependent on the trend in outsourcing of packaging and test services by IDM and foundry 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. 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. 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.

We also face competition from 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 foundries, which are substantially larger than us 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. 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 you that we will be able to compete successfully in the future against our existing or potential competitors, that our customers will not rely on internal sources or foundries for packaging and test services or that our business, liquidity, results of operations, financial condition or cash flows will not be materially and adversely affected by such increased competition.

We make substantial investments in equipment and facilities to support the demand of our customers, which may materially and 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. 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, advances in technology, our liquidity position and the availability of financing. Our ongoing capital expenditure requirements may strain our cash and liquidity, and, in periods when we are expanding our capital base, we expect that depreciation expense and factory operating expenses associated with capital expenditures to increase production capacity will put downward pressure on our gross profit, at least in 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 profit could be negatively impacted.

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 materially and 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.

Due to our high percentage of fixed costs, we may be unable to maintain satisfactory gross margins if we are unable to achieve relatively high-capacity utilization rates.

Our operations are characterized by 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. Transitions between different packaging technologies can also impact our capacity utilization if we do not efficiently redeploy our equipment for other packaging and test opportunities. 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 may be negatively impacted.

In addition, our fixed operating costs have increased as a result of capital expenditures for capacity expansion. The anticipated customer demand for which we have made capital investments may not materialize, and our sales may not adequately cover fixed costs, resulting in reduced profit levels or even significant losses, either of which may materially and adversely impact our business, liquidity, results of operations, financial condition and cash flows.

The lack of contractually committed customer demand may materially and 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. Generally, our customers do not commit 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 could be materially and adversely affected.

Additionally, while we generally purchase materials based on Amkor's commitments to customer forecasts, and our customers are generally responsible for any unused materials we purchase based on such commitments, due to the Covid-19 pandemic and the resulting supply chain constraints and extended lead times, we have been placing an increasing number of our orders for materials in advance of customer forecasts. If we are unable to timely fulfill our customers' orders, or if we are required to bear the cost of a substantial amount of unused materials, our margins, operating results, financial condition and cash flows could be materially and adversely affected.

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 experience declining average selling prices and are unable to offset such declines 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 and adversely affected.

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, and in line with industry practice, customers usually require us to pass a lengthy and rigorous qualification process that may take several months. Once qualified and in production, 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, and 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 qualify new processes, maintain quality standards or acceptable production yields, if significant and prolonged, could result in the 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.

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 scope of semiconductor packaging, SiP modules and test services are rapidly increasing. As a result, we expect 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 may 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 impact our ability to meet customer orders and materially and adversely impact our business.

Although we seek patent protection for some of our technology under U.S. and foreign patent laws, 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 us meaningful protection or other commercial advantage.

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. 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 Form 10-Q on our results of operations, financial condition and cash flows could change in the future.

***We may 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 may be 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 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 materially and 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.

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 may decrease or suspend our quarterly dividend, and any decrease in or suspension of the dividend could cause our stock price to decline.

Since October 2020, we have paid a regular quarterly cash dividend on our outstanding common stock. However, the payment, amount and timing of future cash dividends are subject to the final determination each quarter by our Board of Directors or a committee thereof that there are sufficient funds available to lawfully pay a dividend, that the dividend is compliant with the applicable restrictions in our debt agreements, and that the payment of the dividend remains in our and our stockholders' best interests. The determination will be based on our results of operations, financial condition, cash requirements, debt restrictions and other factors. Given these considerations, we may increase or decrease the amount of the dividend at any time and may also decide to vary the timing of or suspend the payment of dividends in the future. Any decrease or suspension could cause our stock price to decline.

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 $70.3 million as of March 31, 2022. 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. We have made, and may in the future make, offers to some or all of the covered employees the option to convert from the severance plan to the defined contribution plan. Some employees have accepted previous offers, and future offers to make similar conversions could impact the timing of future payments, reducing our cash flow and materially and adversely affecting our financial condition.

James J. Kim and members of his family can effectively determine or substantially influence the outcome of all matters requiring stockholder approval.

As of March 31, 2022, James J. Kim, the Executive Chairman of our Board of Directors, Susan Y. Kim, the Executive Vice Chairman of our Board of Directors, and members of the Kim family and affiliates owned approximately 142.0 million shares, or approximately 58%, of our outstanding common stock. The Kim family also has options to acquire approximately 0.5 million shares. If the options are exercised, the Kim family's total ownership would be an aggregate of approximately 142.5 million shares, or approximately 58% of our outstanding common stock.

In June 2013, the Kim family exchanged convertible notes issued by Amkor in 2009 for approximately 49.6 million shares of common stock (the "Convert Shares"). The Convert Shares are subject to a voting agreement. The voting 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. 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 cause the market price of our stock to decline significantly.

General Risk Factors

The Covid-19 pandemic has impacted, and may continue to impact, the supply chain and consumer demand for our customers' products and services, and the continued impact on the supply chain and consumer demand may ultimately have a material and adverse effect on our business, results of operations, and financial condition.

Our business has been, and may continue to be, adversely impacted by the effects of the Covid-19 pandemic. The impacts have varied, and likely will continue to vary, by location, by industry and by end market. We, our suppliers and our customers have been and may continue to be disrupted by worker illness and absenteeism, quarantines and restrictions on employees' ability to work, office and factory closures, disruptions to ports and other shipping infrastructure and border closures or other travel or health-related restrictions. There is considerable uncertainty regarding such restrictions and potential future governmental restrictions. Restrictions on our workforce or access to our manufacturing facilities, or similar limitations for our suppliers, or restrictions or disruptions of transportation, such as reduced availability of air transport, port closures, and increased border controls, could limit our capacity to meet customer demand and have a material adverse effect on our business, results of operations and financial condition. Such restrictions and efforts to contain the spread of Covid-19 have caused and may continue to cause disruptions to our supply chain in connection with the sourcing of equipment, supplies and other materials. The resumption of normal business operations after any such restrictions are lifted may be delayed or constrained by lingering effects of the Covid-19 pandemic on our suppliers or customers or both, and additional restrictions may be implemented in response to the emergence of new variants or re-emergence of Covid-19. Additionally, other national, regional, and local governments have implemented, and may continue to implement, restrictions to mitigate the spread of Covid-19, the emergence of new variants, or the re-emergence of Covid-19 in jurisdictions in which we, our customers, and our suppliers operate, and such restrictions may materially and adversely impact our operations and the operations of our customers and suppliers. We also remain subject to industry-wide supply constraints and inflationary price pressures, which have resulted in long lead times, rising prices and supply chain disruptions, and we expect these industry constraints and external pressures to persist throughout 2022.

The spread of Covid-19 has caused us to modify our business practices (including corporate hygiene protocols at factories, restricting employee travel and employee work locations and cancelling physical participation in meetings, events and conferences), and we may take further actions as may be required by government authorities or that we determine to be in the best interests of our employees, customers and suppliers. There is no certainty that such measures will be sufficient to mitigate the current or future impacts of the Covid-19 pandemic, and our ability to perform critical functions could be harmed. While certain governments have started to relax Covid-19-related restrictions and many countries are offering Covid-19 vaccines to their residents, vaccination rates remain low in many areas and there remains uncertainty around the impact of new variants or resurgences of Covid-19, when remaining restrictions will be lifted, the implementation and duration of any additional restrictions in response to the emergence of new variants or re-emergence of Covid-19, the timing of distribution and administration of the vaccines globally and when or if normal economic activity and business operations will resume.

At this time, we are unable to predict the future impacts that the Covid-19 pandemic will have on our business, financial condition or results of operations due to various uncertainties, including the duration of the outbreak and the actions that may be taken by governmental authorities and other businesses in response to the Covid-19 pandemic.

Our substantial indebtedness could have a material adverse effect on our financial condition and prevent us from fulfilling our obligations.

We have a substantial amount of debt, and the terms of the agreements governing our indebtedness allow us and our subsidiaries to incur more debt, subject to certain limitations. As of March 31, 2022, our total debt balance was $1,244.1 million, of which $156.7 million was classified as a current liability and $642.4 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 increase.

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 covenants in our indebtedness, 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.

We are exposed to fluctuations in interest rates and changes in credit risk, which could have a material adverse impact on our earnings as it relates to the market value of our investment portfolio.

We maintain an investment portfolio of various holdings, types and maturities. Our portfolio includes available-for-sale debt investments, the values of which are subject to market price volatility resulting from interest rate movements, changes in credit risk and financial market conditions. If such investments suffer market price declines, we may recognize in earnings the decline in the fair value of our investments below their cost basis when the decline is judged to be an impairment, including an allowance for credit loss.

We may have difficulty funding liquidity needs.

We assess our liquidity based on our current expectations regarding sales and operating expenses, capital spending, dividend payments, stock repurchases, debt service requirements and other funding needs. We fund our operations, including capital expenditures and other investments and servicing principal and interest obligations with respect to our debt, from cash flows from our operations, existing cash and cash equivalents, borrowings under available debt facilities, or proceeds from any additional debt or equity financing. Our liquidity is affected by, among other factors, volatility in the global economy and credit markets, the performance of our business, our capital expenditures and other investment levels, other uses of our cash including any payments of dividends and purchases of stock under any stock repurchase program, any acquisitions or investments in joint ventures and any decisions we might make to either repay debt and other long-term obligations out of our operating cash flows or refinance debt at or prior to maturity with the proceeds of debt or equity financings.

Servicing our current and future customers requires that we incur significant operating expenses and continue to make significant capital expenditures and other investments, and the amount of our capital expenditures for 2022 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, the performance of our business, economic and market conditions, advances in technology, 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.

The health of the worldwide banking system and capital markets also 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. The U.S. Federal Reserve raised interest rates in March and May of 2022 and has signaled further rate increases in the near term. Volatility in the banking system and capital markets, as well as any further increase in interest rates or adverse economic, political, public health or 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 could be materially and adversely impacted.

The loss of certain customers or reduced orders or pricing from existing customers may have a material 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 accounted for, in the aggregate, 63% of our net sales for the year ended December 31, 2021. 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 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, and we cannot be sure 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, as seen in the automotive end market in 2020, the Covid-19 pandemic and restrictions imposed by governmental authorities to mitigate the spread of Covid-19 in our customers' end markets may decrease demand for our customers' products and services, thereby adversely impacting their demand for our services.

In addition, from time to time, we may acquire or build new facilities or migrate existing business among our facilities. In connection with these facility changes or new facility constructions, our customers require us to 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 qualify facility changes, that we will complete construction of new facilities in a timely manner or that our customers will not qualify our competitors and move the business for such services.

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 intensifying, accelerated by increasing competition in the semiconductor industry for talent to meet strong demand, and our business could be materially and adversely affected by the loss of the services of any of our existing key personnel, including senior management and technical talent, as a result of competition or for any other reason. Labor shortages could also result in higher wages that would increase our labor costs, which could reduce our profits. Other than the agreement with our Chief Executive Officer, 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.

If we fail to maintain an effective system of internal controls, we may not be able to accurately report financial results or prevent fraud.

Our internal controls over financial reporting 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 concerning the effectiveness of internal controls in future periods are subject to the risk that our internal controls may become inadequate because of changes in conditions, or that the degree of compliance with our 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. 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 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, ransomware attacks, telecommunication failures, user errors, malfeasance or catastrophic events. Such events have occurred in the past and may occur in the future. Cybersecurity breaches could result in unauthorized disclosure of confidential information or disruptions to our operations. While we have not experienced a material information security breach in the past, we cannot be sure that such a breach will not occur in the future. The IT systems in our factories are at varying levels of sophistication and maturity as the factories have different sets of products, processes and customer expectations. 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 continue to further integrate our Japan operations' 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:

- delays in the design and implementation of the system;
- costs may exceed our plans and expectations; and
- disruptions resulting from the implementation, integration or cybersecurity breach 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 maintain insurance policies for various types of information security risks, including network security and privacy liability for third party claims, and business interruption and system failure reimbursement coverage, but we do not carry insurance for all the above referred risks. 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 materially and adversely affected by a disruption, failure or breach of our information technology systems.

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, facility and operational expansions, 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;
- 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:

- incur costs associated with personnel reductions and voluntary retirement programs;
- record restructuring charges to cover costs associated with facility consolidations and related cost reduction initiatives;
- use a significant portion of our available cash;
- incur substantial debt;

- issue equity securities, which may dilute the ownership of current stockholders;
- 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. 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.

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. Changes in the tax laws of foreign jurisdictions could arise as a result of the base erosion and profit shifting project that was undertaken by the Organization for Economic Cooperation and Development ("OECD"). The OECD, which represents a coalition of member countries, recommended changes to long-standing tax principles related to transfer pricing and has developed new proposals including establishing a global minimum corporate income tax (tested on a jurisdictional basis). Changes in U.S. or foreign tax laws, including new or modified guidance with respect to existing tax laws, 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 materially and 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 and adversely affect our results of operations.

Environmental, health and safety liabilities and expenditures could have a material adverse effect on our business, results of operation and financial condition.

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 or generated in, or emitted by, our production processes, on the factories we occupy and on the materials contained in semiconductor products. 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 within the interconnect terminals typically referred to as leads, pins or balls, and 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 emission of greenhouse gasses or other chemicals, the existence of hazardous materials on our properties or the existence of hazardous substances in the products for which we perform our services. 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, which may materially and adversely affect our ability to maintain or expand our operations. Additionally, if Amkor is unable to align its environmental, health and safety practices with shifting customer preferences, we could suffer reputational harm, which could have a material and adverse effect on our business, results of operations, liquidity and cash flows.

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 for which we perform our services, 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 operating costs may increase.

Our business and financial condition could be adversely affected by natural disasters and other calamities, health conditions or pandemics, political instability, hostilities or other disruptions.

We have significant packaging and test services and other operations in China, Japan, Korea, Malaysia, the Philippines, Portugal, Singapore and Taiwan, and we have announced our intention to expand our operations to Vietnam. Such operations 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 Covid-19 and other coronaviruses, Ebola or flu); industrial strikes; government-imposed travel restrictions or quarantines; 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 in regions where we have facilities; and industrial accidents and other events, that could disrupt or even shutdown our operations. While our global manufacturing footprint allows us to shift production to other factories without substantial cost or production delays, certain of our services are currently performed using equipment located in one or a subset of our factories. A major disruption or shutdown of any such factory could completely impair our ability to perform those services or require us to shift them to another location. As a result, our ability to fulfill customer orders may be impaired or delayed, and we could incur significant losses.

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, and we incurred earthquake-related costs for damaged inventory, buildings and equipment. Our suppliers and customers also have significant operations in such locations, and this could compound the effect of any such disruption. 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, or customer approval, 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.

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.

We maintain insurance policies for various types of property, casualty and other risks, but we do not carry insurance for all the above referred risks. 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 materially and adversely affected by natural disasters and other calamities.

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 March 31, 2022.

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)
January 1 - January 31	—	$ —	—	$ 91,586,032
February 1 - February 28	3,870	20.90	—	91,586,032
March 1 - March 31	65	21.72	—	91,586,032
Total	3,935	20.91	—	

(a) Represents shares of common stock surrendered to us to satisfy tax withholding obligations associated with the shares issued to employees in connection with share-based compensation.

(b) On August 30, 2011, we announced that our Board of Directors had authorized the repurchase of up to $150.0 million of our common stock, exclusive of any fees, commissions or other expenses, under the Stock Repurchase Program. On February 1, 2012, we announced that our Board of Directors had authorized an additional $150.0 million for the repurchase of our common stock under the Stock Repurchase Program, resulting in a total repurchase authorization under the Stock Repurchase Program of $300.0 million. Pursuant to the Stock Repurchase Program, we made no common stock purchases for the three months ended March 31, 2022, and at March 31, 2022, approximately $91.6 million was available for repurchase. Repurchases of our common stock under the Stock Repurchase Program are funded with available cash, and the Stock Repurchase Program may be suspended or discontinued at any time.

Item 3. *Defaults Upon Senior Securities*

None.

Item 4. *Mine Safety Disclosures*

Not applicable.

Item 5. *Other Information*

None.

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Item 6. *Exhibits*

Exhibit Number	Exhibit Description	Incorporated by Reference: Form	Period Ending	Exhibit	Filing Date	Included Herewith
10.1	Secured Facility Agreement, dated March 28, 2022, between Amkor Technology, Inc., as parent, Amkor Technology Singapore Holding Pte. Ltd., as borrower, the subsidiaries of the borrower set forth in the schedules thereto, as original guarantors, the Hongkong and Shanghai Banking Corporation Limited, Singapore Branch ("HSBC") and DBS Bank Ltd., each as mandated lead arranger and bookrunner, the other financial institutions party thereto, as lenders, HSBC, as agent and offshore security trustee, and CTBC Bank Co., Ltd., as onshore security agent.	8-K		10.1	3/29/22	
10.2	Amkor Technology, Inc. Non-Employee Director Compensation Policy	10-K		10.34	2/18/22	
10.3	Form of Global Non-Employee Director Time-Vested Restricted Stock Unit Award Agreement*	10-K		10.35	2/18/22	
10.4	Amendment One to the Amkor Technology, Inc. 2021 Equity Incentive Plan*	10-K		10.36	2/18/22	
31.1	Certification of Guillaume Marie Jean Rutten, Chief Executive Officer of Amkor Technology, Inc., pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as amended					X
31.2	Certification of Megan Faust, Chief Financial Officer of Amkor Technology, Inc., pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as amended					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	Inline 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	Inline XBRL Taxonomy Extension Schema Document					X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					X
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)					X

*Indicates management compensatory plan, contract or arrangement.

**Furnished herewith.

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
Executive Vice President,
Chief Financial Officer and Treasurer
(Principal Financial Officer and Principal Accounting Officer)

Date: May 5, 2022

Exhibit 31.1

SECTION 302 CERTIFICATION

I, Guillaume Marie Jean Rutten, 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 control over financial reporting.

/s/ Guillaume Marie Jean Rutten

Guillaume Marie Jean Rutten
President and Chief Executive Officer

May 5, 2022

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 control over financial reporting.

/s/ Megan Faust

Megan Faust
Executive Vice President,
Chief Financial Officer and Treasurer

May 5, 2022

Exhibit 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

For purposes of Section 1350 of Chapter 63 of Title 18 of the United States Code, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, each of the undersigned officers of Amkor Technology, Inc., a Delaware corporation (the “Company”), does hereby certify, to such officer’s knowledge, that the Company’s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2022 (the “Form 10-Q”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)) and that the information contained in the Form 10-Q fairly presents in all material respects the financial condition and results of operations of the Company.

/s/ Guillaume Marie Jean Rutten

By:	Guillaume Marie Jean Rutten
Title:	President and Chief Executive Officer
Date:	May 5, 2022

/s/ Megan Faust

By:	Megan Faust
Title:	Executive Vice President, Chief Financial Officer and Treasurer
Date:	May 5, 2022