

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

- QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the quarterly period ended September 30, 2020
- 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: 001-38273

ACM Research, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of Incorporation or Organization)

94-3290283
(I.R.S. Employer Identification No.)

42307 Osgood Road, Suite I
Fremont, California
(Address of Principal Executive Offices)

94539
(Zip Code)

Registrant's telephone number, including area code: **(510) 445-3700**

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

Title of Each Class	Trading Symbol	Name of Each Exchange on which Registered
Class A Common Stock, \$0.0001 par value	ACMR	Nasdaq Global 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 such 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 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 definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date.

Class	Number of Shares Outstanding
Class A Common Stock, \$0.0001 par value	16,662,218 shares outstanding as of November 3, 2020
Class B Common Stock, \$0.0001 par value	1,802,606 shares outstanding as of November 3, 2020

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We conduct our business operations principally through ACM Research (Shanghai), Inc., or ACM Shanghai, a subsidiary of ACM Research, Inc., or ACM Research. Unless the context requires otherwise, references in this report to “our company,” “our,” “us,” “we” and similar terms refer to ACM Research, Inc. and its subsidiaries, including ACM Shanghai, collectively.

For purposes of this report, certain amounts in Renminbi, or RMB, have been translated into U.S. dollars solely for the convenience of the reader. The translations have been made based on the conversion rates published by the State Administration of Foreign Exchange of the People's Republic of China.

SAPS, TEBO, ULTRA C and ULTRA FURNACE are our trademarks. For convenience, these trademarks appear in this report without TM symbols, but that practice does not mean that we will not assert, to the fullest extent under applicable law, our rights to the trademarks. This report also contains other companies' trademarks, registered marks and trade names, which are the property of those companies.

NOTE ABOUT FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, included in this report regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans and objectives of management are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as “may,” “might,” “will,” “objective,” “intend,” “should,” “could,” “can,” “would,” “expect,” “believe,” “anticipate,” “project,” “target,” “design,” “estimate,” “predict,” “potential,” “plan” or the negative of these terms, and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on our management’s belief and assumptions and on information currently available to our management. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to future events or our future operational or financial performance, and involve known and unknown risks, uncertainties and other factors, including those described or incorporated by reference in “Item 1A. Risk Factors” of Part II of this report, that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements.

The information included in this report under the heading “Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations – Overview” contains statistical data and estimates, including forecasts, that are based on information provided by Gartner, Inc., or Gartner, in “Forecast: Semiconductor Wafer Fab Manufacturing Equipment (Including Wafer-Level Packaging), Worldwide, 4Q19 Update” (December 2019), or the Gartner Report. The Gartner Report represents research opinions or viewpoints that are published, as part of a syndicated subscription service, by Gartner and are not representations of fact. The Gartner Report speaks as of its original publication date (and not as of the date of this report), and the opinions expressed in the Gartner Report are subject to change without notice. While we are not aware of any misstatements regarding any of the data presented from the Gartner Report, estimates, and in particular forecasts, involve numerous assumptions and are subject to risks and uncertainties, as well as change based on various factors, that could cause results to differ materially from those expressed in the data presented below.

Any forward-looking statement made by us in this report speaks only as of the date on which it is made. Except as required by law, we assume no obligation to update these statements publicly or to update the reasons actual results could differ materially from those anticipated in these statements, even if new information becomes available in the future.

You should read this report, and the documents that we reference in this report and have filed as exhibits to this report, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

PART I. FINANCIAL INFORMATION
Item 1. Financial Statements

ACM RESEARCH, INC.
Condensed Consolidated Balance Sheets
(in thousands, except share and per share data)
(unaudited)

Assets	September 30, 2020	December 31, 2019
Current assets:		
Cash and cash equivalents	\$ 92,203	\$ 58,261
Restricted cash	-	59,598
Trading securities (note 11)	23,888	-
Accounts receivable, less allowance for doubtful accounts of \$0 as of September 30, 2020 and December 31, 2019 (note 3)	59,796	31,091
Other receivables	6,177	2,603
Inventories (note 4)	64,182	44,796
Prepaid expenses	5,531	2,047
Total current assets	251,777	198,396
Property, plant and equipment, net (note 5)	5,974	3,619
Land use right, net (note 2)	9,284	-
Operating lease right-of-use assets, net (note 8)	4,568	3,887
Intangible assets, net	335	344
Deferred tax assets (note 17)	10,093	5,331
Long-term investments (note 10)	6,580	5,934
Other long-term assets	8,008	192
Total assets	296,619	217,703
Liabilities, Redeemable Non-controlling Interests and Stockholders' Equity		
Current liabilities:		
Short-term borrowings (note 6)	28,327	13,753
Accounts payable	35,639	13,262
Advances from customers	8,011	9,129
Income taxes payable	3,589	3,129
Other payables and accrued expenses (note 7)	18,494	12,874
Current portion of operating lease liability (note 8)	1,388	1,355
Deferred revenue	819	-
Total current liabilities	96,267	53,502
Long-term operating lease liability (note 8)	3,180	2,532
Other long-term liabilities (note 9)	6,454	4,186
Total liabilities	105,901	60,220
Commitments and contingencies (note 18)		
Redeemable non-controlling interests (note 15)	-	60,162
Stockholders' equity:		
Common stock – Class A, par value \$0.0001: 50,000,000 shares authorized as of September 30, 2020 and December 31, 2019; 16,657,135 shares issued and outstanding as of September 30, 2020 and 16,182,151 shares issued and outstanding as of December 31, 2019 (note 14)	2	2
Common stock–Class B, par value \$0.0001: 2,409,738 shares authorized as of September 30, 2020 and December 31, 2019; 1,802,606 shares issued and outstanding as of September 30, 2020 and 1,862,608 shares issued and outstanding as of December 31, 2019 (note 14)	-	-
Additional paid in capital	100,145	83,487
Accumulated surplus	25,758	15,507
Accumulated other comprehensive income (loss)	1,037	(1,675)
Total ACM Research, Inc. stockholders' equity	126,942	97,321
Non-controlling interests	63,776	-
Total stockholders' equity	190,718	97,321
Total liabilities, redeemable non-controlling interests, and stockholders' equity	\$ 296,619	\$ 217,703

The accompanying notes are an integral part of these condensed consolidated financial statements.

ACM RESEARCH, INC.
Condensed Consolidated Statements of Operations and Comprehensive Income
(in thousands, except share and per share data)
(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Revenue	\$ 47,665	\$ 33,427	\$ 111,062	\$ 82,916
Cost of revenue	27,324	17,173	61,137	44,705
Gross profit	20,341	16,254	49,925	38,211
Operating expenses:				
Sales and marketing	3,924	3,886	11,524	8,679
Research and development	4,343	3,492	13,241	9,598
General and administrative	4,568	1,846	9,100	5,992
Total operating expenses, net	12,835	9,224	33,865	24,269
Income from operations	7,506	7,030	16,060	13,942
Interest income	179	95	834	128
Interest expense	(272)	(205)	(611)	(538)
Change in fair value of financial liability	(6,533)	-	(11,964)	-
Unrealized gain on trading securities	8,970	-	8,970	-
Other income (expense), net	(1,759)	1,850	(933)	2,132
Equity income (loss) in net income (loss) of affiliates	182	(9)	539	260
Income before income taxes	8,273	8,761	12,895	15,924
Income tax benefit (expense) (note 17)	1,747	328	(416)	(667)
Net income	10,020	9,089	12,479	15,257
Less: Net income attributable to non-controlling interests and redeemable non-controlling interests	1,393	307	2,228	307
Net income attributable to ACM Research, Inc.	\$ 8,627	\$ 8,782	\$ 10,251	\$ 14,950
Comprehensive income:				
Net income	\$ 10,020	\$ 9,089	\$ 12,479	\$ 15,257
Foreign currency translation adjustment	5,757	(2,591)	4,099	(2,902)
Comprehensive Income	15,777	6,498	16,578	12,355
Less: Comprehensive income attributable to non-controlling interests and redeemable non-controlling interests	2,698	307	3,614	307
Comprehensive income attributable to ACM Research, Inc.	\$ 13,079	\$ 6,191	\$ 12,964	\$ 12,048
Net income attributable to ACM Research, Inc. per common share (note 2):				
Basic	\$ 0.47	\$ 0.52	\$ 0.57	\$ 0.91
Diluted	\$ 0.40	\$ 0.45	\$ 0.48	\$ 0.80
Weighted average common shares outstanding used in computing per share amounts (note 2):				
Basic	18,201,943	16,999,746	18,124,665	16,381,944
Diluted	21,555,296	19,354,214	21,257,661	18,699,010

The accompanying notes are an integral part of these condensed consolidated financial statements.

ACM RESEARCH, INC.
Condensed Consolidated Statements of Changes in Stockholders' Equity
For the Nine Months Ended September 30, 2020 and 2019
(in thousands, except share and per share data)
(unaudited)

	Common Stock Class A		Common Stock Class B		Additional Paid- in Capital	Accumulated Surplus	Accumulated Other Comprehensive Income (Loss)	Non- controlling interests	Total Stockholders' Equity
	Shares	Amount	Shares	Amount					
Balance at December 31, 2019	16,182,151	\$ 2	1,862,608	\$ -	\$ 83,487	\$ 15,507	\$ (1,675)	\$ -	\$ 97,321
Net income	-	-	-	-	-	10,251	-	1,585	11,836
Foreign currency translation adjustment	-	-	-	-	-	-	2,712	2,233	4,945
Exercise of stock options	592,946	-	-	-	2,191	-	-	-	2,191
Stock-based compensation	-	-	-	-	4,323	-	-	-	4,323
Conversion of class B common shares to Class A common shares	60,002	-	(60,002)	-	-	-	-	-	-
Share cancellation (note 12)	(242,681)	-	-	-	(9,715)	-	-	-	(9,715)
Issuance of warrants (note 12)	-	-	-	-	19,859	-	-	-	19,859
Exercise of stock warrants	64,717	-	-	-	-	-	-	-	-
Reclassification of redeemable non-controlling interest	-	-	-	-	-	-	-	59,958	59,958
Balance at September 30, 2020	16,657,135	\$ 2	1,802,606	\$ -	\$ 100,145	\$ 25,758	\$ 1,037	\$ 63,776	\$ 190,718

	Common Stock Class A		Common Stock Class B		Additional Paid- in Capital	Accumulated Surplus (Deficit)	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance at December 31, 2018	14,110,315	\$ 1	1,898,423	\$ -	\$ 56,567	\$ (3,387)	\$ (857)	\$ 52,324
Net income attributable to ACM Research, Inc.	-	-	-	-	-	14,950	-	14,950
Foreign currency translation adjustment	-	-	-	-	-	-	(2,220)	(2,220)
Exercise of stock options	193,642	-	-	-	312	-	-	312
Cancellation of stock options	-	-	-	-	(576)	-	-	(576)
Stock-based compensation	-	-	-	-	2,919	-	-	2,919
Issuance of Class A common stock in connection with public offering	2,053,572	1	-	-	26,462	-	-	26,463
Share repurchase	(214,286)	-	-	-	(2,827)	-	-	(2,827)
Conversion of Class B common stock to Class A common stock	35,815	-	(35,815)	-	-	-	-	-
Balance at September	16,179,058	\$ 2	1,862,608	\$ -	\$ 82,857	\$ 11,563	\$ (3,077)	\$ 91,345

The accompanying notes are an integral part of these condensed consolidated financial statements.

ACM RESEARCH, INC.
Condensed Consolidated Statements of Changes in Stockholders' Equity
For the Three Months Ended September 30, 2020 and 2019
(in thousands, except share and per share data)
(unaudited)

	Common Stock Class A		Common Stock Class B		Additional Paid-in Capital	Accumulated Surplus	Accumulated Other Comprehensive Income (Loss)	Non- controlling interests	Total Stockholders' Equity
	Shares	Amount	Shares	Amount					
Balance at June 30, 2020	16,250,092	\$ 2	1,802,606	\$ -	\$ 76,189	\$ 17,131	\$ (3,415)	\$ 61,078	\$ 150,985
Net income	-	-	-	-	-	8,627	-	1,393	10,020
Foreign currency translation adjustment	-	-	-	-	-	-	4,452	1,305	5,757
Exercise of stock options	407,043	-	-	-	1,318	-	-	-	1,318
Stock-based compensation	-	-	-	-	2,779	-	-	-	2,779
Issuance of warrants (note 12)	-	-	-	-	19,859	-	-	-	19,859
Balance at September 30, 2020	16,657,135	\$ 2	1,802,606	\$ -	\$ 100,145	\$ 25,758	\$ 1,037	\$ 63,776	\$ 190,718

	Common Stock Class A		Common Stock Class B		Additional Paid-in Capital	Accumulated Surplus	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance at June 30, 2019	14,229,942	\$ 1	1,883,423	\$ -	\$ 58,101	\$ 2,781	\$ (1,168)	\$ 59,715
Net income attributable to ACM Research, Inc.	-	-	-	-	-	8,782	-	8,782
Foreign currency translation adjustment	-	-	-	-	-	-	(1,909)	(1,909)
Exercise of stock options	89,015	-	-	-	140	-	-	140
Cancellation of stock options	-	-	-	-	(576)	-	-	(576)
Stock-based compensation	-	-	-	-	1,557	-	-	1,557
Issuance of Class A common stock in connection with public offering	2,053,572	1	-	-	26,462	-	-	26,463
Share repurchases	(214,286)	-	-	-	(2,827)	-	-	(2,827)
Conversion of Class B common stock to Class A common stock	20,815	-	(20,815)	-	-	-	-	-
Balance at September 30, 2019	16,179,058	\$ 2	1,862,608	\$ -	\$ 82,857	\$ 11,563	\$ (3,077)	\$ 91,345

The accompanying notes are an integral part of these condensed consolidated financial statements.

ACM RESEARCH, INC.
Condensed Consolidated Statements of Cash Flows
(in thousands)
(unaudited)

	Nine Months Ended September 30,	
	2020	2019
Cash flows from operating activities:		
Net income	\$ 12,479	\$ 15,257
Adjustments to reconcile net income from operations to net cash used in operating activities:		
Depreciation and amortization	774	586
Loss on disposals of property, plant and equipment	1	296
Equity income in net income of affiliates	(539)	(260)
Unrealized gain on trading securities	(8,970)	-
Deferred income taxes	(4,632)	(757)
Stock-based compensation	4,323	2,919
Change in fair value of financial liability	11,964	-
Net changes in operating assets and liabilities:		
Accounts receivable	(27,575)	(19,634)
Other receivables	(3,512)	1,187
Inventory	(18,362)	(5,889)
Prepaid expenses	(3,371)	323
Other long-term assets	(839)	(182)
Accounts payable	22,023	(417)
Advances from customers	(1,142)	746
Income tax payable	389	162
Other payables and accrued expenses	5,962	2,352
Deferred revenue	819	-
Other long-term liabilities	2,172	(1,441)
Net cash flow used in operating activities	(8,036)	(4,752)
Cash flows from investing activities:		
Purchase of property and equipment	(3,583)	(832)
Purchase of intangible assets	(81)	(114)
Purchase of land-use-right	(9,331)	-
Purchase of trading securities	(14,680)	-
Prepayment for property	(6,978)	-
Investments in unconsolidated affiliates	-	(4,348)
Net cash used in investing activities	(34,653)	(5,294)
Cash flows from financing activities:		
Proceeds from short-term borrowings	31,068	18,267
Repayments of short-term borrowings	(16,881)	(11,770)
Repayments of notes payable	(1,820)	-
Proceeds from stock option exercise to common stock	2,191	312
Proceeds from issuance of Class A common stock in connection with public offering, net of direct issuance expenses of \$2,287	-	26,463
Payment for repurchase of Class A common stock	-	(785)
Payment for cancellation of stock option	-	(576)
Proceeds from issuance of common stock to redeemable Non-controlling interest	-	27,264
Net cash provided by financing activities	14,558	59,175
Effect of exchange rate changes on cash, cash equivalents and restricted cash	\$ 2,475	\$ (2,407)
Net increase (decrease) in cash, cash equivalents and restricted cash	\$ (25,656)	\$ 46,722
Cash, cash equivalents and restricted cash at beginning of period	117,859	27,124
Cash, cash equivalents and restricted cash at end of period	\$ 92,203	\$ 73,846
Supplemental disclosure of cash flow information:		
Interest paid	\$ 611	\$ 538
Cash paid for income taxes	\$ 4,606	\$ -
Reconciliation of cash, cash equivalents and restricted cash in condensed consolidated statements of cash flows:		
Cash and cash equivalents	\$ 92,203	\$ 47,264
Restricted cash	-	26,582
Cash, cash equivalents and restricted cash	\$ 92,203	\$ 73,846
Non-cash financing activities:		
Warrant conversion to common stock	\$ 399	\$ -
Share cancellation, note 12	\$ 9,715	\$ -
Issuance of warrant for settlement of financial liability and cancellation of note receivable	\$ 19,859	\$ -

ACM RESEARCH, INC.
Notes to Condensed Consolidated Financial Statements (unaudited)
(dollars in thousands, except share and per share data)

NOTE 1 – DESCRIPTION OF BUSINESS

ACM Research, Inc. (“ACM”) and its subsidiaries (collectively with ACM, the “Company”) develop, manufacture and sell single-wafer wet cleaning equipment used to improve the manufacturing process and yield for advanced integrated chips. The Company markets and sells its single-wafer wet-cleaning equipment, under the brand name “Ultra C,” based on the Company’s proprietary Space Alternated Phase Shift (“SAPS”) and Timely Energized Bubble Oscillation (“TEBO”) technologies. These tools are designed to remove random defects from a wafer surface efficiently, without damaging the wafer or its features, even at increasingly advanced process nodes.

ACM was incorporated in California in 1998, and it initially focused on developing tools for manufacturing process steps involving the integration of ultra low-K materials and copper. The Company’s early efforts focused on stress-free copper-polishing technology, and it sold tools based on that technology in the early 2000s.

In 2006 the Company established its operational center in Shanghai in the People’s Republic of China (the “PRC”), where it operates through ACM’s subsidiary ACM Research (Shanghai), Inc. (“ACM Shanghai”). ACM Shanghai was formed initially in 2005 to help establish and build relationships with integrated circuit manufacturers in the PRC, and the Company initially financed its Shanghai operations in part through sales of non-controlling equity interests in ACM Shanghai.

In 2007 the Company began to focus its development efforts on single-wafer wet-cleaning solutions for the front-end chip fabrication process. The Company introduced its SAPS megasonic technology, which can be applied in wet wafer cleaning at numerous steps during the chip fabrication process, in 2009. It introduced its TEBO technology, which can be applied at numerous steps during the fabrication of small node two-dimensional conventional and three-dimensional patterned wafers, in March 2016. The Company has designed its equipment models for SAPS and TEBO solutions using a modular configuration that enables it to create a wet-cleaning tool meeting the specific requirements of a customer, while using pre-existing designs for chamber, electrical, chemical delivery and other modules. In August 2018, the Company introduced its Ultra-C Tahoe wafer cleaning tool, which can deliver high cleaning performance with significantly less sulfuric acid than typically consumed by conventional high-temperature single-wafer cleaning tools. The Company also offers a range of custom-made equipment, including cleaners, coaters and developers, to back-end wafer assembly and packaging factories, principally in the PRC.

In 2011 ACM Shanghai formed a wholly owned subsidiary in the PRC, ACM Research (Wuxi), Inc. (“ACM Wuxi”), to manage sales and service operations.

In June 2017 ACM formed a wholly owned subsidiary in Hong Kong, CleanChip Technologies Limited (“CleanChip”), to act on the Company’s behalf in Asian markets outside the PRC by, for example, serving as a trading partner between ACM Shanghai and its customers, procuring raw materials and components, performing sales and marketing activities, and making strategic investments.

In December 2017 ACM formed a wholly owned subsidiary in the Republic of Korea, ACM Research Korea CO., LTD. (“ACM Korea”), to serve customers based in Republic of Korea and perform sales, marketing, research and development activities for new products and solutions.

In March 2019 ACM Shanghai formed a wholly owned subsidiary in the PRC, Shengwei Research (Shanghai), Inc. (“ACM Shengwei”), to manage activities related to addition of future long-term production capacity.

In June 2019 CleanChip formed a wholly owned subsidiary in California, ACM Research (CA), Inc. (“ACM California”), to provide procurement services on behalf of ACM Shanghai.

In June 2019 ACM announced plans to complete over the next three years a listing (the “STAR Listing”) of shares of ACM Shanghai on the Shanghai Stock Exchange’s new Sci-Tech innovAtion boARd, known as the STAR Market, and a concurrent initial public offering (the “STAR IPO”) of ACM Shanghai shares in the PRC. ACM Shanghai is currently ACM’s primary operating subsidiary, and at the time of announcement, was wholly owned by ACM. To meet a STAR Listing requirement that it have multiple independent stockholders in the PRC, ACM Shanghai completed private placements of its shares in June and November 2019, following which, as of September 30, 2020, the private placement investors held a total of 8.3% of the outstanding shares of ACM Shanghai and ACM Research held the remaining 91.7%. As part of the STAR Listing process, in June 2020 the ownership interests held by the private investors were reclassified from redeemable non-controlling interests to non-controlling interests as the redemption feature was terminated. (Note 15).

In preparation for the STAR IPO, the Company completed a reorganization in December 2019 that included the sale of all of the shares of CleanChip by ACM to ACM Shanghai for \$3,500. The reorganization and sale had no impact on the Company’s consolidated financial statements.

ACM RESEARCH, INC.
Notes to Condensed Consolidated Financial Statements (unaudited)
(dollars in thousands, except share and per share data)

The Company has direct or indirect interests in the following subsidiaries:

Name of subsidiaries	Place and date of incorporation	Effective interest held as at	
		September 30, 2020	December 31, 2019
ACM Research (Shanghai), Inc.	China, May 2005	91.7%	91.7%
ACM Research (Wuxi), Inc.	China, July 2011	91.7%	91.7%
CleanChip Technologies Limited	Hong Kong, June 2017	91.7%	91.7%
ACM Research Korea CO., LTD.	Korea, December 2017	91.7%	91.7%
Shengwei Research (Shanghai), Inc.	China, March 2019	91.7%	91.7%
ACM Research (CA), Inc.	USA, June 2019	91.7%	91.7%
ACM Research (Cayman), Inc.	Cayman Islands, April 2019	100.0%	100.0%

NOTE 2 – SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation and Principles of Consolidation

The Company's consolidated financial statements include the accounts of ACM and its subsidiaries, including ACM Shanghai and its subsidiaries, which include ACM Wuxi, ACM Shengwei and CleanChip (the subsidiaries of which include ACM California and ACM Korea). ACM's subsidiaries are those entities in which ACM, directly and indirectly, controls more than one half of the voting power. All significant intercompany transactions and balances have been eliminated upon consolidation.

The accompanying condensed consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and the rules and regulations of the Securities and Exchange Commission for reporting on Form 10-Q. Accordingly, they do not include all the information and footnotes required by GAAP for complete financial statements. The unaudited condensed consolidated financial statements herein should be read in conjunction with the historical consolidated financial statements of the Company for the year ended December 31, 2019 included in ACM's Annual Report on Form 10-K for the year ended December 31, 2019.

The accompanying condensed consolidated balance sheet as of September 30, 2020, condensed consolidated statements of operations and comprehensive income for the three and nine months ended September 30, 2020 and 2019, condensed consolidated statements of changes in stockholders' equity for the three and nine months ended September 30, 2020 and 2019, and condensed consolidated statements of cash flows for the nine months ended September 30, 2020 and 2019 are unaudited. In the opinion of management, the unaudited condensed consolidated financial statements of the Company reflect all adjustments that are necessary for a fair presentation of the Company's financial position and results of operations. Such adjustments are of a normal recurring nature, unless otherwise noted. The balance sheet as of September 30, 2020 and the results of operations for the three and nine months ended September 30, 2020 are not necessarily indicative of the results to be expected for any future period.

COVID-19 Assessment

The outbreak of COVID-19, the coronavirus, has grown both in the United States and globally, and related government and private sector responsive actions have adversely affected the Company's business operations. In December 2019 a series of emergency quarantine measures taken by the PRC government disrupted domestic business activities during the weeks after the initial outbreak of COVID-19. Since that time, an increasing number of countries, including the United States, have imposed restrictions on travel to and from the PRC and elsewhere, as well as general movement restrictions, business closures and other measures imposed to slow the spread of COVID-19. The situation continues to develop, however, and it is impossible to predict the effect and ultimate impact of the COVID-19 outbreak on the Company's business operations and results. While the quarantine, social distancing and other regulatory measures instituted or recommended in response to COVID-19 are expected to be temporary, the duration of the business disruptions, and related financial impact, cannot be estimated at this time. The COVID-19 outbreak has been declared a worldwide health pandemic that could adversely affect the economies and financial markets of many countries, resulting in an economic downturn and changes in global economic policy that could reduce demand for the Company's products and its customers' chips and have a material adverse impact on the Company's business, operating results and financial condition. Through September 30, 2020 the Company did not experience significant negative impact of COVID-19 on its operations, capital and financial resources, including overall liquidity position.

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Use of Estimates

The preparation of condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the balance sheet date and the reported revenue and expenses during the reported period in the condensed consolidated financial statements and accompanying notes. The Company's significant accounting estimates and assumptions include, but are not limited to, those used for the valuation and recognition of stock-based compensation arrangements and valuation of financial liability, realization of deferred tax assets, assessment for impairment of long-lived assets, allowance for doubtful accounts, inventory valuation for excess and obsolete inventories, lower of cost and market value or net realizable value of inventories, depreciable lives of property and equipment, and useful life of intangible assets. Management believes that the estimates, judgments and assumptions are reasonable, based on information available at the time they are made. Actual results could differ materially from those estimates.

Basic and Diluted Net Income per Common Share

Basic and diluted net income per common share is calculated as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Numerator:				
Net income	\$ 10,020	\$ 9,089	\$ 12,479	\$ 15,257
Net income attributable to non-controlling interests and redeemable non-controlling interests	1,393	307	2,228	307
Net income available to common stockholders, basic and diluted	\$ 8,627	\$ 8,782	\$ 10,251	\$ 14,950
Weighted average shares outstanding, basic	18,201,943	16,999,746	18,124,665	16,381,944
Effect of dilutive securities	3,353,353	2,354,468	3,132,996	2,317,066
Weighted average shares outstanding, diluted	21,555,296	19,354,214	21,257,661	18,699,010
Net income per common share:				
Basic	\$ 0.47	\$ 0.52	\$ 0.57	\$ 0.91
Diluted	\$ 0.40	\$ 0.45	\$ 0.48	\$ 0.80

ACM has been authorized to issue Class A and Class B common stock since redomesticating in Delaware in November 2016. The two classes of common stock are substantially identical in all material respects, except for voting rights. Since ACM did not declare any dividends during the three and nine months ended September 30, 2020 and 2019, the net income per common share attributable to each class is the same under the "two-class" method. As such, the two classes of common stock have been presented on a combined basis in the condensed consolidated statements of operations and comprehensive income and in the above computation of net income per common share.

Diluted net income per common share reflects the potential dilution from securities that could share in ACM's earnings. ACM's potential dilutive securities consist of warrants and stock options for the three and nine months ended September 30, 2020 and 2019.

Land use right, net

The land use right represents the cost to purchase a right to use state-owned land in the PRC with lease terms of 50 years expiring in 2070, for which an upfront lump-sum payment was made during the first nine months of 2020. The Company classifies the land use right as non-current assets on the condensed consolidated balance sheets.

The land use right is carried at cost less accumulated amortization and impairment losses, if any. Amortization is computed using the straight-line method over the term specified in the land use right certificate, which is 50 years.

Concentration of Credit Risk

The Company is potentially subject to concentrations of credit risks in its accounts receivable. For the nine months ended September 30, 2020 and 2019, the Company's three largest customers accounted for 79.8% and 72.3%, respectively, of revenue. For the three months ended September 30, 2020 and 2019, the Company's three largest customers accounted for 72.1% and 98.6%, respectively, of revenue. As of September 30, 2020 and December 31, 2019, the Company's three largest customers accounted for 76.9% and 67.7%, respectively, of the Company's accounts receivables. The Company believes that the receivable balances from these largest customers do not represent a significant credit risk based on past collection experience.

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Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

In August 2018, the Financial Accounting Standards Board (the “FASB”) issued Accounting Standards Update (“ASU”) 2018-13, *Fair Value Measurement (Topic 820)*, which eliminates, adds and modifies certain disclosure requirements for fair value measurements. The modified standard eliminates the requirement to disclose changes in unrealized gains and losses included in earnings for recurring Level 3 fair value measurements and requires changes in unrealized gains and losses be included in other comprehensive income for recurring Level 3 fair value measurements of instruments. The standard also requires the disclosure of the range and weighted average used to develop significant unobservable inputs and how weighted average is calculate for recurring and nonrecurring Level 3 fair value measurements. The amendment is effective for fiscal years beginning after December 15, 2019 and interim periods within that fiscal year, with early adoption permitted. The adoption of ASU 2018-13 did not have a material impact on the Company’s consolidated financial statements.

Recent Accounting Pronouncements Not Yet Adopted

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. ASU 2016-13 replaced the pre-existing incurred loss impairment methodology with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. ASU 2016-13 requires use of a forward-looking expected credit loss model for accounts receivables, loans and other financial instruments. ASU 2016-13 is effective for fiscal years beginning after December 15, 2019, with early adoption permitted. In October 2019, the FASB issued ASU 2019-10, *Financial Instruments – Credit Losses (Topic 326), Derivatives and Hedging (Topic 815) and Leases (Topic 842)*, which defers the effective date for public filers that are considered small reporting companies as defined by the Securities and Exchange Commission to fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. Since the Company is a smaller reporting company, implementation is not needed until January 1, 2023. Adoption of the standard requires using a modified retrospective approach through a cumulative-effect adjustment to retained earnings as of the effective date to align existing credit loss methodology with the new standard. The Company is evaluating the impact of this standard on its consolidated financial statements, including accounting policies, processes and systems and expects the standard will have a minor impact on its consolidated financial statements.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*. ASU 2019-12 will simplify the accounting for income taxes by removing certain exceptions to the general principles in Topic 740. The amendments also improve consistent application of and simplify GAAP for other areas of Topic 740 by clarifying and amending existing guidance. For public business entities, the amendments in this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2021, and interim periods within fiscal years beginning after December 15, 2022. The Company is evaluating the impact of the adoption of ASU 2019-12, but does not expect it to have a material impact on income taxes as reported in its consolidated financial statements.

NOTE 3 – ACCOUNTS RECEIVABLE

At September 30, 2020 and December 31, 2019, accounts receivable consisted of the following:

	September 30, 2020	December 31, 2019
Accounts receivable	\$ 59,796	\$ 31,091
Less: Allowance for doubtful accounts	-	-
Total	\$ 59,796	\$ 31,091

The Company reviews accounts receivable on a periodic basis and makes general and specific allowances when there is doubt as to the collectability of individual balances. No allowance for doubtful accounts was considered necessary at September 30, 2020 and December 31, 2019. At September 30, 2020 and December 31, 2019, accounts receivable of \$0 and \$1,433, respectively, were pledged as collateral for borrowings from financial institutions.

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NOTE 4 – INVENTORIES

At September 30, 2020 and December 31, 2019, inventory consisted of the following:

	September 30, 2020	December 31, 2019
Raw materials	\$ 27,254	\$ 15,105
Work in process	13,882	10,407
Finished goods	23,046	19,284
Total inventory	<u>\$ 64,182</u>	<u>\$ 44,796</u>

System shipments of first-tools to an existing or prospective customer, for which ownership does not transfer until customer acceptance, are classified as finished goods inventory and carried at cost until ownership is transferred.

NOTE 5 – PROPERTY, PLANT AND EQUIPMENT, NET

At September 30, 2020 and December 31, 2019, property, plant and equipment consisted of the following:

	September 30, 2020	December 31, 2019
Manufacturing equipment	\$ 4,093	\$ 3,902
Office equipment	926	627
Transportation equipment	177	124
Leasehold improvement	1,471	1,442
Total cost	6,667	6,095
Less: Total accumulated depreciation	(3,751)	(3,077)
Construction in progress	3,058	601
Total property, plant and equipment, net	<u>\$ 5,974</u>	<u>\$ 3,619</u>

Depreciation expense was \$195 and \$176 for the three months ended September 30, 2020 and 2019, respectively, and \$569 and \$528 for the nine months ended September 30, 2020 and 2019, respectively.

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NOTE 6 – SHORT-TERM BORROWINGS

At September 30, 2020 and December 31, 2019, short-term borrowings consisted of the following:

	September 30, 2020	December 31, 2019
Line of credit up to RMB 50,000 from Bank of Shanghai Pudong Branch, due on January 23, 2020 with an annual interest rate of 5.22%, guaranteed by the Company's CEO and Cleanchip Technologies Limited. It was fully repaid on January 23, 2020.	\$ -	\$ 5,057
Line of credit up to RMB 20,000 from Shanghai Rural Commercial Bank, due on February 21, 2020 with an annual interest rate of 5.66%, guaranteed by the Company's CEO and pledged by accounts receivable. It was fully repaid on February 21, 2020.	-	1,433
Line of credit up to RMB 20,000 from Bank of Communications, due on January 18, 2020 with an annual interest rate of 5.66% and fully repaid on January 19, 2020.	-	1,433
Line of credit up to RMB 20,000 from Bank of Communications, due on January 22, 2020 with an annual interest rate of 5.66% and fully repaid on January 22, 2020.	-	717
Line of credit up to RMB 20,000 from Bank of Communications, due on February 14, 2020 with an annual interest rate of 5.66% and fully repaid on February 14, 2020.	-	717
Line of credit up to RMB 50,000 from China Everbright Bank, due on March 25, 2020 with an annual interest rate of 4.94%, guaranteed by the Company's CEO and fully repaid on March 24, 2020.	-	3,250
Line of credit up to RMB 50,000 from China Everbright Bank, due on April 17, 2020 with an annual interest rate of 5.66%, guaranteed by the Company's CEO and fully repaid on April 2, 2020.	-	1,146
Line of credit up to RMB 80,000 from China Everbright Bank, due on April 1, 2021 with an annual interest rate of 4.70%, guaranteed by the Company's CEO.	4,404	-
Line of credit up to RMB 80,000 from China Everbright Bank, due on June 27, 2021 with an annual interest rate of 4.25%, guaranteed by the Company's CEO.	1,321	-
Line of credit up to RMB 80,000 from China Everbright Bank, due on April 29, 2021 with an annual interest rate of 2.80%, guaranteed by the Company's CEO.	820	-
Line of credit up to RMB 80,000 from China Everbright Bank, due on June 27, 2021 with an annual interest rate of 2.70%, guaranteed by the Company's CEO.	2,079	-
Line of credit up to RMB 20,000 from Bank of Communications, due on April 12, 2021 with an annual interest rate of 4.65%.	1,468	-
Line of credit up to RMB 20,000 from Bank of Communications, due on May 24, 2021 with an annual interest rate of 3.65%.	1,468	-
Line of credit up to RMB 70,000 from Bank of Shanghai Pudong Branch, due on May 27, 2021 with an annual interest rate of 4.68%, guaranteed by the Company's CEO and Cleanchip Technologies Limited.	2,466	-
Line of credit up to RMB 70,000 from Bank of Shanghai Pudong Branch, due on June 27, 2021 with an annual interest rate of 4.68%, guaranteed by the Company's CEO and Cleanchip Technologies Limited.	1,321	-
Line of credit up to RMB 70,000 from Bank of Shanghai Pudong Branch, due on May 28, 2021 with an annual interest rate of 3.48%, guaranteed by the Company's CEO and Cleanchip Technologies Limited.	2,441	-
Line of credit up to RMB 70,000 from Bank of Shanghai Pudong Branch, due on June 7, 2021 with an annual interest rate of 3.50%, guaranteed by the Company's CEO and Cleanchip Technologies Limited.	1,521	-
Line of credit up to RMB 70,000 from Bank of Shanghai Pudong Branch, due on June 16, 2021 with an annual interest rate of 3.50%, guaranteed by the Company's CEO and Cleanchip Technologies Limited.	1,837	-
Line of credit up to RMB 30,000 from Bank of China Pudong Branch, due on December 17, 2020 with annual interest rate of 4.35%, guaranteed by the Company's CEO.	2,496	-
Line of credit up to RMB 80,000 from China Merchants Bank, due on August 10, 2021 with annual interest rate of 3.85%.	1,321	-
Line of credit up to RMB 80,000 from China Merchants Bank, due on August 25, 2021 with annual interest rate of 3.85%.	2,936	-
Line of credit up to KRW 500,000 from Industrial Bank of Korea, due on July 11, 2021 with an annual interest rate of 3.99%, guaranteed by the ACM-KOREA CEO.	428	-
Total	\$ 28,327	\$ 13,753

Interest expense related to short-term borrowings amounted to \$272 and \$205 for the three months ended September 30, 2020 and 2019, respectively, and \$611 and \$538 for the nine months ended September 30, 2020 and 2019, respectively.

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NOTE 7 – OTHER PAYABLE AND ACCRUED EXPENSES

At September 30, 2020 and December 31, 2019, other payable and accrued expenses consisted of the following:

	September 30, 2020	December 31, 2019
Accrued commissions	\$ 7,785	\$ 4,082
Accrued warranty	3,449	2,811
Accrued payroll	2,960	2,092
Accrued professional fees	40	165
Accrued machine testing fees	1,481	1,456
Others	2,779	2,268
Total	\$ 18,494	\$ 12,874

NOTE 8 – LEASES

The Company leases space under non-cancelable operating leases for several office and manufacturing locations. These leases do not have significant rent escalation holidays, concessions, leasehold improvement incentives, or other build-out clauses. Further, the leases do not contain contingent rent provisions.

Most leases include one or more options to renew. The exercise of lease renewal options is typically at the Company's sole discretion; therefore, the majority of renewals to extend the lease terms are not included in the Company's right-of-use assets and lease liabilities as they are not reasonably certain of exercise. The Company regularly evaluates the renewal options, and when they are reasonably certain of exercise, the Company includes the renewal period in its lease term.

As most of the Company's leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on the information available at the lease commencement date in determining the present value of the lease payments. The Company has a centrally managed treasury function; therefore, based on the applicable lease terms and the current economic environment, it applies a portfolio approach for determining the incremental borrowing rate.

The components of lease expense were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Operating lease cost	\$ 384	\$ 363	\$ 1,139	\$ 1,064
Short-term lease cost	73	92	170	117
Lease cost	<u>\$ 457</u>	<u>\$ 455</u>	<u>\$ 1,309</u>	<u>\$ 1,181</u>

Supplemental cash flow information related to operating leases was as follows for the three and nine-month periods ended September 30, 2020 and 2019, respectively:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash outflow from operating leases	\$ 457	\$ 455	\$ 1,309	\$ 1,181

Maturities of lease liabilities for all operating leases were as follows as of September 30, 2020:

	December 31,
2020	\$ 390
2021	1,592
2022	1,580
2023	912
2024	872
2025	22
Total lease payments	<u>5,368</u>
Less: Interest	(800)
Present value of lease liabilities	<u>\$ 4,568</u>

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The weighted average remaining lease terms and discount rates for all operating leases were as follows as of September 30, 2020 and December 31, 2019:

	<u>September 30,</u> <u>2020</u>	<u>December 31,</u> <u>2019</u>
Remaining lease term and discount rate:		
Weighted average remaining lease term (years)	3.70	3.02
Weighted average discount rate	5.29%	5.43%

NOTE 9 – OTHER LONG-TERM LIABILITIES

Other long-term liabilities represent subsidies that we have received from governmental authorities, including China’s Ministry of Science and Technology, the Shanghai Municipal Commission of Economy and Information, and the Shanghai Science and Technology Committee, for development and commercialization of certain technology but have not yet earned and recognized. As of September 30, 2020 and December 31, 2019, other long-term liabilities consisted of the following unearned government subsidies:

	<u>September 30,</u> <u>2020</u>	<u>December 31,</u> <u>2019</u>
Subsidies to Stress Free Polishing project, commenced in 2008 and 2017	\$ 1,126	\$ 1,251
Subsidies to Electro Copper Plating project, commenced in 2014	2,188	2,666
Subsidies to Polytetrafluoroethylene, commenced in 2018	125	135
Subsidies to Tahoe-Single Bench Clean, commenced in 2020	1,962	-
Subsidies to Backside Clean-YMTC National Project, commenced in 2020	751	-
Other	302	134
Total	<u>\$ 6,454</u>	<u>\$ 4,186</u>

NOTE 10 – LONG TERM INVESTMENTS

In September 2017, ACM and Ninebell Co., Ltd. (“Ninebell”), a Korean company that is one of the Company’s principal materials suppliers, entered into an ordinary share purchase agreement, pursuant to which Ninebell issued to ACM ordinary shares representing 20% of Ninebell’s post-closing equity for a purchase price of \$1,200, and a common stock purchase agreement, pursuant to which ACM issued 133,334 shares of Class A common stock to Ninebell for a purchase price of \$1,000 at \$7.50 per share. The investment in Ninebell is accounted for under the equity method.

On June 27, 2019, ACM Shanghai and Shengyi Semiconductor Technology Co., Ltd. (“Shengyi”), a company based in Wuxi, China that is one of the Company’s components suppliers, entered into an agreement pursuant to which Shengyi issued to ACM Shanghai shares representing 15% of Shengyi’s post-closing equity for a purchase price of \$109. The investment in Shengyi is accounted for under the equity method.

On September 5, 2019, ACM Shanghai, entered into a Partnership Agreement with six other investors, as limited partners, and Beijing Shixi Qingliu Investment Co., Ltd., as general partner and manager, with respect to the formation of Hefei Shixi Chanheng Integrated Circuit Industry Venture Capital Fund Partnership (LP) (“Hefei Shixi”), a Chinese limited partnership based in Hefei, China. Pursuant to such Partnership Agreement, on September 30, 2019, ACM Shanghai invested \$4,200, which represented 10% of the Partnership’s total subscribed capital. The investment in Hefei Shixi Chanheng Integrated Circuit Industry Venture Capital Fund Partnership (LP) is accounted for under the equity method.

The components of long-term investments were as follows:

	<u>September 30,</u> <u>2020</u>	<u>December 31,</u> <u>2019</u>
Ninebell	\$ 2,088	\$ 1,538
Shengyi	134	107
Hefei Shixi	4,358	4,289
Total	<u>\$ 6,580</u>	<u>\$ 5,934</u>

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NOTE 11 – TRADING SECURITIES

Pursuant to a Partnership Agreement dated June 9, 2020 (the “Partnership Agreement”) and a Supplementary Agreement thereto dated June 15, 2020 (the “Supplementary Agreement”), ACM Shanghai became a limited partner of Qingdao Fortune-Tech Xinxing Capital Partnership (L.P.), a Chinese limited partnership based in Shanghai, China (the “Partnership”) of which China Fortune-Tech Capital Co., Ltd serves as general partner and thirteen unaffiliated entities serve, with ACM Shanghai, as limited partners. The Partnership was formed to establish a special fund that would purchase, in a strategic placement, shares of Semiconductor Manufacturing International Corporation, (“SMIC”) to be listed on the STAR Market. SMIC is a Shanghai-based foundry that has been a customer of the Company’s single-wafer wet-cleaning tools. The limited partners of the Partnership contributed to the fund a total of RMB 2.224 billion (\$315,000), of which ACM Shanghai contributed RMB 100 million (\$14.2 million), or 4.3% of the total contribution, on June 18, 2020.

Upon the closing of the SMIC offering in July 2020, the initial number of SMIC shares owned by the Partnership was apportioned to all of the limited partners in proportion to their respective capital contributions (4.3% in the case of ACM Shanghai). All of the SMIC shares acquired by the Partnership are subject, under applicable Chinese laws, to lock-up restrictions that prevent sales of the shares for one year after the shares were acquired. Thereafter an individual limited partner will be able to instruct the general partner to sell, on behalf of the limited partner, all or a portion of the limited partner’s apportioned shares, subject to compliance with all laws, regulations, trading rules, the Partnership Agreement and the Supplementary Agreement. Alternatively, following the lock-up period, limited partners holding at least thirty percent of the total SMIC shares held by the Partnership will be able, pursuant to a call auction in accordance with the Supplementary Agreement, to cause the general partner to arrange to sell all of the shares desired to be offered by each of the limited partners that complies with procedural requirements provided in the Supplementary Agreement.

ACM Shanghai’s investment is accounted for as trading securities, and is stated at market value which is classified as Level 2 of the hierarchy established under ASC No. 820 with valuations based on quoted prices for identical securities in active markets, less a discount applied to reflect the remaining lock-up period.

The components of trading securities were as follows:

	September 30, 2020	December 31, 2019
Trading securities listed in Shanghai Stock Exchange		
Cost	\$ 14,680	\$ -
Market value	\$ 23,888	\$ -

Unrealized gain on trading securities amounted to \$8,970 for the three and nine months ended September 30, 2020.

NOTE 12 – FINANCIAL LIABILITY CARRIED AT FAIR VALUE

In December 2016 Shengxin (Shanghai) Management Consulting Limited Partnership (“SMC”) paid 20,123,500 RMB (\$2,981 as of the date of funding) (the “SMC Investment”) to ACM Shanghai for investment pursuant to terms to be subsequently negotiated. SMC is a PRC limited partnership partially owned by employees of ACM Shanghai.

In March 2017 (a) ACM issued to SMC a warrant (the “Warrant”) exercisable to purchase 397,502 shares of Class A common stock at a price of \$7.50 per share, for a total exercise price of \$2,981, and (b) ACM Shanghai agreed to repay the SMC Investment within 60 days after the exercise of the Warrant. In March 2018 SMC exercised the Warrant in full, as a result of which (1) ACM issued 397,502 shares of Class A common stock to SMC, (2) SMC borrowed the funds to pay the Warrant exercise price pursuant to a senior secured promissory note (the “SMC Note”) in the principal amount of \$2,981 issued to ACM Shanghai, which in turn issued to ACM a promissory note (the “Intercompany Note”) in the principal amount of \$2,981 in payment of the Warrant exercise price. Each of the SMC Note and the Intercompany Note bears interest at a rate of 3.01% per annum and matures on August 17, 2023. The SMC Note was secured by a pledge of the shares issued upon exercise of the Warrant.

In connection with its follow-on public offering of Class A common stock in August 2019, ACM agreed to purchase a total of 154,821 of the Warrant shares from SMC at a per share price of \$13.195, of which (a) \$1,161 was applied to reduce SMC’s obligations to ACM Shanghai under the SMC Note, and which ACM then withheld for its own account and applied to reduce ACM Shanghai’s obligations to ACM under the Intercompany Note, and (b) the remaining \$882 was paid to SMC. In a separate transaction, ACM Shanghai repaid \$1,161 of the SMC Investment in cash, which reduced the amount of the SMC Investment due to SMC to \$1,820.

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The SMC Note and SMC Investment are offsetting items in the Company's consolidated balance sheet in accordance with Accounting Standards Codification 210-20-45-1 up to April 30, 2020.

In preparation for the STAR IPO, ACM Shanghai was required to terminate its financial relationship with SMC. In order to facilitate such termination, on April 30, 2020, ACM entered into two agreements relating to outstanding obligations among ACM Research, ACM Shanghai and SMC. Pursuant to such agreements: (i) ACM Shanghai assigned to ACM its rights under the SMC Note, including the right to receive payment of the \$1,820 payable thereunder; (ii) ACM cancelled the outstanding \$1,820 obligation of ACM Shanghai under the Intercompany Note; (iii) SMC surrendered its remaining 242,681 Warrant shares to ACM Research; and (iv) in exchange for such 242,681 Warrant shares, ACM agreed to deliver to SMC certain consideration ("SMC Consideration") agreed upon by ACM Research and SMC, subject to obtaining certain PRC regulatory approvals. Under the agreements, if the required approvals were not obtained by December 31, 2023, ACM would cancel the SMC Note as consideration for the 242,681 Warrant shares. In a separate transaction in April 2020, ACM Shanghai repaid the remaining \$1,820 of the SMC Investment in cash.

For the period beginning April 30, 2020 the SMC Consideration is accounted for as a financial liability, and the Company applies fair value option to measure the SMC Consideration in accordance with Accounting Standards Codification 825-15-4a. On April 30, 2020, the SMC Consideration was \$9,715. The financial liability was remeasured to fair value as of the end of each of the reporting periods.

On July 29, 2020 ACM and SMC entered into an amended agreement under which, in settlement of the SMC Consideration, ACM issued to SMC a warrant (the "SMC 2020 Warrant") to purchase 242,681 shares of Class A common stock at a purchase price of \$7.50 per share, and ACM cancelled the SMC Note. The financial liability was remeasured to fair value of \$21,679 as of July 29, 2020, and was retired with the issuance of the SMC 2020 Warrant. The Company recognized a change in fair value of financial liability of \$6,533 and \$11,964 for the three and nine months ended September 30, 2020, respectively, which was charged to the consolidated statement of operations.

The SMC 2020 Warrant was initially measured at fair value at the issuance date and classified as equity permanently in accordance with Accounting Standards Codification 815. The fair value of the SMC 2020 Warrant amounted to \$21,679 based on the grant date using the Black-Scholes valuation model with the following assumptions:

	Nine Months Ended September 30, 2020
Fair value of common share(1)	\$89.28
Expected term in years(2)	3.42
Volatility(3)	47.42%
Risk-free interest rate(4)	0.15%
Expected dividend(5)	0%

- (1) Fair value of Class A common stock was the closing market price of the Class A common stock on July 29, 2020.
- (2) Expected term of share options is based on the average of the vesting period and the contractual term for each grant according to Staff Accounting Bulletin 110.
- (3) Volatility is calculated based on the historical volatility of the stock of companies comparable to ACM in the period equal to the expected term of each grant.
- (4) Risk-free interest rate is based on the yields of U.S. Treasury securities with maturities similar to the expected term of the share options in effect at the time of grant.
- (5) Expected dividend is assumed to be 0% as ACM has no history or expectation of paying a dividend on its common stock.

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NOTE 13 – RELATED PARTY BALANCES AND TRANSACTIONS

	September 30, 2020	December 31, 2019		
Prepaid expenses				
Ninebell	\$ 2,272	\$ 348		
	September 30, 2020	December 31, 2019		
Accounts payable				
Ninebell	\$ 3,197	\$ 727		
Shengyi	609	488		
Total	\$ 3,806	\$ 1,215		
	Three Months Ended September 30	Nine Months Ended September 30		
	2020	2019	2020	2019
Purchase of materials				
Ninebell	\$ 4,029	\$ 2,591	\$ 9,552	\$ 7,395
Shengyi	599	261	1,113	453
Total	\$ 4,628	\$ 2,852	\$ 10,665	\$ 7,848
	Three Months Ended September 30	Nine Months Ended September 30		
	2020	2019	2020	2019
Service fee charged by				
Shengyi	\$ 14	\$ -	\$ 204	\$ -
Ninebell	22	-	22	-
Total	\$ 36	\$ -	\$ 226	\$ -

NOTE 14 – COMMON STOCK

ACM is authorized to issue 50,000,000 shares of Class A common stock and 2,409,738 shares of Class B common stock, each with a par value of \$0.0001. Each share of Class A common stock is entitled to one vote, and each share of Class B common stock is entitled to twenty votes and is convertible at any time into one share of Class A common stock. Shares of Class A common stock and Class B common stock are treated equally, identically and ratably with respect to any dividends declared by the Board of Directors unless the Board of Directors declares different dividends to the Class A common stock and Class B common stock by getting approval from a majority of common stockholders.

During the nine months ended September 30, 2020 and 2019, ACM issued 592,946 and 193,642 shares of Class A common stock upon option exercises by employees and non-employees, respectively. During the nine months ended September 30, 2020, ACM issued 64,717 shares of Class A common stock upon a cashless warrant exercise by a non-employee.

During the three months ended September 30, 2020 and 2019, ACM issued 407,043 and 89,015 shares, respectively, of Class A common stock upon option exercises by employees and non-employees.

During the nine months ended September 30, 2020, SMC transferred and cancelled its ownership of 242,681 shares of Class A common stock to ACM in exchange for the SMC 2020 Warrant (Note 12)

There were issued and outstanding 16,657,135 shares of Class A common stock and 1,802,606 shares of Class B common stock at September 30, 2020 and 16,182,151 shares of Class A common stock and 1,862,608 shares of Class B common stock at December 31, 2019.

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NOTE 15 – REDEEMABLE NON-CONTROLLING INTERESTS

The components of the change in redeemable non-controlling interests for the nine months ended September 30, 2020 are presented in the following table:

Balance at December 31, 2019	\$ 60,162
Net income attributable to redeemable non-controlling interests	643
Effect of foreign currency translation gain attributable to redeemable non-controlling interests	(847)
Reclassification of redeemable non-controlling interest	(59,958)
Balance at September 30, 2020	\$ -

Upon the submission of application documents by ACM Shanghai for the STAR Listing and the STAR IPO to the Shanghai Stock Exchange during the second quarter of 2020, the redemption feature of the private placement funding (Note 1) terminated and the aggregate proceeds of the funding therefore were reclassified from redeemable non-controlling interests to non-controlling interests. Further, upon the termination of such redemption feature, the Company released the aggregate proceeds of the private placement funding from reserved cash, which the Company previously had voluntarily imposed in light of a potential redemption.

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NOTE 16 – STOCK-BASED COMPENSATION

In January 2020 ACM Shanghai adopted a 2019 Stock Option Incentive Plan (the “Subsidiary Stock Option Plan”) that provides for, among other incentives, the granting to officers, directors, employees of options to purchase shares of ACM Shanghai’s common stock. The fair value of the stock options granted is estimated at the date of grant based on the Black-Scholes option pricing model using assumptions generally consistent with those used for ACM’s stock options. Because ACM Shanghai shares are not currently publicly traded, the expected volatility is estimated with reference to the average historical volatility of a group of publicly traded companies that are believed to have similar characteristics to ACM Shanghai.

ACM’s stock-based compensation consists of employee and non-employee awards issued under the 1998 Stock Option Plan and the 2016 Omnibus Incentive Plan and as standalone options. ACM granted stock options to employees under the 2016 Omnibus Incentive Plan during the nine months ended September 30, 2020. The vesting condition may consist of service period determined by the Board of Directors for s grant or certain performance conditions determined by the Board of Directors for a grant. The fair value of the stock options granted with service period based condition is estimated at the date of grant using the Black-Scholes option pricing model. The fair value of the stock options granted with market based condition is estimated at the date of grant using the Monte Carlo simulation model.

The following table summarizes the components of stock-based compensation expense included in the consolidated statements of operations:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2020	2019	2020	2019
Stock-Based Compensation Expense:				
Cost of revenue	\$ 44	\$ 154	\$ 132	\$ 213
Sales and marketing expense	237	172	495	252
Research and development expense	193	759	568	939
General and administrative expense	2,305	472	3,128	1,515
	<u>\$ 2,779</u>	<u>\$ 1,557</u>	<u>\$ 4,323</u>	<u>\$ 2,919</u>

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2020	2019	2020	2019
Stock-based compensation expense by type:				
Employee stock purchase plan	\$ 2,651	\$ 1,329	\$ 3,717	\$ 1,841
Non-employee stock purchase plan	44	228	356	1,078
Subsidiary option grants	84	-	250	-
	<u>\$ 2,779</u>	<u>\$ 1,557</u>	<u>\$ 4,323</u>	<u>\$ 2,919</u>

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Employee Awards

The following table summarizes the Company's employee share option activities during the nine months ended September 30, 2020:

	Number of Option Share	Weighted Average Grant Date Fair Value	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term
Outstanding at December 31, 2019	2,994,063	\$ 2.59	\$ 6.77	7.05 years
Granted	778,399	11.98	28.70	
Exercised	(327,917)	1.56	4.33	
Expired	-	-	-	
Forfeited/cancelled	(40,515)	4.94	13.04	
Outstanding at September 30, 2020	3,404,030	\$ 4.81	\$ 11.95	7.14 years
Vested and exercisable at September 30, 2020	2,061,793			

As of September 30, 2020 and December 31, 2019, \$9,697 and \$4,712, respectively, of total unrecognized employee stock-based compensation expense, net of estimated forfeitures, related to stock-based awards for ACM were expected to be recognized over a weighted-average period of 1.96 years and 1.47 years, respectively. Total recognized compensation cost may be adjusted for future changes in estimated forfeitures.

Non-employee Awards

The following table summarizes ACM's non-employee stock option activities during the nine months ended September 30, 2020:

	Number of Option Shares	Weighted Average Grant Date Fair Value	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term
Outstanding at December 31, 2019	1,101,613	\$ 0.82	\$ 2.69	5.85 years
Granted	20,000	10.29	25.60	
Exercised	(265,029)	0.91	3.34	
Expired	-	-	-	
Forfeited/cancelled	(111)	0.30	0.75	
Outstanding at September 30, 2020	856,473	\$ 1.01	\$ 3.02	5.11 years
Vested and exercisable at September 30, 2020	819,819			

As of September 30, 2020 and December 31, 2019, \$235 and \$406, respectively, of total unrecognized non-employee stock-based compensation expense, net of estimated forfeitures, related to stock-based awards were expected to be recognized over a weighted-average period of 0.11 years and 0.23 years, respectively. Total recognized compensation cost may be adjusted for future changes in estimated forfeitures.

The fair value of options granted to employee and non-employee with a service period based condition is estimated on the grant date using the Black-Scholes valuation model with the following assumptions.

	Nine Months Ended September 30, 2020	Year Ended December 31, 2019
Fair value of common share(1)	\$22.07-85.27	\$13.64-16.81
Expected term in years(2)	5.50-6.25	6.25
Volatility(3)	42.17%-48.15%	39.91%-40.35%
Risk-free interest rate(4)	0.27%-0.82%	1.69%-2.46%
Expected dividend(5)	0%	0%

- (1) Fair value of Class A common stock value was the closing market price of the Class A common stock on the grant date.
- (2) Expected term of share options is based on the average of the vesting period and the contractual term for each grant according to Staff Accounting Bulletin 110.
- (3) Volatility is calculated based on the historical volatility of the stock of companies comparable to ACM in the period equal to the expected term of each grant.
- (4) Risk-free interest rate is based on the yields of U.S. Treasury securities with maturities similar to the expected term of the share options in effect at the time of grant.
- (5) Expected dividend is assumed to be 0% as ACM has no history or expectation of paying a dividend on its common stock.

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The fair value of option granted to employee with market based condition is estimated on the grant date using the Monte Carlo simulation model with the following assumptions.

	Nine Months Ended September 30, 2020
Fair value of common share(1)	\$22.07
Expected term in years(2)	9.20 - 9.80
Volatility(3)	45.10%
Risk-free interest rate(4)	2.68%
Expected dividend(5)	0%

- (1) Fair value of Class A common stock value was the closing market price of the Class A common stock on the grant date.
- (2) Expected term of share options is based on the average of the vesting period and the contractual term for each grant according to Staff Accounting Bulletin 110.
- (3) Volatility is calculated based on the historical volatility of the stock of companies comparable to ACM in the period equal to the expected term of each grant.
- (4) Risk-free interest rate is based on the yields of U.S. Treasury securities with maturities similar to the expected term of the share options in effect at the time of grant.
- (5) Expected dividend is assumed to be 0% as ACM has no history or expectation of paying a dividend on its common stock.

ACM Shanghai Option Grants

The following table summarizes the ACM Shanghai employee stock option activities during the nine months ended September 30, 2020:

	Number of Option Shares in ACM Shanghai	Weighted Average Grant Date Fair Value	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term
Outstanding at December 31, 2019	-	\$ -	\$ -	-
Granted	5,869,808	0.22	1.87	
Exercised	-	-	-	
Expired	-	-	-	
Forfeited/cancelled	(330,770)	0.23	1.87	
Outstanding at September 30, 2020	5,539,038	\$ 0.22	\$ 1.87	3.76 years
Vested and exercisable at September 30, 2020	-			

During the three and nine months ended September 30, 2020, the Company recognized stock-based compensation expense of \$84 and \$250, respectively, related to stock option grants of ACM Shanghai. As of September 30, 2020, \$911 of total unrecognized non-employee stock-based compensation expense, net of estimated forfeitures, related to ACM Shanghai stock-based awards were expected to be recognized over a weighted-average period of 2.75 years. Total recognized compensation cost may be adjusted for future changes in estimated forfeitures.

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NOTE 17 – INCOME TAXES

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry-forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period during which such rates are enacted.

The Company considers all available evidence to determine whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become realizable. Management considers the scheduled reversal of deferred tax liabilities (including the impact of available carryback and carry-forward periods) and projected taxable income in assessing the realizability of deferred tax assets. In making such judgments, significant weight is given to evidence that can be objectively verified.

As of each reporting date, management considers new evidence, both positive and negative, that could affect its view of the future realization of deferred tax assets. Prior to September 30, 2019, the Company had recorded a valuation allowance for the full amount of net deferred tax assets in the United States, as the realization of deferred tax assets was uncertain. Since September 30, 2019, the Company has not maintained a valuation allowance except for a partial valuation allowance on certain U.S. deferred tax assets. In order to recognize the remaining U.S. deferred tax assets that continue to be subject to a valuation allowance, the Company will need to generate sufficient U.S. taxable income in future periods before the expiration of the deferred tax assets governed by the tax code.

ACM Shanghai has shown a three-year historical cumulative profit and has projections of future income. As a result, the Company does not maintain a valuation allowance.

The Company accounts for uncertain tax positions in accordance with the authoritative guidance on income taxes under which the Company may only recognize or continue to recognize tax positions that meet a more likely than not threshold. The Company recognizes accrued interest and penalties related to unrecognized tax benefits as a component of the provision for income taxes.

The Company's effective tax rate differs from statutory rates of 21% for U.S. federal income tax purposes and 15% to 25% for Chinese income tax purposes due to the effects of the valuation allowance and certain permanent differences from book-tax differences. As a result, the Company recorded income tax benefit (expense) of \$1,747 and \$328 during the three months ended September 30, 2020 and 2019, respectively, and \$(416) and \$(667) during the nine months ended September 30, 2020 and 2019, respectively.

As of September 30, 2020, the Company's total unrecognized tax benefits were \$155, which would not affect the effective tax rate if recognized. The Company will recognize interest and penalties, when they occur, related to uncertain tax provisions as a component of tax expense. No interest or penalties were recognized for the nine months ended September 30, 2020.

The Company files income tax returns in the United States and state and foreign jurisdictions. The federal, state and foreign income tax returns are under the statute of limitations subject to tax examinations for the tax years ended December 31, 2009 through December 31, 2019. To the extent the Company has tax attribute carry-forwards, the tax years in which the attribute was generated may still be adjusted upon examination by the U.S. Internal Revenue Service, state or foreign tax authorities to the extent utilized in a future period.

The Company's effective tax rate differs from statutory rates of 21% for U.S. federal income tax purposes and 15% to 25% for Chinese income tax purposes due to the effects of the valuation allowance and certain permanent differences as it pertains to book-tax differences in the value of client equity securities received for services and the treatment of stock-based compensation. The Company's three PRC subsidiaries, ACM Shanghai, ACM Wuxi and ACM Shengwei, are liable for PRC corporate income taxes at the rates of 15%, 25% and 25%, respectively. Pursuant to the Corporate Income Tax Law of the PRC, ACM's PRC subsidiaries generally would be liable for PRC corporate income taxes as a rate of 25%. According to Guoshuihan 2009 No. 203, an entity certified as an "advanced and new technology enterprise" is entitled to a preferential income tax rate of 15%. ACM Shanghai was certified as an "advanced and new technology enterprise" in 2012 and again in 2016 and 2018, with an effective period of three years.

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ACM files income tax returns in the United States and state and foreign jurisdictions. Those federal, state and foreign income tax returns are under the statute of limitations subject to tax examinations for 2009 through 2019. To the extent ACM has tax attribute carryforwards, the tax years in which the attribute was generated may still be adjusted upon examination by the U.S. Internal Revenue Service or state or foreign tax authorities to the extent utilized in a future period. The U.S. Coronavirus Aid, Relief, and Economic Security Act (“CARES Act”) was enacted on March 27, 2020. It contains several provisions that may have financial statement effects. Key aspects of the CARES Act include the following:

- repealed the 80% taxable income limitation for 2018, 2019 and 2020, and allows those years to be carried back up to five years;
- allows corporations to claim 100% of AMT credits in 2019, and provides for an election to take the entire refundable credit amount in 2018;
- raised the Section 163(j) ATI limit from 30% to 50% for businesses; and
- made technical corrections to TCJA for Qualified Improvement Property (“QIP”) and designates QIP as 15-year property for depreciation purposes, which makes QIP a category eligible for 100% bonus depreciation

The CARES Act is not expected to have a material impact on income taxes in the Company’s consolidated financial statements.

Income tax expense was as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
	<i>(in thousands)</i>		<i>(in thousands)</i>	
Total income tax benefit (expense)	\$ 1,747	\$ 328	\$ (416)	\$ (667)

NOTE 18 – COMMITMENTS AND CONTINGENCIES

The Company leases offices under non-cancelable operating lease agreements. See note 8 for future minimum lease payments under non-cancelable operating lease agreements with initial terms of one year or more.

As of September 30, 2020, the Company had \$1,369 of open capital commitments.

Covenants in ACM Shengwei’s Grant Contract for State-owned Construction Land Use Right in Shanghai City, with the China (Shanghai) Pilot Free Trade Zone Lin-gang Special Area Administration require, among other things, that ACM Shengwei pay liquidated damages in the event that (a) it does not make a total investment (including the costs of construction, fixtures, equipment and grant fees) of at least RMB 450.0 million (\$63,400) or (b) within six years after the land use right is obtained, the Company does not (i) generate a minimum specified amount of annual sales of products manufactured on the granted land or (ii) pay to the PRC at least RMB 157.6 million (\$22,000) in annual total taxes (including value-added taxes, corporate income tax, personal income taxes, urban maintenance and construction taxes, education surcharges, stamp taxes, and vehicle and shipping taxes) as a result of operations in connection with the granted land.

From time to time the Company is subject to legal proceedings, including claims in the ordinary course of business and claims with respect to patent infringements. As of September 30, 2020, the Company did not have any legal proceedings.

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

You should read the following discussion of our financial condition and results of operations together with our condensed consolidated financial statements and the related notes and other financial information included elsewhere in this report and our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, or our Annual Report. The following discussion contains forward-looking statements that reflect our plans, estimates, and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed in Part I, Item 1A. “Risk Factors” in our Annual Report, as well as those discussed below and elsewhere in this report, particularly in the section titled “Item 1A. Risk Factors” in Part II below.

Overview

We supply advanced, innovative capital equipment developed for the global semiconductor industry. Fabricators of advanced integrated circuits, or chips, can use our single-wafer wet-cleaning tools in numerous steps to improve product yield, even at increasingly advanced process nodes. We have designed these tools for use in fabricating foundry, logic and memory chips, including dynamic random-access memory, or DRAM, and 3D NAND-flash memory chips. We also develop, manufacture and sell a range of advanced packaging tools to wafer assembly and packaging customers.

Selling prices for our single-wafer wet-cleaning tools range from \$2 million to more than \$5 million. Our customers for single-wafer wet-cleaning and other front-end cleaning tools have included Semiconductor Manufacturing International Corporation, Shanghai Huali Microelectronics Corporation, SK Hynix Inc. and Yangtze Memory Technologies Co., Ltd. We recognized revenue from sales of single-wafer wet cleaning and other front-end processing equipment totaling \$38.4 million, or 80.3% of total revenue, for the three months ending September 30, 2020 compared to \$28.3 million, or 84.8% of total revenue, for the corresponding period in 2019. We recognized revenue from sales of single-wafer wet cleaning and other front-end processing equipment totaling \$99.0 million, or 89.1% of total revenue, for the nine months ending September 30, 2020 compared to \$70.1 million, or 84.5% of total revenue, for the corresponding period in 2019.

Based on Gartner’s December 2019 estimates, the market for global wafer cleaning equipment (auto wet stations, single-wafer processors, and other clean process) grew by 20% to \$3.46 billion in 2018, decreased by 5% to \$3.28 billion in 2019, and was expected to decrease by 6% to \$3.07 billion in 2020. We estimate, based on third-party reports and on customer and other information, that our cleaning products address more than 80% of this global wafer cleaning equipment market.

We focus our selling efforts on establishing a referenceable base of leading foundry, logic and memory chip makers, whose use of our products can influence decisions by other manufacturers. We believe this customer base will help us penetrate the mature chip manufacturing markets and build credibility with additional industry leaders. Using a “demo-to-sales” process, we have placed evaluation equipment, or “first tools,” with a number of selected customers. Since 2009 we have delivered more than 120 single-wafer wet cleaning and other front-end processing tools, more than 105 of which have been accepted by customers and thereby generated revenue to us and the balance of which are awaiting customer acceptance should contractual conditions be met.

Since our formation in 1998, we have focused on building a strategic portfolio of intellectual property to support and protect our key innovations. Our tools have been developed using our key proprietary technologies:

- *Space Alternated Phase Shift, or SAPS, technology for flat and patterned wafer surfaces (such as via or deep trench with stronger structure),* which employs alternating phases of megasonic waves to deliver megasonic energy in a highly uniform manner on a microscopic level;
- *Timely Energized Bubble Oscillation, or TEBO, technology for patterned wafer surfaces at advanced process nodes,* which provides effective, damage-free cleaning for 2D and 3D patterned wafers with fine feature sizes;
- *Tahoe technology for cost and environmental savings,* which delivers high cleaning performance using significantly less sulfuric acid and hydrogen peroxide than is typically consumed by conventional high-temperature single-wafer cleaning tools; and
- *Electro-Chemical Plating, or ECP, technology for advanced metal plating,* which includes Ultra ECP AP, or Advanced Packaging, technology for back-end assembly processes and Ultra ECP MAP, or Multi-Anode Partial Plating, technology for front-end wafer fabrication processes.

We conduct substantially all of our product development, manufacturing, support and services in the People’s Republic of China, or the PRC. All of our tools are built to order at our manufacturing facilities in the Pudong region of Shanghai, which now encompass a total of 136,000 square feet of floor space for production capacity, with 50,000 square feet having been added in the second quarter of 2020 through an expansion of our second facility in the Pudong region of Shanghai. In May 2020 ACM Shanghai, through its wholly owned subsidiary Shengwei Research (Shanghai), Inc., entered into an agreement for a land use right in the Lingang region of Shanghai. In July 2020 Shengwei Research (Shanghai), Inc. began a multi-year construction project for a new development and production center. The planned 1,000,000 square foot facility will incorporate state-of-the-art manufacturing systems and automation technologies, and will provide the floor space to support significantly more production capacity and related research and development activities when fully-staffed and supplied. Our experience has shown that chip manufacturers in the PRC and throughout Asia demand equipment meeting their specific technical requirements and prefer building relationships with local suppliers. We will continue to seek to leverage our local presence to address the growing market for semiconductor manufacturing equipment in the region by working closely with regional chip manufacturers to understand their specific requirements, encourage them to adopt our SAPS, TEBO, Tahoe and ECP technologies, and enable us to design innovative products and solutions to address their needs.

We have been issued more than 285 patents in the United States, the PRC, Japan, Korea, Singapore and Taiwan.

Corporate Background

ACM Research was incorporated in California in 1998 and redomesticated in Delaware in 2016. We perform strategic planning, marketing, and financial activities at our global corporate headquarters in Fremont, California.

Initially we focused on developing tools for chip manufacturing process steps involving the integration of ultra-low-K materials and copper. In the early 2000s we sold tools based on stress-free copper polishing technology. In 2007 we began to focus our development efforts on single-wafer wet-cleaning solutions for the front-end chip fabrication process. Since that time, we have strategically built our technology base and expanded our product offerings:

- In 2009 we introduced *SAPS* megasonic technology, which can be applied in wet wafer cleaning at numerous steps during the chip fabrication process.
- In 2016 we introduced *TEBO* technology, which can be applied at numerous steps during the fabrication of small node conventional two-dimensional and three-dimensional patterned wafers.
- In August 2018 we introduced the *Ultra-C Tahoe* wafer cleaning tool, which delivers high cleaning performance with significantly less sulfuric acid than typically consumed by conventional high temperature single-wafer cleaning tools.
- In March 2019 we introduced (a) the *Ultra ECP AP* or Advanced Wafer Level Packaging tool, a back-end assembly tool used for bumping, or applying copper, tin and nickel to wafers at the die-level prior to packaging, and (b) the *Ultra ECP MAP* or Multi Anode Plating tool, a front-end process tool that utilizes our proprietary technology to deliver world-class electrochemical copper plating for copper interconnect applications.
- In April 2020 we introduced the *Ultra Furnace*, our first system developed for multiple dry processing applications.
- In May 2020 we introduced the *Ultra C Family* of semi-critical cleaning systems, including the *Ultra C b* for backside clean, the *Ultra C wb* automated wet bench, and the *Ultra C s* scrubber.

To help us establish and build relationships with chip manufacturers in the PRC, in 2006 we moved our operational center to Shanghai and began to conduct our business through our subsidiary ACM Shanghai. Since that time, we have expanded our geographic presence:

- In 2011 we formed a wholly owned subsidiary in the PRC, *ACM Research (Wuxi), Inc.*, which now is a wholly owned subsidiary of ACM Shanghai, to manage sales and service operations.
- In June 2017 we formed a subsidiary in Hong Kong, *CleanChip Technologies Limited*, which now is a wholly owned subsidiary of ACM Shanghai, to act on our behalf in Asian markets outside the PRC by, for example, serving as a trading partner between ACM Shanghai and its customers, procuring raw materials and components, performing sales and marketing activities, and making strategic investments.
- In December 2017 we formed a subsidiary in the Republic of Korea, *ACM Research Korea CO., LTD.*, which now is a wholly owned subsidiary of ACM Shanghai, to serve our customers based in the Republic of Korea and perform sales, marketing, and research and development activities.
- In March 2019 ACM Shanghai formed a wholly owned subsidiary in the PRC, *Shengwei Research (Shanghai), Inc.*, to manage activities related to addition of future long-term production capacity.

We currently conduct the majority of our product development, support and services, and substantially all of our manufacturing, at ACM Shanghai. Our Shanghai operations position us to be near many of our current and potential new customers in the PRC (including Taiwan), Korea and throughout Asia, providing convenient access and reduced shipping and manufacturing costs.

- Our initial factory is located in the Pudong Region of Shanghai and has a total of 36,000 square feet of available floor space.
- In September 2018 we announced the opening of a second factory, also in the Pudong region of Shanghai. This facility initially had a total of 50,000 square feet of available floor space for production capacity, which was increased by 50,000 square feet in the second quarter of 2020.
- In July 2020 ACM Shanghai began a multi-year construction project to build a development and production center in the Lingang region of Shanghai. The new facility is expected to have a total of 1,000,000 square feet of available floor space for production. capacity.

Recent Developments

STAR Market Listing and IPO

In June 2019 we announced our intention to complete:

- a listing, which we refer to as the STAR Listing, of shares of ACM Shanghai on the Shanghai Stock Exchange's Sci-Tech innovAtion boARd, known as the STAR Market; and
- a concurrent initial public offering, which we refer to as the STAR IPO, of ACM Shanghai shares in the PRC, at a pre-offering valuation of not less than RMB 5.15 billion (\$747.1 million).

We believe the STAR Listing will help us scale our business in mainland PRC, as we continue to seek to broaden our markets in Europe, Japan, Korea, Taiwan and the United States. Our global headquarters will continue to be located in Fremont, California, and we are committed to maintaining the listing of Class A common stock on the Nasdaq Global Market.

To qualify for the STAR Listing, ACM Shanghai was required to have multiple independent stockholders in the PRC. In June and November 2019, ACM Shanghai entered into private placement agreements with fifteen investors pursuant to which the investors purchased ACM Shanghai shares for a total of RMB 416.1 million (\$59.7 million as of the investment dates). As of September 30, 2020, 91.7% of the outstanding shares of ACM Shanghai were owned by ACM Research and 8.3% were owned by the private placement investors.

Upon the submission of application documents by ACM Shanghai for the STAR Listing and STAR IPO to the Shanghai Stock Exchange during the second quarter of 2020, the shares of ACM Shanghai issued to the private placement investors were reclassified from redeemable non-controlling interests to non-controlling interests. Upon the termination of such redemption feature, we released the aggregate proceeds of the private placement funding from reserved cash, which we previously had voluntarily imposed in light of a potential redemption.

On September 30, 2020, the application was approved by the Listing Committee of the STAR Market. Listing of ACM Shanghai's shares on the STAR Market remains subject to submission of formal registration and to review and approval by the China Securities Regulatory Commission.

ACM Shanghai currently proposes to offer up to ten percent of its shares in the STAR IPO. The net proceeds of the STAR IPO are expected to be used to fund:

- the land lease for, and construction of, ACM Shanghai's proposed development and production center in the Lingang region of Shanghai;
- product development to upgrade and expand our process equipment targeted at more advanced process nodes, including technical improvement and development of TEBO megasonic cleaning equipment, Tahoe single wafer wet bench combined cleaning equipment, front-end brush scrubbing equipment, front end process electroplating equipment, Stress Free Polish equipment and vertical furnace equipment; and
- working capital.

COVID-19 Outbreak

Following its initial outbreak in December 2019, COVID-19, or the coronavirus, spread across the PRC, the United States and globally. The COVID-19 outbreak affected our business and operating results for the first quarter of 2020. The COVID-19 situation continues to evolve, and it is impossible for us to predict the effect and ultimate impact of the COVID-19 outbreak on our business operations and results. While the quarantine, social distancing and other regulatory measures instituted or recommended in response to COVID-19 are expected to be temporary, the duration of the business disruptions, and related financial impact, of the outbreak cannot be estimated at this time. For an explanation of some of the risks we potentially face, please read carefully the information provided under "Item 1A. Risk Factors—Risks Related to the COVID-19 Outbreak," of Part I of our Annual Report which is incorporated by reference in "Item 1A. Risk Factors" of Part II of this report.

The following summary reflects our expectations and estimates based on information known to us as of the date of this filing:

- *Operations:* We conduct substantially all of our product development, manufacturing, support and services in the PRC, and those activities have been directly impacted by the COVID-19 outbreak and related restrictions on transportation and public appearances. In February 2020 our ACM Shanghai headquarters were closed for an additional six days beyond the normal Lunar New Year Holiday in accordance with Shanghai government restrictions related to the outbreak. We took steps before and after the Lunar New Year to ensure no employees took unreasonable risks to rush back to work. Currently substantially all of our staff have returned to work at both of our Shanghai facilities. To date we have not experienced absenteeism of management or other key employees, other than certain of our executive officers being delayed in traveling back to the PRC after working from our California office in February. Our corporate headquarters are located in Alameda County in the San Francisco Bay Area and are the subject of a number of state and county public health directives and orders. These actions have not negatively impacted our business to date, however, because of the limited number of employees at our headquarters and the nature of the work they generally perform.

- *Customers:* Our customers' business operations have been, and are continuing to be, subject to business interruptions arising from the COVID-19 outbreak. Historically a majority of our revenue from sales of single-wafer wet cleaning equipment for front-end manufacturing has been derived from customers located in the PRC and surrounding areas that have been impacted by COVID-19. Three customers that accounted for 73.8% of our revenue in 2019 and 87.6% of our revenue in 2018 are based in the PRC and Korea. One of those customers, Yangtze Memory Technologies Co., Ltd. — which accounted for 27.5% of our 2019 revenue and 39.6% of our 2018 revenue — is based in Wuhan. While Yangtze Memory Technologies Co., Ltd. and other key customers continued to operate their fabrication facilities without interruption during and after the first quarter of 2020, they were forced to restrict access of service personnel and deliveries to and from their facilities. A portion of the shipments we previously had expected to deliver in the first quarter of 2020 were postponed due to these factors, and were subsequently delivered in the second quarter of 2020.
- *Suppliers:* Our global supply chain includes components sourced from the PRC, Japan, Taiwan, the United States and Europe. While the COVID-19 outbreak has resulted in significant governmental measures being implemented to control the spread of COVID-19 around the world, to date we have not experienced material issues with our supply chain. As with our customers, we continue to be in close contact with our key suppliers to help ensure we are able to identify any potential supply issues that may arise.
- *Projects:* Our strategy includes a number of plans to support the growth of our core business, including the STAR Listing and STAR IPO with respect to shares of ACM Shanghai described above as well as ACM Shanghai's recent acquisition of a land use right in the Lingang area of Shanghai where we began construction of a new research and development center and factory in July 2020. The extent to which COVID-19 impacts these projects will depend on future developments that are highly uncertain, but to date, the timing of these ongoing projects has not been delayed or disrupted by COVID-19 or related government measures.

Government Research and Development Funding

ACM Shanghai has received six special government grants from the PRC's Ministry of Science and Technology, the Shanghai Municipal Commission of Economy and Information, and the Shanghai Science and Technology Committee. The first grant, which was awarded in 2008, relates to the development and commercialization of 65nm to 45nm stress-free polishing technology. The second grant was awarded in 2009 to fund interest expense on short-term borrowings. The third grant was made in 2014 and relates to the development of electro copper-plating technology. The fourth grant was made in June 2018 and related to development of polytetrafluoroethylene. The fifth grant was made in 2020, and relates to the development of Tahoe single bench cleaning technologies. The sixth grant was made in 2020, and relates to the development of backside cleaning technologies. These governmental authorities provide the majority of the funding, although ACM Shanghai is also required to invest certain amounts in the projects.

The governmental grants contain certain operating conditions, and we are required to go through a government due diligence process once the project is complete. The grants therefore are recorded as long-term liabilities upon receipt, although we are not required to return any funds we receive. Grant amounts are recognized in our statements of operations and comprehensive income as follows:

- Government subsidies relating to current expenses are reflected as reductions of those expenses in the periods in which they are reported. Those reductions totaled \$0.7 million and \$2.9 million in the first nine months of 2020 and 2019 respectively.
- Government grants used to acquire depreciable assets are transferred from long-term liabilities to property, plant and equipment when the assets are acquired, and the recorded amounts of the assets are credited to other income over the useful lives of the assets. These credits totaled \$110,000 and \$111,000 in the first nine months of 2020 and 2019, respectively.

How We Evaluate Our Operations

We present information below with respect to four measures of financial performance:

- We define "shipments" of tools to include (a) a "repeat" delivery to a customer of a type of tool that the customer has previously accepted, for which we recognize revenue upon delivery, and (b) a "first-time" delivery of a tool to a customer on an approval basis, for which we may recognize revenue in the future if contractual conditions are met and customer acceptance is received.
- We define "adjusted EBITDA" as our net income excluding interest expense (net), income tax benefit (expense), depreciation and amortization, and stock-based compensation. We define adjusted EBITDA to also exclude restructuring costs, although we have not incurred any such costs to date.

- We define “free cash flow” as net cash provided by operating activities less purchases of property and equipment (net of proceeds from disposals) and of intangible assets.
- We define “adjusted operating income” as our income from operations excluding stock-based compensation.

These financial measures are not based on any standardized methodologies prescribed by accounting principles generally accepted in the United States, or GAAP, and are not necessarily comparable to similarly titled measures presented by other companies.

We have presented shipments, adjusted EBITDA, free cash flow and adjusted operating income because they are key measures used by our management and board of directors to understand and evaluate our operating performance, to establish budgets and to develop operational goals for managing our business. We believe that these financial measures help identify underlying trends in our business that could otherwise be masked by the effect of the expenses that we exclude. In particular, we believe that the exclusion of the expenses eliminated in calculating adjusted EBITDA and adjusted operating income can provide useful measures for period-to-period comparisons of our core operating performance and that the exclusion of property and equipment purchases from operating cash flow can provide a usual means to gauge our capability to generate cash. Accordingly, we believe that these financial measures provide useful information to investors and others in understanding and evaluating our operating results, enhancing the overall understanding of our past performance and future prospects, and allowing for greater transparency with respect to key financial metrics used by our management in its financial and operational decision-making.

Shipments, adjusted EBITDA, free cash flow and adjusted operating income are not prepared in accordance with GAAP, and should not be considered in isolation of, or as an alternative to, measures prepared in accordance with GAAP.

Shipments

Shipments consist of two components:

- a shipment to a customer of a type of tool that the customer has previously-accepted, for which we recognize revenue when the tool is delivered; and
- a shipment to a customer of a type of tool that the customer is receiving and evaluating for the first time, in each case a “first tool,” for which we may recognize revenue at a later date, subject to the customer’s acceptance of the tool upon the tool’s satisfaction of applicable contractual requirements.

“First tool” shipments can be made to either an existing customer that not previously accepted that specific type of tool in the past — for example, a delivery of SAPS V tool to a customer that previously had received only SAPS II tools — or to a new customer that has never purchased any tool from us.

Shipments in the three months ended September 30, 2020 totaled \$59 million, as compared to \$43 million in the three months ended September 30, 2019, and \$45 million in the three months ended June 30, 2020. Shipments in the nine months ended September 30, 2020 totaled \$116 million, as compared to \$90 million in the corresponding period in 2019.

The dollar amount attributed to a “first tool” shipment is equal to the consideration we expect to receive if any and all contractual requirements are satisfied and the customer accepts the tool. There are a number of limitations related to the use of shipments in evaluating our business, including that customers have significant discretion in determining whether to accept our tools and their decision not to accept delivered tools is likely to result in our inability to recognize revenue from the delivered tools.

Adjusted EBITDA

There are a number of limitations related to the use of adjusted EBITDA rather than net income, which is the nearest GAAP equivalent. Some of these limitations are:

- adjusted EBITDA excludes depreciation and amortization and, although these are non-cash expenses, the assets being depreciated or amortized may have to be replaced in the future;
- we exclude stock-based compensation expense from adjusted EBITDA and adjusted operating income, although (a) it has been, and will continue to be for the foreseeable future, a significant recurring expense for our business and an important part of our compensation strategy and (b) if we did not pay out a portion of our compensation in the form of stock-based compensation, the cash salary expense included in operating expenses would be higher, which would affect our cash position;
- the expenses and other items that we exclude in our calculation of adjusted EBITDA may differ from the expenses and other items, if any, that other companies may exclude from adjusted EBITDA when they report their operating results;
- adjusted EBITDA does not reflect changes in, or cash requirements for, working capital needs;
- adjusted EBITDA does not reflect interest expense, or the requirements necessary to service interest or principal payments on debt;

- adjusted EBITDA does not reflect income tax expense (benefit) or the cash requirements to pay taxes;
- adjusted EBITDA does not reflect historical cash expenditures or future requirements for capital expenditures or contractual commitments;
- although depreciation and amortization charges are non-cash charges, the assets being depreciated and amortized will often have to be replaced in the future, and adjusted EBITDA does not reflect any cash requirements for such replacements; and
- adjusted EBITDA includes expense reductions and non-operating other income attributable to PRC governmental grants, which may mask the effect of underlying developments in net income, including trends in current expenses and interest expense, and free cash flow includes the PRC governmental grants, the amount and timing of which can be difficult to predict and are outside our control.

The following table reconciles net income, the most directly comparable GAAP financial measure, to adjusted EBITDA:

	Nine Months Ended September 30,	
	2020	2019
	<i>(in thousands)</i>	
Adjusted EBITDA Data:		
Net Income	\$ 12,479	\$ 15,257
Interest expense (income), net	(223)	410
Income tax expense	416	667
Depreciation and amortization	774	586
Stock based compensation	4,323	2,919
Change in fair value of financial liability	11,964	-
Unrealized gain on trading securities	(8,970)	-
Adjusted EBITDA	<u>\$ 20,763</u>	<u>\$ 19,839</u>

Adjusted EBITDA in the nine months ended September 30, 2020 increased by \$0.9 million as compared to the same period in 2019 due to a decrease of \$2.8 million in net income, a decrease of \$9.0 million from unrealized gain on trading securities, a decrease of \$0.6 million in net interest expense, and a decrease of \$0.3 million income tax expense, and was offset by an increase of \$12.0 million in non-cash, non-operating expense, and an increase of \$1.4 million in stock-based compensation expense. We do not exclude from adjusted EBITDA expense reductions and non-operating other income attributable to PRC governmental grants because we consider and incorporate the expected amounts and timing of those grants in incurring expenses and capital expenditures. If we did not receive the grants, our cash expenses therefore would be lower, and our cash position would not be materially affected, to the extent we have accurately anticipated the amounts of the grants. For additional information regarding our PRC grants, please see “—Government Research and Development Funding.”

Free Cash Flow

The following table reconciles net cash provided by operating activities, the most directly comparable GAAP financial measure, to free cash flow:

	Nine Months Ended September 30,	
	2020	2019
	<i>(in thousands)</i>	
Free Cash Flow Data:		
Net cash used in operating activities	\$ (8,036)	\$ (4,752)
Purchase property and equipment	(3,583)	(832)
Purchase of intangible assets	(81)	(114)
Purchase of land-use-right	(9,331)	-
Purchase of trading securities	(14,680)	-
Free cash flow	<u>\$ (35,711)</u>	<u>\$ (5,698)</u>

Free cash flow declined by \$30.0 million in the nine months ended September 30, 2020, as compared to the same period in 2019, primarily due to (a) investments in ACM Shanghai’s development and production center in the Lingang region of Shanghai, (b) purchase of long-term investments in Qingdao Fortune-Tech Xinxing Capital Partnership (L.P.), a Chinese limited partnership based in Shanghai which participated in the Star Market IPO of Semiconductor Manufacturing International Corporation, or SMIC, in which ACM Shanghai is a limited partner, (c) factors driving net cash provided by operating activities (an increase in accounts payable, other long-term liabilities and inventory, offset by an increase in accounts receivable and other receivables), and (d) increased purchases of property and equipment. Consistent with our methodology for calculating adjusted EBITDA, we do not adjust free cash flow for the effects of PRC government subsidies, because we take those subsidies into account in incurring expenses and capital expenditures.

Adjusted Operating Income

Adjusted operating income excludes stock-based compensation. Although stock-based compensation is an important aspect of the compensation of our employees and executives, determining the fair value of certain of the stock-based instruments we utilize involves a high degree of judgment and estimation and the expense recorded may bear little resemblance to the actual value realized upon the vesting or future exercise of the related stock-based awards. Furthermore, unlike cash compensation, the value of stock options, which is an element of our ongoing stock-based compensation expense, is determined using a complex formula that incorporates factors, such as market volatility, that are beyond our control. Management believes it is useful to exclude stock-based compensation in order to better understand the long-term performance of our core business and to facilitate comparison of our results to those of peer companies. The use of non-GAAP financial measures excluding stock-based compensation has limitations, however. If we did not pay out a portion of our compensation in the form of stock-based compensation, the cash salary expense included in operating expenses would be higher and our cash holdings would be less. The following table reflects the exclusion of stock-based compensation, or SBC, from line items comprising income from operations:

	Nine Months Ended September 30,					
	2020			2019		
	Actual (GAAP)	SBC	Adjusted (Non- GAAP)	Actual (GAAP)	SBC	Adjusted (Non-GAAP)
	<i>(in thousands)</i>					
Revenue	\$ 111,062	\$ -	\$ 111,062	\$ 82,916	\$ -	\$ 82,916
Cost of revenue	(61,137)	(132)	(61,005)	(44,705)	(213)	(44,492)
Gross profit	49,925	(132)	50,057	38,211	(213)	38,424
Operating expenses:						
Sales and marketing	(11,524)	(495)	(11,029)	(8,679)	(252)	(8,427)
Research and development	(13,241)	(568)	(12,673)	(9,598)	(939)	(8,659)
General and administrative	(9,100)	(3,128)	(5,972)	(5,992)	(1,515)	(4,477)
Income from operations	16,060	(4,323)	20,383	13,942	(2,919)	16,861

Adjusted operating income for the nine months ended on September 30, 2020 increased by \$3.5 million, as compared with the same period in 2019, due to a \$2.1 million increase in income from operations, and a \$1.4 million increase in stock-based compensation expense.

Critical Accounting Policies and Significant Judgments and Estimates

There were no significant changes in our critical accounting policies or significant judgments or estimates during the nine months ended September 30, 2020 to augment the critical accounting estimates disclosed under the heading “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report, other than those described in the notes to the condensed consolidated financial statements included in this report, including the adoption of the Financial Accounting Standards Board’s Accounting Standards Update 2018-13, *Fair Value Measurement (Topic 820)* effective January 1, 2020. For information regarding the impact of recently adopted accounting standards, refer to note 2 to the condensed consolidated financial statements included in this report.

Recent Accounting Pronouncements

A discussion of recent accounting pronouncements is included in our Annual Report and is updated in note 2 to the condensed consolidated financial statements included in this report.

Results of Operations

The following table sets forth our results of operations for the periods presented, as percentages of revenue:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Revenue	100.0%	100.0%	100.0%	100.0%
Cost of revenue	57.3	51.4	55.0	53.9
Gross margin	42.7	48.6	45.0	46.1
Operating expenses:				
Sales and marketing	8.2	11.6	10.4	10.5
Research and development	9.1	10.4	11.9	11.6
General and administrative	9.6	5.5	8.2	7.2
Total operating expenses, net	26.9	27.6	30.5	29.3
Income from operations	15.8	21.0	14.5	16.8
Interest income (expense), net	(0.2)	(0.3)	0.2	(0.5)
Change in fair value of financial liability	(13.7)	-	(10.8)	-
Unrealized gain on trading securities	18.8	-	8.1	-
Other income (expense), net	(3.7)	5.5	(0.8)	2.6
Equity income (loss) in net income (loss) of affiliates	0.4	(0.0)	0.5	0.3
Income before income taxes	17.4	26.2	11.6	19.2
Income tax benefit (expense)	3.7	1.0	(0.4)	(0.8)
Net income	21.1	27.2	11.3	18.4
Less: Net income attributable to non-controlling interests and redeemable non-controlling interests	2.9	0.9	2.0	0.4
Net income attributable to ACM Research, Inc.	18.2%	26.3%	9.3%	18.0%

Comparison of Three Months Ended September 30, 2020 and 2019

Revenue

	Three Months Ended September 30,		% Change 2020 v 2019
	2020	2019	
	<i>(in thousands)</i>		
Revenue	\$ 47,665	\$ 33,427	42.6%

The increase in revenue of \$14.2 million in the three months ended September 30, 2020 as compared to the same period in 2019 consisted of an increase in revenue of \$10.0 million from single-wafer cleaning and other front-end processing equipment and an increase in revenue of \$4.2 million from back-end wafer assembly and packaging equipment and spares.

Cost of Revenue and Gross Margin

	Three Months Ended September 30,		% Change 2020 v 2019
	2020	2019	
	<i>(in thousands)</i>		
Cost of revenue	\$ 27,324	\$ 17,173	59.1%
Gross profit	20,341	16,254	25.1%
Gross margin	42.67%	48.63%	-6.0

Cost of revenue increased \$10.2 million and gross profit increased \$4.1 million in the three months ended September 30, 2020 as compared to the corresponding period in 2019 due to the increased sales volume offset by a 6.0% decrease in gross margin, which reflected differences in product mix.

Gross margin may vary from period to period, primarily related to the level of utilization and the timing and mix of purchase orders. We expect gross margin to be between 40.0% and 45.0% for the foreseeable future, with direct manufacturing costs approximating 50.0% to 55.0% of revenue and overhead costs totaling 5.0% of revenue.

Operating Expenses

	Three Months Ended September 30,		% Change 2020 v 2019
	2020	2019	
	<i>(in thousands)</i>		
Sales and marketing expense	\$ 3,924	\$ 3,886	1.0%
Research and development expense	4,343	3,492	24.4%
General and administrative expense	4,568	1,846	147.5%
Total operating expenses	<u>\$ 12,835</u>	<u>\$ 9,224</u>	39.1%

Sales and marketing expense increased by \$38,000 in the three months ended September 30, 2020 as compared to the corresponding period in 2019. Sales and marketing expense consists primarily of:

- compensation of personnel associated with pre- and after-sale support and other sales and marketing activities, including stock-based compensation;
- sales commissions paid to independent sales representatives;
- fees paid to sales consultants;
- shipping and handling costs for transportation of products to customers;
- cost of trade shows;
- travel and entertainment; and
- allocated overhead for rent and utilities.

Research and development expense increased by \$851,000 in the three months ended September 30, 2020 as compared to the corresponding period in 2019, principally as a result of increases in new product development, testing fees and personnel costs. Research and development expense represented 9.1% and 10.4% of our revenue in the three months ended September 30, 2020 and 2019, respectively. Without reduction by grant amounts received from PRC governmental authorities (see “—Government Research and Development Funding”), gross research and development expense totaled \$4.7 million, or 13.1% of revenue, in the three months ended September 30, 2020 and \$4.4 million, or 13.1% of revenue, in the corresponding period in 2019. Research and development expense relates to the development of new products and processes and encompasses our research, development and customer support activities. Research and development expense consists primarily of:

- compensation of personnel associated with our research and development activities, including stock based compensation;
- costs of components and other research and development supplies;
- travel expense associated with customer support;
- amortization of costs of software used for research and development purposes; and
- allocated overhead for rent and utilities.

General and administrative expense increased \$2.7 million in the three months ended September 30, 2020 as compared to the corresponding period in 2019. General and administrative expense consists primarily of:

- compensation of executive, accounting and finance, human resources, information technology, and other administrative personnel, including stock-based compensation;
- professional fees, including accounting and legal fees;
- other corporate expenses; and
- allocated overhead for rent and utilities.

We expect that, for the foreseeable future, general and administrative expenses will increase in absolute dollars, as we incur additional costs associated with growing our business and operating as a public company in the United States and the PRC.

Other Income and Expenses

	Three Months Ended September 30,		% Change 2020 v 2019
	2020	2019	
	<i>(in thousands)</i>		
Interest Income	\$ 179	\$ 95	88.4%
Interest Expense	(272)	(205)	32.7%
Interest Income (expense), net	<u>\$ (93)</u>	<u>\$ (110)</u>	-15.5%
Other income (expense), net	\$ (1,759)	\$ 1,850	-195.1%

Interest income consists of interest earned on our cash and equivalents and restricted cash accounts, offset by interest expense incurred from outstanding short-term borrowings. We incurred \$93,000 of interest expense, net in the three months ended September 30, 2020 as compared to \$110,000 of interest expense, net in the corresponding period in 2019. This was a result of a larger balance of cash and equivalents offset by increased borrowings under short-term bank loans.

Other income, net primarily reflects (a) gains or losses recognized from the impact of exchange rates on our foreign currency-denominated working-capital transactions and (b) depreciation of assets acquired with government subsidies, as described under “—Government Research and Development Funding” above. Other income (expense), declined by \$3.6 million in the three months ended September 30, 2020 as compared to Other income (expense) in the corresponding period in 2019, due primarily to realized losses of \$2.5 million resulting from changes in the RMB-to-U.S. dollar exchange rate, compared to a gain of \$1.8 million in the prior year period, which was partly offset by higher other income related to PRC funding in the three months ended September 30, 2020 compared to the prior year period.

Change in fair value of financial liability

We recognized a change in fair value of financial liability of \$6.5 million for the three months ended September 30, 2020, which was charged to the condensed consolidated statement of operations, as described in note 12 to the condensed consolidated financial statements included in this report,

Unrealized gain from trading securities

We recorded an unrealized gain of \$9.0 million for the three months ended September 30, 2020 based on the change in market value of ACM Shanghai’s indirect investment in SMIC shares on the STAR Market as is described in note 11 to the condensed consolidated financial statements included in this report.

Income Tax Expense

The following presents components of income tax expense for the indicated periods:

	Three Months Ended September 30,	
	2020	2019
	<i>(in thousands)</i>	
Total income tax benefit (expense)	\$ 1,747	\$ 328

Our effective tax rate differs from statutory rates of 21% for U.S. federal income tax purposes and 15% to 25% for Chinese income tax purposes due to the effects of the valuation allowance and certain permanent differences as it pertains to book-tax differences in the value of client equity securities received for services and the treatment of stock-based compensation. Our two PRC subsidiaries, ACM Shanghai and ACM Wuxi, are liable for PRC corporate income taxes at the rates of 15% and 25%, respectively. Pursuant to the Corporate Income Tax Law of the PRC, our PRC subsidiaries generally would be liable for PRC corporate income taxes as a rate of 25%. According to Guoshuihan 2009 No. 203, an entity certified as an “advanced and new technology enterprise” is entitled to a preferential income tax rate of 15%. ACM Shanghai was certified as an “advanced and new technology enterprise” in 2012 and again in 2016 and 2018, with an effective period of three years.

We file income tax returns in the United States and state and foreign jurisdictions. Those federal, state and foreign income tax returns are under the statute of limitations subject to tax examinations for 2009 through 2016. To the extent we have tax attribute carryforwards, the tax years in which the attribute was generated may still be adjusted upon examination by the Internal Revenue Service or state or foreign tax authorities to the extent utilized in a future period.

The Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was enacted on March 27, 2020. It contains several provisions that may have financial statement effects. Key Aspects of the CARES Act include the following:

- repealed the 80% taxable income limitation for 2018, 2019 and 2020, and allows those years to be carried back up to five years;
- allows corporations to claim 100% of AMT credits in 2019, and provides for an election to take the entire refundable credit amount in 2018;
- raised the Section 163(j) ATI limit from 30% to 50% for businesses; and
- made technical corrections to TCJA for Qualified Improvement Property (“QIP”) and designates QIP as 15-year property for depreciation purposes, which makes QIP a category eligible for 100% bonus depreciation.

The CARES Act is not expected have a material impact on income taxes in the Company’s consolidated financial statements.

Net Income Attributable to Non-Controlling Interests and Redeemable Non-Controlling Interests

	Three Months Ended September 30,		% Change 2020 v 2019
	2020	2019	
	<i>(in thousands)</i>		
Net income attributable to non-controlling interests	\$ 1,393	\$ 307	353.7%

As described above under “—STAR Market Listing and IPO,” in 2019, ACM Shanghai sold a total number of shares representing 8.3% of its outstanding ACM Shanghai shares. ACM Research continues to hold the remaining 91.7% of ACM Shanghai’s outstanding shares. As a result, commencing with the three months ended September 30, 2019, we reflect, as net income attributable to non-controlling interests and redeemable non-controlling interests, the portion of our net income allocable to the minority holders of ACM Shanghai shares. In the three months ended September 30, 2020, this amount totaled \$1.4 million as compared to \$0.3 million in the corresponding period in 2019.

Comparison of Nine Months Ended September 30, 2020 and 2019*Revenue*

	Nine Months Ended September 30,		% Change 2020 v 2019
	2020	2019	
	<i>(in thousands)</i>		
Revenue	\$ 111,062	\$ 82,916	33.9%

The increase in revenue of \$28.1 million in the nine months ended September 30, 2020 as compared to the same period in 2019 reflected increases in revenue of \$28.9 million from single-wafer cleaning and other front-end processing equipment, offset by a decrease in revenue of \$0.8 million from back-end wafer assembly and packaging equipment and spares.

Cost of Revenue and Gross Margin

	Nine Months Ended September 30,		% Change 2020 v 2019
	2020	2019	
	<i>(in thousands)</i>		
Cost of revenue	\$ 61,137	\$ 44,705	36.8%
Gross profit	49,925	38,211	30.7%
Gross margin	44.95%	46.08%	-1.1

Cost of revenue increased \$16.4 million and gross profit increased \$11.7 million in the nine months ended September 30, 2020, as compared to the corresponding period in 2019, due to increased sales volume and higher gross margin. Gross margin decreased by 1.1 percentage points during the nine months ended September 30, 2020, as compared to the comparable period in 2019 due to differences in product mix.

Gross margin may vary from period to period, primarily related to the level of utilization and the timing and mix of purchase orders. We expect gross margin to be between 40.0% and 45.0% for the foreseeable future, with direct manufacturing costs approximating 50.0% to 55.0% of revenue and overhead costs totaling 5.0% of revenue.

Operating Expenses

	<u>Nine Months Ended September 30,</u>		<u>% Change 2020 v 2019</u>
	<u>2020</u>	<u>2019</u>	
	<i>(in thousands)</i>		
Sales and marketing expense	\$ 11,524	\$ 8,679	32.8%
Research and development expense	13,241	9,598	38.0%
General and administrative expense	9,100	5,992	51.9%
Total operating expenses	<u>\$ 33,865</u>	<u>\$ 24,269</u>	39.5%

Sales and marketing expense increased by \$2.8 million in the nine months ended September 30, 2020, as compared to the corresponding period in 2019. Sales and marketing expense consists primarily of:

- compensation of personnel associated with pre and aftersales support and other sales and marketing activities, including stock-based compensation;
- sales commissions paid to independent sales representatives;
- fees paid to sales consultants;
- shipping and handling costs for transportation of products to customers;
- cost of trade shows;
- travel and entertainment; and
- allocated overhead for rent and utilities.

Research and development expense increased by \$3.6 million in the nine months ended September 30, 2020 as compared to the corresponding period in 2019, principally as a result of increases in testing fees and personnel costs. Research and development expense represented 11.9% and 11.6% of our revenue in the nine months ended September 30, 2020 and 2019, respectively. Without reduction by grant amounts received from PRC governmental authorities (see “—Government Research and Development Funding”), gross research and development expense totaled \$13.9 million, or 12.5% of revenue, in the nine months ended September 30, 2020 and \$12.5 million, or 15.1% of revenue, in the corresponding period in 2019. Research and development expense relates to the development of new products and processes and encompasses our research, development and customer support activities. Research and development expense consists primarily of:

- compensation of personnel associated with our research and development activities, including stock based compensation;
- costs of components and other research and development supplies;
- travel expense associated with customer support;
- amortization of costs of software used for research and development purposes; and
- allocated overhead for rent and utilities.

General and administrative expense increased by \$3.1 million in the nine months ended September 30, 2020 as compared to the corresponding period in 2019. General and administrative expense consists primarily of:

- compensation of executive, accounting and finance, human resources, information technology, and other administrative personnel, including stock-based compensation;
- professional fees, including accounting and legal fees;
- other corporate expenses; and
- allocated overhead for rent and utilities.

We expect that, for the foreseeable future, general and administrative expenses will increase in absolute dollars, as we incur additional costs associated with growing our business and operating as a public company in the United States and the PRC.

Other Income and Expenses

	<u>Nine Months Ended September 30,</u>		<u>% Change 2020 v 2019</u>
	<u>2020</u>	<u>2019</u>	
	<i>(in thousands)</i>		
Interest Income	\$ 834	\$ 128	551.6%
Interest Expense	(611)	(538)	13.6%
Interest Income (expense), net	<u>\$ 223</u>	<u>\$ (410)</u>	-154.4%
Other income (expense), net	\$ (933)	\$ 2,132	-143.8%

Interest income consists of interest earned on our cash and equivalents and restricted cash accounts, offset by interest expense incurred from outstanding short-term borrowings. We earned \$223,000 of interest income, net in the nine months ended September 30, 2020 as compared to incurring (\$410,000) of interest expense, net in the corresponding period in 2019. This was a result of a larger balance of cash and equivalents and restricted cash partly offset by increased borrowings under short-term bank loans.

Other income, net primarily reflects (a) gains or losses recognized from the impact of exchange rates on our foreign currency-denominated working-capital transactions and (b) depreciation of assets acquired with government subsidies, as described under “—Government Research and Development Funding” above. Other income (expense), declined by \$3.1 million in the nine months ended September 30, 2020 as compared to Other income (expense) in the corresponding period in 2019, due primarily to realized losses of \$2.0 million resulting from changes in the RMB-to-U.S. dollar exchange rate, compared to a gain of \$2.3 million in the prior year period. This was partly offset by higher other income related to PRC funding in the nine months ended September 30, 2020 compared to the prior year period.

Change in fair value of financial liability

We recognized a change in fair value of financial liability of \$12.0 million for the nine months ended September 30, 2020, which was charged to the condensed consolidated statement of operations, as described in note 12 to the condensed consolidated financial statements included in this report.

Unrealized gain from trading securities

We recorded an unrealized gain of \$9.0 million for the nine months ended September 30, 2020 based on the change in market value of ACM Shanghai’s indirect investment in SMIC shares on the STAR Market as is described in note 11 to the condensed consolidated financial statements included in this report.

Income Tax Expense

The following presents components of income tax expense for the indicated periods:

	Nine Months Ended September 30,	
	2020	2019
	<i>(in thousands)</i>	
Total income tax expense	\$ (416)	\$ (667)

Our effective tax rate differs from statutory rates of 21% for U.S. federal income tax purposes and 15% to 25% for Chinese income tax purposes due to the effects of the valuation allowance and certain permanent differences as it pertains to book-tax differences in the value of client equity securities received for services and the treatment of stock-based compensation. Our two PRC subsidiaries, ACM Shanghai and ACM Wuxi, are liable for PRC corporate income taxes at the rates of 15% and 25%, respectively. Pursuant to the Corporate Income Tax Law of the PRC, our PRC subsidiaries generally would be liable for PRC corporate income taxes as a rate of 25%. According to Guoshuihan 2009 No. 203, an entity certified as an “advanced and new technology enterprise” is entitled to a preferential income tax rate of 15%. ACM Shanghai was certified as an “advanced and new technology enterprise” in 2012 and again in 2016 and 2018, with an effective period of three years.

We file income tax returns in the United States and state and foreign jurisdictions. Those federal, state and foreign income tax returns are under the statute of limitations subject to tax examinations for 2009 through 2016. To the extent we have tax attribute carryforwards, the tax years in which the attribute was generated may still be adjusted upon examination by the Internal Revenue Service or state or foreign tax authorities to the extent utilized in a future period.

The Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was enacted on March 27, 2020. It contains several provisions that may have financial statement effects. Key Aspects of the CARES Act include the following:

- repealed the 80% taxable income limitation for 2018, 2019 and 2020, and also allows those years to be carried back up to five years;
- allows corporations to claim 100% of AMT credits in 2019, and also provides for an election to take the entire refundable credit amount in 2018;
- raises Section 163(j) ATI limit from 30% to 50% for businesses; and
- makes technical corrections to TCJA for Qualified Improvement Property (“QIP”), and designates QIP as 15-year property for depreciation purposes, which makes QIP a category eligible for 100% bonus depreciation.

The CARES Act is not expected have a material impact on income taxes in the Company's consolidated financial statements.

Net Income Attributable to Non-Controlling Interests and Redeemable Non-Controlling Interests

	Nine Months Ended September 30,		% Change 2020 v 2019
	2020	2019	
	<i>(in thousands)</i>		
Net income attributable to non-controlling interests	\$ 2,228	\$ 307	625.7%

As described above under “—STAR Market Listing and IPO,” in 2019 ACM Shanghai sold 8.3% of its shares to private placement investors in connection with the STAR Listing. ACM Research continues to hold the remaining 91.7% of ACM Shanghai's outstanding shares. As a result, commencing with the nine months ended September 30, 2019, we have reflected, as net income attributable to non-controlling interests and redeemable non-controlling interests, the portion of our net income allocable to the minority holders of ACM Shanghai shares. In the nine months ended September 30, 2020, this amount totaled \$2.3 million, as compared to \$0.3 million for the prior year period.

Liquidity and Capital Resources

During the first nine months of 2020, we funded our technology development and operations principally through our beginning cash balance, including application of net proceeds from our initial public offering and follow-on public offering of Class A common stock in 2017 and 2019, respectively, and net proceeds from our private equity raises and short-term borrowings by ACM Shanghai from local financial institutions.

We believe our existing cash and cash equivalents, our cash flow from operating activities, and short-term bank borrowings by ACM Shanghai will be sufficient to meet our anticipated cash needs for at least the next twelve months. We do not expect that our anticipated cash needs for the next twelve months will require our receipt of any PRC government subsidies. Our future working capital needs will depend on many factors, including the rate of our business and revenue growth, the payment schedules of our customers, and the timing of investment in our research and development as well as sales and marketing. To the extent our cash and cash equivalents, cash flow from operating activities and short-term bank borrowings are insufficient to fund our future activities in accordance with our strategic plan, we may determine to raise additional funds through public or private debt or equity financings or additional bank credit arrangements. We also may need to raise additional funds in the event we determine in the future to effect one or more acquisitions of businesses, technologies and products. If additional funding is necessary or desirable, we may not be able to obtain bank credit arrangements or to affect an equity or debt financing on terms acceptable to us or at all.

Sources of Funds

Cash Flow from Operating Activities. Our operations used cash flow of \$8.0 million in the first nine months of 2020. Our cash flow from operating activities is influenced by (a) the level of net income, (b) the amount of cash we invest in personnel and technology development to support anticipated future growth in our business, (c) increases in the number of customers using our products, and (d) the amount and timing of payments by customers.

Equity and Equity-related Securities. During the nine months ended September 30, 2020, we received proceeds of \$2.2 million from sales of Class A common stock pursuant to option exercises.

Release of Voluntarily Restricted Proceeds. During the nine months ended September 30, 2020, we released the restrictions on \$58.8 million of the cash proceeds received from the private placement investors that purchased ACM Shanghai shares in anticipation of the STAR Listing (see “—Recent Developments—STAR Market Listing and IPO” above). Previously, due to the investors' redemption rights, we had voluntarily chosen to hold the proceeds as restricted cash. These redemption rights were removed upon submission of the STAR Listing application.

Short-Term Loan Facilities. We have short-term borrowings with three banks, as follows:

Lender	Agreement Date	Maturity Date	Annual Interest Rate	Maximum Borrowing Amount(1)	Amount Outstanding at September 30, 2020
<i>(in thousands)</i>					
Bank of China Pudong Branch	June 2020	December 2020	4.35%	RMB30,000	RMB17,000
				\$ 4,404	\$ 2,496
Bank of Shanghai Pudong Branch	April 2020	May 2021 - June 2021	3.48%-4.68%	RMB70,000	RMB65,296
				\$ 10,276	\$ 9,585
Bank of Communications	April 2020	April 2021 - May 2021	3.65%-4.65%	RMB20,000	RMB20,000
				\$ 2,936	\$ 2,936
China Everbright Bank	April 2020	April 2021 - June 2021	2.7%-4.7%	RMB80,000	RMB58,749
				\$ 11,744	\$ 8,625
China Merchants Bank	August 2020	August 2021	3.85%	RMB80,000	RMB29,000
				\$ 11,744	\$ 4,257
Industrial Bank of Korea	July 2020	July 2021	3.99%	KRW500,000	KRW500,000
				\$ 428	\$ 428
				\$ 41,532	\$ 28,327

- (1) Converted from RMB to dollars as of September 30, 2020. All of the amounts owing under the line of credit with China Everbright Bank and Bank of China Pudong Branch are guaranteed by Dr. David Wang, our Chief Executive Officer, President and Chair of the Board. All of the amounts owing under the line of credit with Bank of Shanghai Pudong Branch are guaranteed by Dr. Wang and CleanChip Technologies LTD, a wholly owned subsidiary of ACM Shanghai. All of the amounts owing under the line of credit with Industrial Bank of Korea are guaranteed by YY Kim, CEO of ACM Research (Korea).

Government Research and Development Grants. As described under “Government Research and Development Funding,” ACM Shanghai has received research and development grants from local and central PRC governmental authorities. ACM Shanghai received cash payments of \$2.9 million related to such grants received in the nine months ended September 30, 2020, as compared to cash payments of \$1.5 million related to such grants received during the same period in 2019. Not all grant amounts are received in the year in which a grant is awarded. Because of the nature and terms of the grants, the amounts and timing of payments under the grants are difficult to predict and vary from period to period. In addition, we expect to apply for additional grants when available in the future, but the grant application process can extend for a significant period of time and we cannot predict whether, or when, we will determine to apply for any such grants.

Working Capital. The following table sets forth selected working capital information:

	September 30, 2020
	<i>(in thousands)</i>
Cash and cash equivalents	\$ 92,203
Accounts receivable, less allowance for doubtful amounts	59,796
Inventory	64,182
Working capital	\$ 216,181

Our cash and cash equivalents at September 30, 2020 were unrestricted and held for working capital purposes. ACM Shanghai, our only direct PRC subsidiary, is, however, subject to PRC restrictions on distributions to equity holders. We currently intend for ACM Shanghai to retain all available funds any future earnings for use in the operation of its business and do not anticipate its paying any cash dividends. We have not entered into, and do not expect to enter into, investments for trading or speculative purposes. Our accounts receivable balance fluctuates from period to period, which affects our cash flow from operating activities. Fluctuations vary depending on cash collections, client mix, and the timing of shipment and acceptance of our tools.

We have never declared or paid cash dividends on our capital stock. We intend to retain all available funds and any future earnings to support the operation of and to finance the growth and development of our business and do not anticipate paying any cash dividends in the foreseeable future.

Uses of Funds

Capital Expenditures. We incurred \$3.7 million in capital expenditures in the first nine months of 2020, compared to \$0.9 million during the same period in 2019.

Trading Securities. ACM Shanghai made an indirect investment of \$14.7 million in SMIC shares on the STAR Market through ACM Shanghai's investment in Qingdao Limited Partnership Fund, during the first nine months of 2020, as is described in note 11 to the condensed consolidated financial statements included in this report.

Lingang-Related Investments. ACM Shanghai, through its wholly owned subsidiary Shengwei Research (Shanghai), Inc., purchased a land use right for \$9.3 million in the first nine months of 2020, as described in note 2 to the condensed financial statements included in this report. ACM Shanghai pre-paid \$7.0 million in the first nine months of 2020 for a deposit towards a potential purchase of housing properties which was recorded in other long term assets in the condensed consolidated balance sheets.

Off-Balance Sheet Arrangements

As of September 30, 2020, we did not have any significant off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of Regulation S-K under the Securities Act of 1933.

Emerging Growth Company Status

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act, or JOBS Act, and may take advantage of provisions that reduce our reporting and other obligations from those otherwise generally applicable to public companies. We may take advantage of these provisions until December 31, 2020, at which time we will become a "large accelerated filer" for purposes of the SEC's disclosure requirements as the result of the market value of our capital stock held by non-affiliates exceeding \$700 million as of June 30, 2020. We have chosen to take advantage of some of the emerging growth company provisions, and as a result we may not provide stockholders with all of the information that is provided by other public companies. We have, however, irrevocably elected not to avail ourselves, as would have been permitted by Section 107 of the JOBS Act, of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933 for complying with new or revised accounting standards, and we therefore will be subject to the same new or revised accounting standards as public companies that are not emerging growth companies.

Item 3. Quantitative and Qualitative Disclosures about Market Risks

We are a smaller reporting company as defined by Item 10(f)(1) of Regulation S-K under the Securities Act of 1933 and as such are not required to provide information under this Item.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2020. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported, within the time periods specified in the rules and forms of the SEC. Disclosure controls and procedures include controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Securities Exchange Act of 1934 is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of September 30, 2020, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures over financial reporting were effective.

Changes in Internal Control over Financial Reporting

During the three months ended September 30, 2020, no changes were identified to our internal control over financial reporting that materially affected, or were reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

From time to time we may become involved in legal proceedings or may be subject to claims arising in the ordinary course of our business. Although the results of litigation and claims cannot be predicted with certainty, we currently believe that the final outcome of these ordinary course matters will not have a material adverse effect on our business, operating results, financial condition or cash flows. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

There have been no material developments with regard to legal proceedings in the nine months ended September 30, 2020 or in the subsequent period up to the date of this report.

Item 1A. Risk Factors

Except as set forth below and Item 1A, “Risk Factors” of Part II in our Quarterly Report for the quarterly period ended June 30, 2020, there were no material changes to the risk factors discussed in Item 1A, “Risk Factors” of Part I in our Annual Report. In addition to the other information set forth in this report, you should carefully consider those risk factors, which could materially affect our business, financial condition and future operating results. Those risk factors are not the only risks facing our company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may have a material adverse effect on our business, financial condition and operating results.

Short sellers of our stock may be manipulative and may drive down the market price of our Class A common stock.

Short selling is the practice of selling securities that a seller does not own but rather has borrowed, or intends to borrow, from a third party with the intention of buying identical securities at a later date to return to the lender. A short seller hopes to profit from a decline in the value of the securities between the sale of the borrowed securities and the purchase of the replacement shares, as the short seller expects to pay less in that purchase than it received in the sale. As it is in the short seller’s interest for the price of the stock to decline, some short sellers publish, or arrange for the publication of, opinions or characterizations regarding the relevant issuer, its business prospects and similar matters calculated to or which may create negative market momentum, which may permit them to obtain profits for themselves as a result of selling the securities short. The use of the Internet, social media, and blogging have allowed short sellers to publicly attack a company’s credibility, strategy and veracity by means of so-called “research reports” that mimic the type of investment analysis performed by legitimate securities research analysts. Issuers with limited trading volumes or substantial retail stockholder bases can be particularly susceptible to higher volatility levels, and can be particularly vulnerable to such short attacks.

Short seller publications are not regulated by any governmental or self-regulatory organization or any other official authority in the United States and are not subject to the certification requirements imposed by the SEC in Regulation Analyst Certification. Accordingly, the opinions they express may be based on distortions of actual facts or, in some cases, outright fabrications. In light of the limited risks involved in publishing such information, and the significant profits that can be made from running successful short attacks, short sellers will likely continue to issue such reports.

While we intend to strongly defend our public filings against any such short seller attacks, in many situations we could be constrained, either by principles of freedom of speech, applicable state law or issues of commercial confidentiality, in the manner in which we are able to proceed against the relevant short seller.

Such short-seller attacks have, and may cause in the future, temporary or possibly long term, declines in the market price of Class A common stock.

Our ability to sell our tools to Chinese customers may be restricted by regulatory actions

The Bureau of Industry and Security of the U.S. Department of Commerce has added, and may continue to add, certain PRC entities to the Entity List, or otherwise restrict the export of American technology to the PRC. For example, in September 2020, certain U.S. suppliers of capital equipment to Semiconductor Manufacturing International Corporation, or SMIC, one of the largest chip manufacturers in the PRC, received letters from the U.S. Department of Commerce informing them of additional license requirements for shipments to the SMIC. The Entity List and other actions by the U.S. Department of Commerce impose limitations on the supply of certain U.S. products and services to the affected entities, including a requirement that an export license be obtained in order to export products and services to the listed entities. Challenges faced by SMIC and its key suppliers could indirectly impact SMIC’s demand for our products.

We cannot be certain what additional actions the U.S. government may take with respect to PRC entities, and whether such actions will impact our relationships with our PRC-based customers, including changes to the Entity List restrictions, export regulations, tariffs or other trade restrictions, or whether the Chinese government may take any actions in response to U.S. government action that may adversely affect our ability to do business with our PRC-based customers. Even in the absence of new restrictions, tariffs or trade actions imposed by the U.S. or Chinese government, our PRC-based customers may take actions to reduce dependence on the supply of components subject to potential U.S. trade regulations, including our tools, which could have a material adverse effect on our operating results. We are unable to predict the duration of the restrictions imposed by the U.S. government or of any additional governmental actions that may impact our relationships with our PRC-based customers, any of which could have a long-term adverse effect on our business, operating results and financial condition.

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

Recent Sales of Unregistered Equity Securities

In the three months ended September 30, 2020, we issued and sold to employees and consultants an aggregate of 150,162 unregistered shares of Class A common stock upon the exercise of stock options at per share exercise prices between \$0.75 and \$1.50. These transactions did not involve any underwriters, any underwriting discounts or commissions, or any public offering. We believe the offers, sales and issuances of these shares were exempt from registration under the Securities Act of 1933 by virtue of Section 4(a)(2) thereof because the issuance of securities to the recipients did not involve a public offering or in reliance on Rule 701 under said Act because the transactions were pursuant to a contract relating to compensation as provided under such rule.

Item 6. Exhibits

The following exhibits are being filed as part of this report:

Exhibit Number	Description
4.01 ‡	Warrant to Purchase Class A Common Stock issued to Shengxin (Shanghai) Management Consulting Limited Partnership dated July 29, 2020
10.01	Amendment No. 1 to Share Transfer and Note Cancellation Agreement dated July 29, 2020 between ACM Research, Inc. and Shengxin (Shanghai) Management Consulting Limited Partnership
10.02	Adoption Agreement dated July 29, 2020 between ACM Research, Inc. and Shengxin (Shanghai) Management Consulting Limited Partnership (amending the Second Amended and Restated Registration Rights Agreement between ACM Research, Inc. and certain of its stockholders filed with the SEC on October 18, 2017 as Exhibit 10.09 to Amendment No. 1 to Registration Statement on Form S-1)
10.03 ‡+	Facilities Agreement dated August 3, 2020 between China Merchants Bank Co., Ltd. Shanghai Branch and ACM Research (Shanghai), Inc.
31.01	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.02	Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.01 *	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

‡ Certain information redacted and replaced with “[***]”.

+ Unofficial English translation of original document prepared in Mandarin Chinese.

*The certifications attached as Exhibit 32.01 accompany this Quarterly Report on Form 10-Q pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed “filed” by the registrant for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

SIGNATURE

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

Date: November 9, 2020

ACM RESEARCH, INC.

By: /s/ Mark McKechnie

Mark McKechnie

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

THIS WARRANT AND THE SHARES ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933. SUCH SECURITIES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION OF THE U.S. SECURITIES ACT OF 1933.

ACM RESEARCH, INC.

WARRANT TO PURCHASE CLASS A COMMON STOCK

Certificate No. A-20-01

Original Issue Date: July 29, 2020

FOR VALUE RECEIVED, ACM Research, Inc., a Delaware corporation (the “*Company*”), certifies that Shengxin (Shanghai) Management Consulting Limited Partnership or its registered assigns (the “*Holder*”) is entitled to purchase from the Company a total of 242,681 shares (the “*Warrant Shares*”) of the Company’s Class A Common Stock, \$0.0001 par value per share (“*Class A Shares*”), at a purchase price per share of \$7.50 (subject to adjustment as provided in this Warrant, the “*Exercise Price*”), all subject to the terms, conditions and adjustments set forth below in this Warrant.

1. Definitions. As used in this Warrant, the following terms have the respective meanings set forth below:

“*Aggregate Exercise Price*” means \$1,820,107.50.

“*Business Day*” means any day other than (a) a Saturday or Sunday or (b) any day on which either the Federal Reserve Bank of New York or the Federal Reserve Bank of San Francisco is closed.

“*Exercise Period*” has the meaning set forth in Section 2.

“*Original Issue Date*” means the Original Issue Date set forth above.

“*Person*” means any individual, sole proprietorship, partnership, limited liability company, corporation, joint venture, trust, incorporated organization or government or department or agency thereof.

This “*Warrant*” means this Warrant and all warrants issued upon division or combination of, or in substitution for, this Warrant.

2. Term. This Warrant may be exercised on any Business Day during the period (the “*Exercise Period*”) beginning immediately after the receipt by the Holder of all approvals required of governmental department and other regulatory bodies of the People’s Republic of China, which receipt shall have been confirmed by a certificate of the Holder delivered to the Company, and ending as of 5 P.M., Eastern standard time, on December 31, 2023.

3. Exercise.

(a) Manner of Exercise. This Warrant may be exercised, on one occasion, in either of the following manners:

(i) Cash Exercise. The Holder may exercise this Warrant for all, but not less than all, of the Warrant Shares by (i) surrendering this Warrant to the Company at the Company’s then principal executive offices and (ii) paying the Aggregate Exercise Price by wire transfer of immediately available funds to an account designated in writing by the Company.

(ii) Cashless Exercise. The Holder may exercise this Warrant in full by instructing the Company to withhold, in payment of the Aggregate Exercise Price, a number of Warrant Shares then issuable upon exercise of this Warrant equal to the quotient (rounded upward to the nearest whole share) of (A) the Aggregate Exercise Price divided by (B) the average of the closing prices of the Class A Shares for the five trading days immediately preceding the date of exercise.

(b) Delivery of Stock Certificates. Upon compliance by the Holder with the provisions of Section 3(a), the Company shall, within ten Business Days following the Exercise Time, execute (or cause to be executed) and deliver (or cause to be delivered) to the Holder a certificate representing (i) in the case of an exercise in accordance with Section 3(a)(i), all of the Warrant Shares or (ii) in the case of an exercise in accordance with Section 3(a)(ii), all of the Warrant Shares not withheld in payment of the Aggregate Exercise Price. The stock certificate so delivered shall be registered in the name of the Holder or, subject to compliance with Section 8, such other Person's name as shall be designated by the Holder in writing. This Warrant shall be deemed to have been exercised and such certificate representing Warrant Shares shall be deemed to have been issued, and the Holder or any other Person so designated to be named therein shall be deemed to have become a holder of record of such Warrant Shares for all purposes, as of 5 P.M., Eastern time, on the date of exercise.

(c) Representations of the Company. With respect to the exercise of this warrant, the Company represents, covenants and agrees:

- (i) this Warrant is, and any Warrant issued in substitution for or replacement of this Warrant will be upon issuance, duly authorized and validly issued;
- (ii) at all times during the Exercise Period, the Company will reserve and keep available out of its authorized but unissued Class A Shares or other securities constituting Warrant Shares, solely for the purpose of issuance upon the exercise of this Warrant, the maximum number of Warrant Shares issuable upon the exercise of this Warrant; and
- (iii) the Warrant Shares will be, upon issuance, and the Company will take all such actions as may be necessary or appropriate in order that the Warrant Shares are, validly issued, fully paid and non-assessable, issued without violation of any preemptive or similar rights of any stockholder of the Company and free and clear of all taxes, liens and charges.

4. Adjustment to Exercise Price and Number of Warrant Shares. In order to prevent dilution of the purchase rights granted under this Warrant, the Exercise Price and the number of Warrant Shares shall be subject to adjustment from time to time as provided in this Section 4 (in each case, after taking into consideration any prior adjustments pursuant to this Section 4).

(a) Dividend, Distribution, Subdivision or Combination of Class A Shares. If the Company shall, at any time or from time to time after the Original Issue Date:

- (i) pay a dividend or make any other distribution upon any capital stock of the Company payable either in Class A Shares or in securities that are convertible into Class A Shares without payment of any consideration; or
- (ii) subdivide (by any stock split, recapitalization or otherwise) outstanding Class A Shares into a greater number of shares;

the Exercise Price in effect immediately prior to any such dividend, distribution or subdivision shall be proportionately reduced and the number of Warrant Shares shall be proportionately increased. If the Company at any time combines (by combination, reverse stock split or otherwise) outstanding Class A Shares into a smaller number of shares, the Exercise Price in effect immediately prior to such combination shall be proportionately increased and the number of Warrant Shares shall be proportionately decreased. Any adjustment under this Section 4(a) shall become effective at the close of business on the date the dividend, distribution, subdivision or combination becomes effective.

- (b) Reorganization, Reclassification, Consolidation or Merger. In the event of any:
- (i) capital reorganization of the Company;
 - (ii) reclassification of the stock of the Company (other than a change in par value or from par value to no par value or from no par value to par value or as a result of a stock dividend or subdivision, split-up or combination of shares);
 - (iii) consolidation or merger of the Company with or into another Person;
 - (iv) sale of all or substantially all of the Company's assets to another Person; or
 - (v) other similar transaction (other than any such transaction covered by Section 4(a)),

in each case that entitles the holders of Class A Shares to receive (either directly or upon subsequent liquidation) stock, securities or assets with respect to or in exchange for Class A Shares, this Warrant shall, immediately after such reorganization, reclassification, consolidation, merger, sale or similar transaction, remain outstanding and shall thereafter, in lieu of or in addition to (as the case may be) the Warrant Shares then exercisable under this Warrant, be exercisable for the kind and number of shares of stock or other securities or assets of the Company or of the successor Person resulting from such transaction to which the Holder would have been entitled upon such reorganization, reclassification, consolidation, merger, sale or similar transaction if the Holder had exercised this Warrant in full immediately prior to the time of such reorganization, reclassification, consolidation, merger, sale or similar transaction and acquired the Warrant Shares as a result of such exercise (without taking into account any limitations or restrictions on the exercisability of this Warrant); and, in such case, appropriate adjustment (in form and substance satisfactory to the Holder) shall be made with respect to the Holder's rights under this Warrant to ensure that the provisions of this Section 4 shall thereafter be applicable, as nearly as possible, to this Warrant in relation to any shares of stock, securities or assets thereafter acquirable upon exercise of this Warrant (including, in the case of any consolidation, merger, sale or similar transaction in which the successor or purchasing Person is other than the Company, an immediate adjustment in the Exercise Price to the value per share for the Class A Shares reflected by the terms of such consolidation, merger, sale or similar transaction, and a corresponding immediate adjustment to the number of Warrant Shares without regard to any limitations or restrictions on exercise, if the value so reflected is less than the Exercise Price in effect immediately prior to such consolidation, merger, sale or similar transaction). The provisions of this Section 4(b) shall similarly apply to successive reorganizations, reclassifications, consolidations, mergers, sales or similar transactions. The Company shall not effect any such reorganization, reclassification, consolidation, merger, sale or similar transaction unless, prior to the consummation thereof, the successor Person (if other than the Company) resulting from such reorganization, reclassification, consolidation, merger, sale or similar transaction, shall assume, by written instrument substantially similar in form and substance to this Warrant and satisfactory to the Holder, the obligation to deliver to the Holder such shares of stock, securities or assets that, in accordance with the foregoing provisions, such Holder shall be entitled to receive upon exercise of this Warrant. Notwithstanding anything to the contrary contained in this Warrant, with respect to any corporate event or other transaction contemplated by the provisions of this Section 4(b), the Holder shall have the right to elect, prior to the consummation of such event or transaction, to give effect to the exercise rights contained in Section 2 instead of giving effect to the provisions contained in this Section 4(b).

(c) Certificate as to Adjustment. The Company shall furnish to the Holder:

- (i) within ten Business Days following any adjustment of the Exercise Price, a certificate of an executive officer setting forth in reasonable detail such adjustment and the facts upon which it is based and certifying the calculation thereof; and
- (ii) within ten Business Days following receipt by the Company of a written request by the Holder, a certificate of an executive officer certifying the Exercise Price then in effect and the number of Warrant Shares or the amount, if any, of other shares of stock, securities or assets then issuable upon exercise of this Warrant.

5. Restriction on Transfer of Warrant. Neither this Warrant nor any right of the Holder under this Warrant is transferable by the Holder without the prior written consent of the Company.

6. Not Deemed Stockholder. Prior to the issuance of the Warrant Shares, the Holder shall not be entitled to vote or receive dividends or be deemed the holder of shares of capital stock of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, as such, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise.

7. Replacement on Loss. Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and upon delivery of an indemnity reasonably satisfactory to it (it being understood that a written indemnification agreement or affidavit of loss of the Holder shall be a sufficient indemnity) and, in case of mutilation, upon surrender of such Warrant for cancellation to the Company, the Company at its own expense shall execute and deliver to the Holder, in lieu of this Warrant, a new Warrant of like tenor and exercisable for an equivalent number of Warrant Shares as the Warrant so lost, stolen, mutilated or destroyed, *provided* that, in the case of mutilation, no indemnity shall be required if this Warrant in identifiable form is surrendered to the Company for cancellation

8. Compliance with Securities Laws. The Holder, by acceptance of this Warrant, agrees to comply in all respects with the provisions of this Section 8 and the restrictive legend requirements set forth on the face of this Warrant and further agrees that such Holder shall not offer, sell or otherwise dispose of this Warrant or any Warrant Shares to be issued upon exercise of this Warrant except under circumstances that will not result in a violation of the Securities Act of 1933 or of the securities laws of any other applicable jurisdiction. All Warrant Shares shall be stamped or imprinted with a legend in substantially the following forms:

THESE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION OF THE U.S. SECURITIES ACT OF 1933.

THE COMPANY HAS MORE THAN ONE CLASS OF STOCK AUTHORIZED TO BE ISSUED. THE COMPANY WILL FURNISH WITHOUT CHARGE TO THE HOLDER UPON WRITTEN REQUEST A COPY OF THE FULL TEXT OF THE PREFERENCES, VOTING POWERS, QUALIFICATIONS AND SPECIAL AND RELATIVE RIGHTS OF THE SHARES OF EACH CLASS OF STOCK AUTHORIZED TO BE ISSUED BY THE COMPANY AS SET FORTH IN THE CERTIFICATE OF INCORPORATION OF THE COMPANY.

9. Warrant Register. The Company shall keep and properly maintain at its principal executive offices books for the registration and any transfers of this Warrant. The Company may deem and treat the Person in whose name this Warrant is registered on such register as the Holder of this Warrant for all purposes, and the Company shall not be affected by any notice to the contrary, except any assignment, division, combination or other transfer of the Warrant effected in accordance with the provisions of this Warrant.

10. General.

(a) Notices. All notices, requests, consents, claims, demands, waivers and other communications in connection or accordance with this Warrant shall be in writing and shall be deemed to have been given: (i) when delivered by hand (with written confirmation of receipt); (ii) when received by the addressee if sent by a nationally recognized overnight courier (receipt requested); (iii) on the date sent by e-mail of a PDF document (with confirmation of transmission) if sent during normal business hours of the recipient, and on the next Business Day if sent after normal business hours of the recipient; or (iv) on the tenth Business Day after the date mailed, by certified or registered mail, return receipt requested, postage prepaid. Such communications must be sent to the respective parties at the addresses indicated below (or at such other address for a party as shall be specified in a notice given in accordance with this Section 10(a)).

If to the Company:

ACM Research, Inc.
42307 Osgood Road, Suite I
Fremont, CA 94539
E-mail: [***]
Attention: Chief Financial Officer

with a copy to:

K&L Gates LLP
One Lincoln Street
Boston, MA 02111
E-mail: [***]
Attention: Mark L. Johnson

If to the Holder:

Shengxin (Shanghai) Management Consulting Limited Partnership
Rm 210 32, 2nd fl. Building 1, 38 Debao Rd.,
Pilot Free Trade Zone,
Shanghai, China
E-mail: _____
Attention: _____

(b) Entire Agreement. This Warrant, together with the Share Transfer and Note Cancellation Agreement dated as of April 30, 2020, as amended by Amendment No. 1 thereto dated as of the Original Issue Date, and the Registration Rights Agreement dated as of March 10, 2017 between the Company and certain of its securityholders, as amended by the Adoption Agreement dated as of the Original Issue Date between the Company and the Holder, constitute the full and entire understanding and agreement between the parties to this Warrant with respect to the subject matter contained in this Warrant, and supersede all prior and contemporaneous understandings and agreements, both written and oral, with respect to such subject matter.

(c) Severability. If any term or provision of this Warrant is invalid, illegal or unenforceable in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other term or provision of this Warrant or invalidate or render unenforceable such term or provision in any other jurisdiction.

(d) Amendment and Modification; Waiver. Except as otherwise provided in this Warrant, this Warrant may only be amended, modified or supplemented by an agreement in writing signed by the Company and the Holder. No waiver by the Company or the Holder of any of the provisions of this Warrant shall be effective unless explicitly set forth in writing and signed by the party so waiving. No waiver by any party shall operate or be construed as a waiver in respect of any failure, breach or default not expressly identified by such written waiver, whether of a similar or different character, and whether occurring before or after that waiver. No failure to exercise, or delay in exercising, any rights, remedy, power or privilege arising from this Warrant shall operate or be construed as a waiver thereof, nor shall any single or partial exercise of any right, remedy, power or privilege of this Warrant preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege.

(e) Successors and Assigns. This Warrant and the rights evidenced by this Warrant shall be binding upon and shall inure to the benefit of the parties to this Warrant and the successors of the Company and the successors and permitted assigns of the Holder. Each such successor or permitted assign of the Holder shall be deemed to be the Holder for all purposes of this Warrant.

(f) No Third-Party Beneficiaries. This Warrant is for the sole benefit of the Company and its successors and the Holder and its successors and permitted assigns. Nothing in this Warrant, express or implied, is intended to or shall confer upon any other Person any legal or equitable right, benefit or remedy of any nature whatsoever, under or by reason of this Warrant.

(g) Submission to Jurisdiction; Waiver of Jury Trial.

(i) Any legal suit, action or proceeding arising out of or based upon this Warrant or the transactions contemplated by this Warrant may be instituted in the federal courts of the United States of America or the courts of the State of Delaware in, and each party irrevocably submits to the exclusive jurisdiction of such courts in any such suit, action or proceeding. Service of process, summons, notice or other document by certified or registered mail to such party's address set forth in this Warrant shall be effective service of process for any suit, action or other proceeding brought in any such court. The parties irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or any proceeding in such courts and irrevocably waive and agree not to plead or claim in any such court that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum.

(ii) EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS WARRANT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES AND, THEREFORE, EACH SUCH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LEGAL ACTION ARISING OUT OF OR RELATING TO THIS WARRANT OR THE TRANSACTIONS CONTEMPLATED BY THIS WARRANT.

(h) Governing Law. This Warrant shall be governed by and construed in accordance with the internal laws of the State of Delaware without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of Delaware.

(i) Interpretation. For purposes of this Agreement:

- (i) headings used in this Agreement are for convenience of reference only and shall not, for any purpose, be deemed a part of this Agreement;
- (ii) any references herein to a Section refer to a Section of this Agreement, unless specified otherwise;
- (iii) the words "include," "includes" and "including" as used herein shall not be construed so as to exclude any other thing not referred to or described;
- (iv) the word "or" is not exclusive;

- (v) the definition given for any term in this Agreement shall apply equally to both the singular and plural forms of the term defined;
- (vi) whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms;
- (vii) unless the context otherwise requires, references herein to a statute means such statute as amended from time to time and includes any successor legislation thereto and any rules and regulations promulgated thereunder; and
- (viii) this Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the party drafting an instrument or causing any instrument to be drafted.

(j) Counterparts. This Warrant may be executed in counterparts, each of which shall be deemed an original, but both of which together shall be deemed to be one and the same agreement. A signed copy of this Warrant delivered by e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Warrant.

IN WITNESS WHEREOF, the Company has duly executed this Warrant on the Original Issue Date.

ACM RESEARCH, INC.

By: /s/ Hui Wang
Name: Hui Wang
Title: CEO

Accepted and agreed:

**SHENGXIN (SHANGHAI) MANAGEMENT
CONSULTING LIMITED PARTNERSHIP**

By: _____, General Partner

By: /s/ Steven Huang

AMENDMENT NO. 1
TO
SHARE TRANSFER AND NOTE CANCELLATION AGREEMENT

THIS AMENDMENT NO. 1 TO SHARE TRANSFER AND NOTE CANCELLATION AGREEMENT (this “*Amendment*”) is made as of the date set forth on the signature page hereto by and between ACM Research, Inc. (“*ACM*”) and Shengxin (Shanghai) Management Consulting Limited Partnership (“*SMC*,” and together with ACM, the “*Parties*”), with respect to their Share Transfer and Note Cancellation Agreement dated as of April 30, 2020 (the “*Agreement*”). Capitalized terms defined in the Agreement but not in this Amendment are used herein with the respective meanings ascribed to them in the Agreement.

RECITALS

A. Pursuant to Section 1.1 of the Agreement, SMC assigned and surrendered the Remaining Warrant Shares, which consisted of 242,681 shares of Class A Common Stock, to ACM for consideration to be determined as described in the Agreement.

B. ACM wishes to deliver, and SMC wishes to accept, the Alternative A Consideration, as set forth in Section 1.2(a) of the Agreement and as otherwise set forth below, in full satisfaction and payment for the Remaining Warrant Shares surrendered to ACM in accordance with Section 1.1 of the Agreement.

In consideration of the mutual covenants and agreements set forth in this Amendment and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Consideration for Remaining Warrant Shares.

1.1 Cancellation of SMC Note. Effective as of the execution and delivery of this Amendment, ACM hereby cancels the SMC Note, with the intention and purpose of irrevocably and unconditionally releasing and forever discharging SMC of and from any and all rights, obligations, promises, agreements, debts, losses, controversies, claims, causes of action, liabilities, damages and expenses of any nature whatsoever, whether known or unknown and whether asserted or unasserted, that ACM ever had or may have against SMC arising under the SMC Note. ACM shall mark the original, executed copy of the SMC Note by writing or stamping the word “CANCELED” on each page thereof and shall promptly send such marked copy to SMC by personal delivery in accordance with Section 5.6 of the Agreement.

1.2 Issuance of Warrant. Contemporaneously with the execution and delivery of this Agreement, ACM is executing, and delivering to SMC, a warrant in the form of EXHIBIT A to this Amendment (the “*New Warrant*”) to purchase, at a purchase price per share of US\$7.50, the New Warrant Shares, which shall consist of the 242,681 shares of Class A Common Stock formerly comprising the Remaining Warrant Shares and which have been held by ACM as treasury stock following the surrender of the Remaining Warrant Shares pursuant to Section 1.1 of the Agreement. The Warrant provides, among other things, that any exercise of the Warrant by SMC at any time shall be subject to all Regulatory Approvals.

1.3 Amendment of Registration Rights Agreement. Contemporaneously with the execution and delivery of this Agreement, ACM and SMC are entering into an Adoption Agreement in the form of EXHIBIT B (the “*Adoption Agreement*”), which will amend the Registration Rights Agreement in order to grant to SMC certain incidental, or piggyback, rights to offer and sell any or all of the New Warrant Shares pursuant to a registration statement filed under the Securities Act.

2. Economic Effects. It is the intention of the Parties that the delivery of the Alternative A Consideration, as set forth in Section 1, as of the date hereof shall, to the maximum extent feasible and permitted by law, shall have the economic effects as if such Alternative A Consideration had been delivered contemporaneously with SMC's assignment and surrender of the Remaining Warrant Shares on April 30, 2020. Without limiting the foregoing, notwithstanding any provision of the SMC Note, no interest shall be deemed to have accrued after April 30, 2020 with respect to any principal of or interest on the SMC Note.

3. Representations and Warranties of ACM. ACM represents and warrants to SMC as follows:

3.1 SMC Note. Immediately prior to the execution and delivery of this Agreement, ACM was the sole owner and holder of the SMC Note and held beneficial and legal title to the SMC Note free and clear of any and all liens or other encumbrances.

3.2 Authorization. All corporate action required to be taken to authorize ACM to enter into and perform this Amendment, including the cancellation of the SMC Note and the execution and delivery of the New Warrant and the Adoption Agreement, the issuance has been taken.

3.3 Binding Obligation. Each of this Amendment, the New Warrant and the Adoption Agreement constitutes a valid and legally binding obligation of ACM, enforceable against ACM in accordance with its terms except as limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or other laws of general application relating to or affecting the enforcement of creditors' rights generally or (b) laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

3.4 Valid Issuance of Class A Common Stock. The New Warrant Shares, if and when issued, sold and delivered in accordance with the terms and for the consideration set forth in the New Warrant, will be validly issued, fully paid and nonassessable, and free of restrictions on transfer other than restrictions on transfer under this Amendment and applicable U.S. federal and state securities laws.

3.5 Governmental Consents and Filings. Except as required by the Required Approvals (including all applicable U.S. federal and state securities laws), no consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any national, provincial or local governmental authority of any jurisdiction is required to be obtained by ACM in connection with the consummation of the transactions contemplated by this Amendment.

3.6 Compliance with Other Instruments. ACM's execution, delivery and performance of this Amendment, the New Warrant and the Adoption Agreement will not result in (a) any violation, or be in conflict with or constitute, with or without the passage of time and giving of notice, default, (i) of any provisions of its organizational documents, (ii) of any instrument, judgment, order, writ or decree, (iii) under any note, indenture or mortgage, or (iv) under any lease, agreement, contract or purchase order to which it is a party or by which it is bound, or, to its knowledge, of any provision of any statute, rule or regulation applicable to ACM, the violation of which would have a material adverse effect on the business, assets (including intangible assets), liabilities, financial condition, property or operating results of ACM or (b) an event that results in the creation of any lien, charge or encumbrance upon any assets of ACM or the suspension, revocation, forfeiture, or nonrenewal of any material permit or license applicable to ACM.

4. Representations and Warranties of SMC. SMC represents and warrants to ACM as follows:

4.1 Authorization. All corporate action required to be taken to authorize SMC to enter into and perform this Amendment has been taken.

4.2 Binding Obligation. This Amendment constitutes a valid and legally binding obligation of SMC, enforceable against SMC in accordance with its terms except as limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or other laws of general application relating to or affecting the enforcement of creditors' rights generally or (b) laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

4.3 Governmental Consents and Filings. Except as required by the Required Approvals, no consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any national, provincial or local governmental authority of any jurisdiction is required to be obtained by SMC in connection with the consummation of the transactions contemplated by this Amendment.

4.4 Compliance with Other Instruments. SMC's execution, delivery and performance of this Amendment and the Adoption Agreement will not result in (a) any violation, or be in conflict with or constitute, with or without the passage of time and giving of notice, default, (i) of any provisions of its organizational documents, (ii) of any instrument, judgment, order, writ or decree, (iii) under any note, indenture or mortgage, or (iv) under any lease, agreement, contract or purchase order to which it is a party or by which it is bound, or, to its knowledge, of any provision of any statute, rule or regulation applicable to SMC, the violation of which would have a material adverse effect on the business, assets (including intangible assets), liabilities, financial condition, property or operating results of SMC or (b) an event that results in the creation of any lien, charge or encumbrance upon any assets of SMC or the suspension, revocation, forfeiture, or nonrenewal of any material permit or license applicable to SMC.

4.5 Purchase Entirely for Own Account. SMC is acquiring the New Warrant, and shall acquire (if and when acquired) the New Warrant Shares, for investment for its own account, not as a nominee or agent and not with a view to the resale or distribution of any interest in the New Warrant or the New Warrant Shares. SMC has no present intention of selling, granting any participation in or otherwise distributing any interest in the New Warrant or the New Warrant Shares. SMC does not presently have any contract, undertaking, agreement or arrangement with any individual or entity to sell, transfer or grant participations to either such individual or entity or any third party, with respect to the New Warrant or the New Warrant Shares, as applicable.

4.6 Disclosure of Information. SMC has had an opportunity to discuss with ACM's management the business, management and financial affairs of ACM and ACM Shanghai and the terms and conditions of the offering of the New Warrant and SMC has had an opportunity to review ACM Shanghai's facilities. The foregoing, however, does not limit or modify the representations and warranties of ACM in Section 2 or the right of SMC to rely thereon.

4.7 Restricted Securities. SMC understands the New Warrant has not been and will not be registered under the Securities Act and, if and when issued, the New Warrant Shares will not have been, and will not be, registered under the Securities Act, in each case by reason of a specific exemption from the registration provisions of the Securities Act that depends upon, among other things, the bona fide nature of the investment intent and the accuracy of SMC's representations as expressed in this Amendment. SMC understands that the New Warrant and, if and when issued, the New Warrant Shares shall constitute "restricted securities" under applicable U.S. federal and state securities laws and that, pursuant to those laws, SMC must hold the Warrant and the New Warrant Shares, as applicable, indefinitely unless they are registered with the Securities and Exchange Commission and qualified by state authorities, or an exemption from such registration and qualification requirements is available, including a transfer outside of the United States in an offshore transaction in compliance with Rule 904 under the Securities Act (if applicable). SMC acknowledges that ACM has no obligation to register or qualify for resale the New Warrant or the New Warrant Shares, except as contemplated by the Registration Rights Agreement with respect to the New Warrant Shares, pursuant to the Adoption Agreement. SMC further acknowledges that if an exemption from registration or qualification is available, it may be conditioned on various requirements including the time and manner of sale, the holding period for the New Warrant or the New Warrant Shares, as applicable, and on requirements relating to ACM that are outside of SMC's control and that ACM is under no obligation, and may not be able, to satisfy.

4.8 Legends. SMC understands that the New Warrant and, if and when issued, the New Warrant Shares, which will be held in book-entry form, may be notated with restrictive legends as ACM and its counsel deem necessary or advisable under applicable law or pursuant to this Amendment or the New Warrant, including a legend substantially to the following effect:

“THESE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933. SUCH SECURITIES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION OF THE U.S. SECURITIES ACT OF 1933.”

4.9 Investor Status. SMC is an accredited investor as defined in Rule 501(a) of Regulation D promulgated under the Securities Act and is not a U.S. person as defined in Regulation S under the Securities Act. SMC understands and confirms that the New Warrant has not been, and the New Warrant Shares will not be, offered or sold within the United States as defined under the Securities Act. At the time of the origination of discussion regarding the offer and sale of the New Warrant and the date of the execution and delivery of this Amendment, SMC was at all times outside of the United States. SMC has satisfied itself as to the full observance of the laws of its jurisdiction in connection with any invitation to receive the New Warrant or the New Warrant Shares, as applicable, or any use of this Amendment, including (a) the legal requirements within its jurisdiction for the purchase of the New Warrant or the New Warrant Shares, as applicable, (b) any foreign exchange restrictions applicable to such purchase, (c) any governmental or other consents that may need to be obtained, (d) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale, or transfer of the New Warrant or the New Warrant Shares, as applicable, and (e) SMC’s receipt and continued beneficial ownership of the New Warrant or the New Warrant Shares, as applicable, will not violate any applicable securities or other laws of SMC’s jurisdiction.

5. Miscellaneous.

5.1 Survival. Unless otherwise set forth in this Amendment, the representations and warranties of each Party contained in this Amendment shall survive the execution and delivery of this Amendment and shall in no way be affected by any investigation or knowledge of the subject matter thereof made by or on behalf of the other Party.

5.2 Successors and Assigns. The terms and conditions of this Amendment shall inure to the benefit of and be binding upon the respective successors and assigns of the Parties. Nothing in this Amendment, express or implied, is intended to confer upon any party other than the Parties to this Amendment or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Amendment, except as expressly provided in this Amendment.

5.3 Governing Law. This Amendment and any controversy arising out of or relating to this Amendment shall be governed by and construed in accordance with the General Corporation Law of the State of Delaware as to matters within the scope thereof, and as to all other matters shall be governed by and construed in accordance with the internal laws of the State of Delaware, without regard to conflict of law principles that would result in the application of any law other than the law of the State of Delaware.

5.4 Counterparts. This Amendment may be executed in counterparts, each of which shall be deemed an original but both of which together shall constitute one and the same instrument. Counterparts may be delivered via electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

5.5 Interpretation. For purposes of this Amendment:

- (a) headings used in this Amendment are for convenience of reference only and shall not, for any purpose, be deemed a part of this Amendment;
- (b) references to a Section or Subsection refer to a Section or Subsection of this Amendment, unless specified otherwise;
- (c) the words “include” and “including” shall not be construed so as to exclude any other thing not referred to or described;
- (d) the word “or” is not exclusive;
- (e) the definition given for any term shall apply equally to both the singular and plural forms of the term defined;
- (f) unless the context otherwise requires otherwise, references (i) to an agreement, instrument or other document (including this Amendment) mean such agreement, instrument or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions thereof and (ii) to a statute mean such statute as amended from time to time and include any successor legislation thereto and any rules and regulations promulgated thereunder; and
- (g) this Amendment shall be construed without regard to any presumption or rule requiring construction or interpretation against the party drafting an instrument or causing any instrument to be drafted.

5.6 Notices. All notices and other communications given or made pursuant to this Amendment shall be in writing and shall be deemed effectively given upon the earlier of (a) personal delivery to, or other actual receipt by, the Party to be notified and (b) when sent, if sent by electronic mail during normal business hours of the recipient, or, if not sent during the recipient’s normal business hours, then on the recipient’s next business day. All communications shall be sent to the respective Parties at their addresses or e-mail addresses as set forth on the signature page, or to such address or e-mail address as subsequently modified by written notice given in accordance with this Subsection 5.6. If notice is given to ACM, a copy shall also be sent to Mark L. Johnson at K&L Gates LLP, State Street Financial Center, 1 Lincoln Street, Boston, Massachusetts 02111.

5.7 Attorneys’ Fees. If any action at law or in equity (including arbitration) is necessary to enforce or interpret the terms of any of this Amendment, the prevailing Party shall be entitled to reasonable attorneys’ fees, costs and disbursements in addition to any other relief to which such Party may be entitled.

5.8 Amendments. Any term of this Amendment may be amended or terminated only with the written consent of the Parties.

5.9 Severability. In case any one or more of the provisions contained in this Amendment is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Amendment, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

5.10 Entire Agreement. The Agreement, as amended by this Amendment, together with the New Warrant and the Adoption Agreement, constitute the full and entire understanding and agreement between the Parties with respect to the subject matter of this Amendment, and any other written or oral agreement relating to the subject matter of this Amendment existing between the Parties is expressly canceled.

5.11 Dispute Resolution.

(a) The Parties (a) irrevocably and unconditionally submit to the jurisdiction of the state courts of the State of Delaware and to the jurisdiction of the U.S. District Court for the District of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Amendment, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Amendment except in the state courts of Delaware or the U.S. District Court for the District of Delaware, and (c) waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Amendment or the subject matter of this Amendment may not be enforced in or by such court.

(b) **WAIVER OF JURY TRIAL: EACH PARTY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AMENDMENT OR THE SUBJECT MATTER OF THIS AMENDMENT. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SUBSECTION 5.11(b) HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY FURTHER WARRANTS AND REPRESENTS THAT IT HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.**

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ACM RESEARCH, INC.

By: /s/ Hui Wang

Name: Hui Wang

Title: CEO

Address: 42307 Osgood Road, Suite I
Fremont, CA 94539
United States of America

SHENGXIN (SHANGHAI) MANAGEMENT
CONSULTING LIMITED PARTNERSHIP

By: /s/ Steven Huang

Name:

Title:

Address: Rm. 210-32, 2nd Fl. Building 1
38 Debao Rd.
Pilot Free Trade Zone
Shanghai, China

Adoption Agreement

This Adoption Agreement (this “*Adoption Agreement*”) is executed on July 29, 2020, by the undersigned (“*Acquirer*”) pursuant to the terms of the Second Amended and Restated Registration Rights Agreement dated as of March 17, 2017 (as further amended or restated from time to time, the “*Agreement*”), by and among ACM Research, Inc. and certain of its security holders. Capitalized terms used but not defined in this Adoption Agreement shall have the respective meanings ascribed to them in the Agreement.

By the execution of this Adoption Agreement, Acquirer agrees as follows.

1. **Acknowledgement.** Acquirer acknowledges that, as the result of its receipt on the date hereof of a Warrant to Purchase Class A Common Stock of the Company it has the right to acquire Registrable Securities, consisting of 242,681 Class A Shares acquirable upon exercise of such Warrant, as a holder of securities of the Company in accordance with Section 12(b)(iii) of the Agreement, after which Acquirer shall be considered an “Incidental Rights Holder” for all purposes of the Agreement.
2. **Agreement.** Acquirer adopts the Agreement with the same force and effect as if Acquirer were originally a party to the Agreement.
3. **Conflicts.** In the event that the terms of the Agreement conflict with any other agreement pursuant to which Acquirer is bound, Acquirer expressly acknowledges and agrees that the terms of the Agreement shall govern.
4. **Notice.** Any notice required or permitted by the Agreement shall be given to Acquirer at the address or email address listed below Acquirer’s signature to this Adoption Agreement.

ACQUIRER:

SHENGXIN (SHANGHAI) MANAGEMENT
CONSULTING LIMITED PARTNERSHIP

By: _____, General Partner

By: /s/ Steven Huang

Address: Rm. 210 32, 2nd FL. Building 1,
38 Debao Rd., Pilot Free Trade Zone
Shanghai, China

Email: _____@acmrsch.com

ACCEPTED AND AGREED:

ACM RESEARCH, INC.

By: /s/ Hui Wang
Name: Hui Wang
Title: CEO

Facilities Agreement

(Applicable to working capital loans not subject to a separate loan contract)

No.: 121XY2020018744

Facilities Grantor: China Merchants Bank Co., Ltd. Shanghai Branch (hereinafter referred to as Party A)

Facilities Applicant: ACM Research (Shanghai), Inc. (hereinafter referred to as Party B)

At the request of Party B, Party A agrees to grant a loan facility to Party B for its use. Party A and Party B hereby reach a consensus on the following provisions and hereby enter into this Agreement upon sufficient negotiation in accordance with relevant laws.

1. Line of credit

1.1 Under this Agreement, Party A provides Party B with the line of credit (including revolving line of credit and/or one-off line of credit) of RMB 80 million (including other currencies of equivalent value, the exchange rate being subject to the exchange quotation published by Party A upon the actual occurrence of a specific transaction, same as below).

The outstanding balance for a specific transaction under /(fill in the name of the agreement) No. / between Party A (or Party A's subordinate affiliate) and Party B shall be automatically included under this Agreement and be directly deemed as utilized facilities hereunder.

1.2 The credit term is 12 months, i.e. from August 03, 2020 to August 02, 2021. Party B shall apply with Party A within the term for utilization of the facility for a specific credit business, and Party A will not accept facility utilization requests from Party B beyond the expiration date of the credit term, unless otherwise provided herein.

1.3 Credit businesses under the facility shall include, without limitation, one or more of the following businesses: loans/order loans, trade financing, bills discounting, acceptance of commercial bills of exchange, confirmation/discounting for accepted commercial bills of exchange, foreign/domestic letters of guarantee, guarantee for payment of customs duty, legal-person account overdraft, derivative businesses, gold leasing, etc.

“Trade financing” includes, without limitation, foreign/domestic letters of credit, import bill advance, delivery guarantee, import collection bill advance, package lending, export bill advance, export negotiation, export collection bill advance, import/export remittance financing, credit insurance financing, factoring, guarantee of bills and other business types.

1.4 The revolving credit line refers to the maximum sum of the balance of the principal under one or more credit businesses described in the preceding paragraph, which is granted by Party A to Party B for its continuous and revolving use during the credit term.

The one-off line of credit refers to the maximum sum of the aggregate incurred amount of all credit businesses described in the preceding paragraph, which is approved and granted by Party A to Party B during the credit term. Party B is not allowed to revolve one-time line of credit. Each credit business applied for by Party B will occupy the corresponding amount in the one-off line of credit, until such credit line is fully occupied.

2. Utilization arrangement for the line of credit

2.1 The specific credit business that has been applied for by Party B and approved by Party A during the credit period shall be automatically included in this Agreement and shall use the line of credit hereunder.

2.2 If Party A conducts factoring business in which Party B is the payer (debtor of accounts receivable), Party A's claim in the accounts receivable due from Party B as transferred by a third party under such business shall be deemed as utilized facilities. If Party B applies with Party A for factoring business in which Party B is the payee (creditor of accounts receivable), purchase funds (for the acquired accounts receivable) paid by Party A to Party B under such business with its own funds or other funds of lawful sources for purchase of Party B's claim in the accounts receivable shall be deemed as utilized facilities.

2.3 If, as required by its internal procedures, Party A entrusts any other branch of China Merchants Bank to re-issue the letter of credit to the beneficiary after the issuance of a letter of credit, such letter of credit and the bill negotiation and shipping guarantee business thereunder shall be deemed as utilized facilities.

When conducting the import letter of credit business, if subsequently, there is an import bill advance under the same letter of credit, the import letter of credit and the import bill advance shall be deemed as the same utilized facility at different stages. In other words, in the case of the import bill advance business, the facilities reinstated after payment with letter of credit will be used in import bill advance and shall be deemed as the same utilized facility under the original import letter of credit.

3. Approval and utilization of facilities

3.1 The type of facilities (revolving line of credit or one-off line of credit) under this Agreement, the applicable types of credit business, the amount of facilities corresponding to each type of credit business, whether the facilities under different types of credit business may be shared, and the specific conditions of use, shall be subject to the approval of Party A. If Party A adjusts its original approval for an application submitted by Party B during the credit term, the subsequent approval issued by Party A shall constitute a supplementation and amendment to the original approval, and so on.

3.2 Party B's use of the credit line must be applied for on a case-by-case basis, and Party B shall submit the materials required by Party A for Party A's approval on a case-by-case basis. Party A may decide whether to approve the application by taking into account its internal management requirements and Party B's business conditions, and may unilaterally reject Party B's application without any legal liability to Party B. If there is any discrepancy between this clause and other relevant provisions of this Agreement, this clause shall prevail.

3.3 Upon Party A's approval of a specific credit business, the specific business documents signed by the Party A and Party B for such business (including but not limited to individual agreements/applications, framework agreements or specific business contracts) shall constitute an integral part of this Facilities Agreement. The specific amount, interest rate, term, purpose, costs and other elements of each loan or other credit business shall be subject to the specific business documents, business vouchers confirmed by Party A (including but not limited to loan notes, etc.) and records in Party A's system.

Where Party B requests a working capital loan within the credit line, there is no need for the Parties to sign a separate loan contract. Party B shall submit a withdrawal application on a case-by-case basis, and Party A shall approve such application on a case-by-case basis.

3.4 Party A has the right to adjust the base interest rates or interest rate pricing methods for loans/other credits under this Agreement on a regular or irregular basis in consideration of changes in relevant State policies, domestic and overseas market conditions, or its own credit policies. Such adjustment shall become effective upon Party A's notice to Party B (by publishing an announcement at Party A's outlets or China Merchants Bank's official website, or sending a notice to the mailing address/contact details provided by Party B herein). If Party B does not accept the adjustment, it may make repayments in advance; otherwise, the adjustment shall be deemed to have been accepted by Party B and apply according to the above notice. If a relevant financing business hereunder involves periodic repricing, and the market base interest rate at the time of repricing is 0, Party A will make the pricing with 0 as the base interest rate.

If there is any discrepancy between this clause and other relevant provisions of this Agreement, this clause shall prevail.

3.5 The term for using each loan or other credit within the credit line shall be determined based on Party B's operation needs and Party A's business management rules. The maturity date of a specific business may be later than the expiration date of the credit term (unless otherwise required by Party A).

3.6 During the credit term, Party A has the right to conduct regular annual reviews of Party B's operations, financial conditions, etc., and adjust the credit line granted to Party B based on the review results.

4. Interest rate for working capital loans

4.1 The interest rate for each loan under this Agreement shall be specified by Party B in the corresponding withdrawal application for Party A's approval. If there is any discrepancy between the withdrawal application and the loan note or the record in Party A's system, the loan note or the record in Party A's system shall prevail.

4.2 If Party B fails to use a loan for purposes agreed in this Agreement, for the part not used for the agreed purposes, a penalty interest shall accrue at the original interest rate plus 100% from the date of change of the purposes. The original interest rate refers to the interest rate applicable before the purposes of the loan are changed.

If Party B fails to repay a loan on time, for the unpaid portion of the loan, an overdue interest (penalty interest) shall accrue at the original interest rate plus 50% (overdue interest rate) from the overdue date. The original interest rate refers to the interest rate applicable before the loan maturity date (including early maturity date) (or the interest rate applicable in the last floating period before the loan maturity date (including early maturity date), if floating interest rate is used).

If a loan is both overdue and not used for the agreed purposes, the higher of the above interest rate shall apply.

4.3 During the loan term, if the People's Bank of China adjusts the rules for loan interest rates, the relevant rules of the People's Bank of China shall apply.

4.4 If a loan maturity date falls on a holiday, the loan shall be automatically extended to the first working day immediately following the holiday, and interest shall accrue for the actual number of days utilized by the loan funds.

4.5 Party B shall pay interest on each interest payment date. Party A may directly deduct interests payable from any account of Party B opened with China Merchants Bank. If the repayment date of the last installment of the loan principal is not an interest payment date, the repayment date of the last installment of the loan principal shall be taken as the interest payment date, and the borrower shall pay all interests accrued on the loan principal on that date. If Party B fails to pay interests on time, a compound interest shall accrue on the overdue interests (including penalty interests) at the overdue interest rate provided in this article.

5. Guarantee

5.1 For all debts owed by Party B to Party A under this Agreement, Party B or a third party recognized by Party A shall provide guarantee by mortgaging certain property or provide joint security. Party B or such third-party guarantor shall issue or sign a separate guarantee document at Party A's request.

5.2 If the guarantor fails to sign the guarantee document or complete the guarantee procedures in accordance with this article (including where the debtor of accounts receivable raises a challenge against such accounts before they are pledged), Party A has the right not to provide the relevant facilities to Party B.

5.3 Where a mortgagor mortgages a real estate as guarantee for all debts owed by Party B to Party A under this Agreement, if Party B becomes aware that the collateral is or may be included in the government's demolition or expropriation plan, it shall notify Party A thereof immediately and urge the mortgagor to use the compensation items received from the demolishing party as ongoing guarantee for Party B's debts in accordance with the mortgage contract, and promptly complete the relevant guarantee procedures, or, at Party A's request, provide other security measures approved by Party A.

If, due to the occurrence of an event described in the preceding paragraph to the collateral, it is necessary to re-establish the guarantee or provide other security measures, the relevant costs incurred shall be borne by the mortgagor, and Party B shall bear joint and several liability for such costs. Party A has the right to directly deduct such costs from Party B's account.

6. Party B's rights and obligations

6.1 Party B has the following rights:

6.1.1 To request Party A to provide loans or other credits within the credit line in accordance with the conditions set forth in this Agreement;

6.1.2 To use the credit line in accordance with this Agreement;

6.1.3 To request Party A to keep confidential any information provided by Party B about its production, operations, property, accounts, etc., unless otherwise provided in this Agreement;

6.1.4 To transfer debts to a third party with the written consent of Party A.

6.2 Party B bears the following obligations:

6.2.1 To truthfully provide documents and materials required by Party A (including but not limited to providing authentic financial books/statements and annual financial reports at the frequency required by Party A, material decisions on and changes in the production, operations and management, fund withdrawal/use materials, collateral materials, etc.), as well as information of its account opening bank, account number, deposit and loan balance, and cooperate with Party A in investigations, reviews and inspections;

6.2.2 To be subject to Party A's supervision over the use of credit funds and the relevant production, operation and financial activities;

6.2.3 To use loans and/or other credits in accordance with the provisions of and/or for purposes committed under this Agreement or specific business documents;

6.2.4 To repay the principal, interests and costs of all loans, advances and other credit debts in full and on time in accordance with this Agreement and specific business documents;

6.2.5 To obtain the written consent of Party A before transferring all or part of its debts under this Agreement to any third party;

6.2.6 Upon the occurrence of any of the following events, Party B shall notify Party A immediately and cooperate actively with Party A to provide security measures for the safe repayment of the principal, interests and costs of the loans, advances and other credit debts under this Agreement:

6.2.6.1 Party B experiences a material financial loss, assets loss or other financial crisis;

6.2.6.2 Party B offers a loan or provides a guarantee or security in favor of a third party or in protection of a third party against loss, or provides its own property (rights) as mortgage (pledge) collateral;

6.2.6.3 Party B suspends business operations, has its business license revoked or cancelled, applies or is applied for bankruptcy or dissolution, or changes its key company information, e.g., company name, registered address, place of business, beneficial owner, etc.;

6.2.6.4 Party B's controlling shareholder, affiliated company or *de facto* controller sustains a material operating or financial crisis, which affects its normal business operations, or Party B's legal representative/principal, director or key senior management personnel are replaced or are punished/restricted of freedom by a competent Chinese authority for breach of law, misconduct or for other reasons, or are missing for 7 days, which may affect its normal business operations;

6.2.6.5 Party B makes a related-party transaction with its controlling shareholder, affiliated company or *de facto* controller in an amount equal to 10% of Party B's net assets (Party B's notice shall at least include the affiliation relationship between the transaction parties, transaction items and nature, transaction amount or ratio, pricing policy (including transactions for no price or a nominal price only), etc.);

6.2.6.6 Party B faces any litigation, arbitration or criminal or administrative penalty which has significant adverse impact on its operations or property conditions;

6.2.6.7 Party B or its *de facto* controller is engaged in a significant amount of private usury, or has bad records at other financial institutions for borrowing new loans to repay old ones, overdue loans, overdue interests, etc.; or the internal capital chain of Party B's affiliate is broken and a debt crisis occurs; or Party B's project is terminated or suspended or Party B makes a material investment error;

6.2.6.8 Other major events which may affect Party B's solvency.

6.2.7 Party B shall not be negligent to manage or recover its claims falling due, or dispose of its existing major property without a compensation or by other inappropriate means.

6.2.8 Party B must obtain the prior written consent of Party A for materials matters such as merger (acquisition), division, restructuring, joint venture (partnership), assets (equity interests) transfer, shareholding reform, foreign investment, increasing debt financing, etc.

6.2.9 Where accounts receivable are pledged, Party B shall ensure that the credit balance at any point during the credit term will remain below 80% of the balance of the pledged accounts receivable; otherwise, Party B must provide new accounts receivable approved by Party A as pledge or lodge a deposit (the deposit account shall be the one automatically created or recorded in Party A's system when the deposit is lodged, the same below), until the balance of the pledged accounts receivable \times 80% + valid deposit > credit balance.

6.2.10 Where Party B lodges a deposit, if the balance in the deposit account falls under 95% of the amount of the specific business due to exchange rate fluctuations, Party B shall supplement a corresponding amount of deposit or provide other guarantees at Party A's request.

6.2.11 Party B shall ensure that all import sales revenues are retrieved into Party A's designated account, and for export negotiations, all bills and/or documents under letters of credit are transferred to Party A.

6.2.12 Party B shall ensure that settlements, payments and other revenue earning and expending activities are mainly made via its settlement bank account opened with Party A. During the credit term, the proportion of settlement transactions made via such designated account shall be at least not lower than the proportion of Party B's financing amount with Party A in its total financing amount with all banks.

7. Party A's rights and obligations

7.1 Party A has the following rights:

7.1.1 To request Party B to repay the principal, interests and costs of loans, advances and other credit debts under this Agreement or specific contracts in full and on time;

7.1.2 To request Party B to provide materials for the utilization of its credit line;

7.1.3 To learn about Party B's production, operations and financial activities;

7.1.4 To supervise over Party B's use of loans and/or other credits for purposes stipulated in this Agreement and specific business documents; and to unilaterally and directly suspend or limit, for business needs, the corporate online banking/corporate App/other online functions of Party B's account (including but not limited to closing corporate online banking/corporate App/other online functions, presetting a payee list/single payment cap amount/phased payment cap amount and other limits) and other electronic payment channels, limiting the sale of settlement vouchers, or limiting over-the-counter payments and fund transfers via Party B's account as well as the payment and exchange functions in non-counter channels such as telephone banking and mobile banking;

7.1.5 To, after issuing a letter of credit upon Party B's application, delegate another branch of China Merchants Bank at the place where the beneficiary is domiciled to re-issue the letter of credit to the beneficiary as required by its internal processes;

7.1.6 To deduct directly from any account opened by Party B with any institution of China Merchants Bank for the repayment of Party B's debts under this Agreement and specific business documents (if a credit debt is not in RMB, to directly use funds in Party B's RMB account, converted at the exchange rate announced by Party A at the time of deduction, to repay the principal, interests and costs of such credit debt);

7.1.7 To transfer its claims against Party B and take actions as it deems fit to notify Party B of such transfer and seek collection from Party B, including but not limited to by fax, mail, personal delivery, announcement in public media, etc.;

7.1.8 To supervise over and entrust other institutions of China Merchants Bank to supervise over Party B's accounts, and control the payment of loan funds for such loan purposes within such payment scope as agreed by the Parties;

7.1.9 If Party A finds that Party B falls under any of the circumstances specified in Article 6.2.6 of this Agreement, Party A has the right to request Party B to provide security measures for the safe repayment of the principal, interests and all relevant costs of the credit debts under this Agreement at Party A's request, and also to directly take one or more breach remedies stipulated in the "Breach Events and Handling" clause of this Agreement;

7.1.10 Other rights specified in this Agreement.

7.2 Party A bears the following obligations:

7.2.1 To release loans or provide other credits within the credit line to Party B in accordance with the conditions set forth in this Agreement and specific contracts;

7.2.2 To keep confidential the assets, finance, production and operations of Party B, unless otherwise provided in laws and regulations, or otherwise required by regulatory authorities, or unless the recipient is Party A's superior or subordinate entities or external auditors, accountants, lawyers or other professionals bound by the same confidentiality obligations.

8. Special warranties of Party B

8.1 Party B is a legal-person entity duly established and legally existing under Chinese laws, has completed true, legal and valid registration, annual reporting and disclosure procedures, and has full civil capacity to sign and perform this Agreement;

8.2 Party B has full authorization from its board of directors or any other competent body to sign and perform this Agreement;

8.3 All documents, materials, vouchers, etc. provided by Party B concerning itself and the guarantors, mortgagors (pledgors), mortgage (pledge) collateral, etc. are true, accurate, complete, valid and free from any material misstatement of facts or omission of any material fact;

8.4 Party B shall strictly abide by the specific business documents and the relevant correspondences and documents issued to Party A;

8.5 There are no and will be no lawsuits, arbitrations or criminal or administrative penalties which may have significant adverse impact on Party B or Party B's main property on the signing date or during the performance of this Agreement. Upon the occurrence of any such event, Party B shall notify Party A immediately;

8.6 Party B shall strictly abide by all Chinese laws and regulations in its business activities, strictly carry out business within the scope stated in its business license or as legally approved, and undergo enterprise (legal-person) registration, annual reporting, business term renewal/extension and other procedures on time;

8.7 Party B shall maintain or improve its existing operation and management levels and ensure the preservation and appreciation of its existing assets. It shall not waive any claims falling due or dispose of its existing major property without a compensation or by other inappropriate means;

8.8 Without the permission of Party A, Party B shall not repay any other long-term debts in advance;

8.9 All loans applied for under the credit shall meet the requirements of laws and regulations. Party B shall not use the loans for investment in fixed assets, equity interests, etc., or for speculation in marketable securities, futures or real estate, or for mutual borrowing to seek illegal gains, or in areas and for purposes banned by the State for its production and operation, or for purposes other than those specified in this Agreement and specific business documents;

Where loan funds are to be paid by the borrower itself, Party B shall report to Party A on a regular basis (at least on a monthly basis) the payment of such loan funds, and Party A has the right to verify whether the loan funds are paid for the agreed purposes via account analysis, voucher inspection, on-site investigation, etc.

8.10 There are no other major events concerning Party B which will affect Party B's performance of its obligations under this Agreement on the signing date and during the performance of this Agreement.

9. Special provisions on working capital loans

9.1 Withdrawal and use of funds

Party B may use the working capital loans under this Agreement by way of self payment or entrusted payment.

9.1.1 Self payment

Self payment means that Party A releases the loan funds into Party B's account upon Party B's withdrawal application, while Party B makes payment to a counterparty for purposes stipulated in the relevant agreement.

9.1.2 Entrusted payment

Entrusted payment means that, upon Party B's withdrawal application and entrustment, Party A pays the loan funds to a counterparty for purposes stipulated in the relevant agreement via Party B's account. For loan funds under entrusted payment, Party B authorizes Party A to pay the same to the counterparty through Party B's account on the loan release date (or on the first working day immediately following the loan release date).

9.1.3 Under any of the following circumstances, Party B shall unconditionally and fully make entrusted payment:

9.1.3.1 The amount of a single withdrawal exceeds RMB 10 million (including, or equivalent in, foreign currency);

9.1.3.2 Party A requires Party B to make entrusted payment based on regulatory requirements or risk management needs.

9.1.4 For an entrusted payment, Party B's outward payment of the loan funds after disbursement of the loan must be approved by Party A. Party B shall not evade Party A's supervision by online banking, check inversing, or breaking up a large payment into several small ones, etc.

9.2 When Party B withdraws a fund, it shall submit a withdrawal application (affixed with Party B's official seal or its specimen seal/signature recorded at Party A) and a loan note as required by Party A, as well as materials required by Party A for self payment or entrusted payment, as the case may be; otherwise, Party A has the right to refuse Party B's withdrawal application. If any payment is delayed or fails due to inaccurate or incomplete payment information provided by Party B, **Party A shall not be held liable for Party B's breach towards its counterparty or other losses caused thereby.**

9.3 Loan extension

If Party B is unable to repay a loan under this Agreement on time and needs an extension, it shall submit a written application to Party A one month before the expiration of the loan. If Party A agrees to grant the extension after examination, the Parties shall sign a separate loan extension agreement. If Party A does not agree to grant the extension, the loan amount already utilized by Party B and the interests accrued thereon shall be repaid in accordance with this Agreement, the relevant loan note or the record in Party A's system.

10. Breach events and handling

10.1 If Party B falls under any of the following circumstances, a breach event shall be deemed to have occurred:

10.1.1 Party B fails to perform or violates its obligations under this Agreement;

10.1.2 Party B's special warranties under this Agreement are untrue or incomplete, or Party B violates any such special warranty and fails to make corrections as required by Party A;

10.1.3 Party B fails to withdraw or use loans in accordance with this Agreement, or fails to repay any loan principal, interest or costs in full and on time in accordance with this Agreement, or fails to use the funds in the fund retrieval account as required by Party A, or fails to subject itself to Party A's supervision and make prompt corrections as required by Party A;

10.1.4 Party B commits a material breach under a legally valid contract with other creditors, which is not satisfactorily resolved within three months upon occurrence.

A material breach mentioned above refers to a breach by Party B which entitles the creditor to claim an amount of over RMB 1 million against Party B.

10.1.5 Where Party B is a company listed on the National Equities Exchange and Quotations (NEEQ) or intends to apply for NEEQ listing, its NEEQ listing encounters material obstacles or its application for listing is suspended; Party B is issued a warning letter by the NEEQ market, is ordered to make corrections, has transactions via its securities account restricted, or is subject to other self-regulatory measures for 3 times or more, or is imposed disciplinary actions, a termination of listing, etc.;

10.1.6 Where Party B is a supplier of a government procurement unit, the government procurement unit delays payment for three consecutive or cumulative times or presents other risks not conducive to the repayment of Party B's credit debts to Party A, or Party B is disqualified as a supplier (is entered into the government's procurement blacklist), or makes untimely delivery of goods, or supplies products of unstable quality, or experiences operation difficulties or significant deterioration in its financial conditions (insolvency), or discontinues its projects, etc.;

10.1.7 Party B's financial indicators fail to continuously meet the requirements of this Agreement/specific business documents; or the preconditions (if any) for Party A's grant of credit/financing to Party B under this Agreement/specific business documents are not continuously satisfied;

10.1.8 Party B uses any loan by "breaking up a large payment into several small ones" to avoid the requirements of this Agreement under which Party B should have entrusted Party A to make outward payments with the loan funds;

10.1.9 Party B's business activities may cause compliance risks of anti-money laundering or sanction to Party A.

10.1.10 Other circumstances which Party A believes will impair its legitimate rights and interests.

10.2 Where a guarantor falls under any of the following circumstances, which Party A believes may affect the guarantor's ability of guarantee and thus requests the guarantor to eliminate the adverse impact caused thereby or requests Party B to increase or replace the guarantee conditions, if the guarantor or Party B fails to cooperate, a breach event shall be deemed to have occurred:

10.2.1 Any event similar to those described in Article 6.2.6 occurs or any event described in Article 6.2.8 occurs without the consent of Party A;

10.2.2 The guarantor, at the time of issuing an irrevocable letter of guarantee, conceals its actual ability to assume the liability of guarantee, or fails to obtain the authorization from the competent authority;

10.2.3 The guarantor fails to complete the relevant registration, annual reporting and/or business term renewal/extension or other procedures on time;

10.2.4 The guarantor is negligent to manage or recover its claims falling due, or disposes of its existing major property without a compensation or by other inappropriate means.

10.3 Where a mortgagor (or pledgor) falls under any of the following circumstances, and Party A believes that the mortgage (or pledge) cannot be established or the mortgage (or pledge) collateral becomes insufficient and thus requests the mortgagor (or pledgor) to eliminate the adverse impact caused thereby or requests Party B to increase or replace the guarantee conditions, if the mortgagor (or pledgor) or Party B fails to cooperate, a breach event shall be deemed to have occurred:

10.3.1 The mortgagor (or pledgor) has no title to or right of disposition in the mortgage (pledge) collateral, or there are disputes over such title or right;

10.3.2 The mortgage (or pledge) collateral has not undergone mortgage/pledge registration procedures, or has been leased, seized, attached, put into custody, or is subject to a joint/statutory right of priority (including but not limited to the right of priority over construction project funds), etc., and/or such situation is concealed;

10.3.3 The mortgagor transfers, leases, re-mortgages or disposes of the collateral in any other inappropriate manner without the written consent of Party A, or the mortgagor does so with the written consent of Party A but fails to use the proceeds from such disposal at Party A's request to repay the debts owed by Party B to Party A;

10.3.4 The mortgagor fails to properly preserve, maintain or repair the collateral, resulting in a significant reduction in the value of the collateral; or the mortgagor acts in such a manner as to directly endanger the collateral, resulting in a reduction in the value of the collateral; or the mortgagor fails to procure/renew insurance for the collateral as required by Party A during the mortgage term;

10.3.5 The collateral is or may be included in the government's demolition or expropriation plan, but the mortgagor fails to promptly notify Party A thereof or perform the relevant obligations under the mortgage contract;

10.3.6 The mortgagor uses the residual value of a property mortgaged to China Merchants Bank as collateral to provide guarantee for a business under this Agreement, and before Party B has repaid the credits hereunder, the mortgagor settles his/her individual mortgage loan in advance without the consent of Party A;

10.3.7 Where the pledgor uses a financial product as collateral, the source of the fund used to subscribe for the financing product is illegal/incompliant with regulations;

10.3.8 The mortgage (pledge) collateral is or may be involved in other events which will affect the value of the collateral or Party A's right of mortgage (pledge) in the collateral.

10.4 Where the guarantee under this Agreement includes the pledge of accounts receivable, if the debtor of the accounts receivable experiences significant deterioration in its business operations, or transfers property/withdraws funds to evade debts, or colludes with the pledgor of the accounts receivable to change the repayment path, resulting in the accounts receivable not repaid into the special repayment account, or loses business reputation, or loses or may lose the ability to perform the relevant contract, or falls under other major circumstances which will affect its ability to repay debts, Party A has the right to request Party B to provide corresponding guarantee or pledge other valid accounts receivable. If Party B fails to do so, a breach event shall be deemed to have occurred.

10.5 If a breach event described above occurs, Party A has the right to take the following measures separately or simultaneously:

10.5.1 Reduce the credit line under this Agreement, or stop the use of the remaining credit line;

10.5.2 Early recover the principal, interests and relevant costs of loans already disbursed within the credit line;

10.5.3 For bills of exchange already accepted by Party A or letters of credit, letters of guarantee, delivery letters of guarantee, etc. already issued by Party A (including those re-issued under a delegation arrangement) during the credit term, regardless of whether Party A has made any advances, Party A may request Party B to lodge additional deposits or transfer the deposit balance in Party B's other accounts opened with Party A into the deposit account as deposit for any future advances made by Party A for Party B under this Agreement, or escrow the corresponding amount to a third party as deposit for future advances by Party A for Party B;

10.5.4 For claims in unpaid accounts receivable transferred from Party B under a factoring business, Party A has the right to request Party B to immediately perform the obligations of repurchase and take other recovery measures under the relevant specific business documents. For claims in accounts receivable against Party B which are transferred from Party B under a factoring business, Party A has the right to recover them from Party B immediately.

10.5.5 Party A may also, based on the actual situation, directly request Party B to provide other property acceptable to Party A as new guarantee. If Party B fails to provide the new guarantee as required, it shall pay liquidated damages at 30% of the credit line under this Agreement.

10.5.6 Directly freeze/deduct the deposit balance in any settlement account and/or other accounts opened by Party B with China Merchants Bank, stop opening new settlement accounts for Party B, and stop issuing new credit cards to Party B's legal representative;

10.5.7 Report information of Party B's breaches and dishonesty to credit reporting agencies and banking associations, and share such information among banking institutions or even make it public by appropriate means;

10.5.8 Dispose of the mortgage (pledge) collateral and/or recover against the guarantor in accordance with the guarantee documents;

10.5.9 Change the conditions for entrusted payment of funds of working capital loans under the credit line, or cancel the option of "self payment" of loan funds by Party B;

10.5.10 Make recoveries in accordance with this Agreement.

10.6 Funds recovered by Party A shall be used to repay credits in a "from the last to the first" order based on their actual maturity dates. For each specific credit, the repayment order shall be: costs, liquidated damages, compound interest, penalty interest, interest, and principal, until the principal, interests and all relevant costs are fully repaid.

Party A has the right to unilaterally adjust the above repayment order, unless otherwise provided by laws and regulations.

11. Amendment and supplementation to the Agreement

This Agreement may be amended by the Parties through mutual consultation with a written agreement. This Agreement shall remain valid until such written amendment is signed. Neither Party may make unilateral amendment to this Agreement without authorization.

Written supplementary agreements signed by the Parties for matters not covered herein or amendments hereto, together with the specific business documents hereunder, shall constitute an integral part of this Agreement.

12. Miscellaneous

12.1 During the term of this Agreement, any tolerance or grace period granted by Party A for any breach or default by Party B or any delay by Party A in enforcing its rights or interests hereunder shall not impair, affect or restrict Party A's rights and interests as a creditor under applicable laws and this Agreement, or constitute Party A's permission or endorsement of any breach hereof, or be taken as Party A's waiver of its right to take actions against any existing or future breaches.

12.2 If, for any reason, this Agreement or any provision hereof becomes invalid at law, Party B shall remain obliged to repay all debts owed to Party A under this Agreement. In such event, Party A has the right to terminate the performance of this Agreement and immediately recover all debts owed by Party B under this Agreement.

If, due to any change in applicable laws and policies, Party A incurs additional costs in performing its obligations under this Agreement, Party B shall indemnify Party A for such additional costs at Party A's request.

12.3 Notices, demands or other documents relating to this Agreement between the Parties shall be sent in writing (including but not limited to by mail, fax, email, corporate online banking/corporate APP or other electronic platforms, mobile phone text message, WeChat, etc.).

12.3.1 A notice shall be deemed duly served, if delivered by person (including but not limited to by lawyer/notary public, courier, etc.), on the date of acknowledgement of receipt by the recipient (if the recipient rejects, on the day of rejection/return or seven days after the delivery date (whichever is earlier)); if sent by mail, seven days after the sending date; if sent by fax, email, notification on Party A's electronic platform, mobile phone text message, WeChat or other electronic means, on the date when the sender's relevant system displays a transmission success message.

Where Party A makes an announcement in public media to notify Party B of a transfer of creditor's rights or seek collection from Party B, the notice shall be deemed duly served on the date of such announcement.

Where a Party changes its mailing address, email address, fax number, mobile number or WeChat account, it shall notify the other Party of such change within five working days from the date of the change; otherwise, the other Party has the right to serve notices to the original mailing address or other contact details. If a notice is not successfully served due to a change in the recipient's mailing address or other contact details, it shall be deemed duly served on the date of return or seven days after the date of delivery (whichever is earlier). The Party making the change shall bear all potential losses caused thereby, without prejudice to the legal effect of the service.

12.3.2 The mailing address, email address, fax number, mobile number and WeChat account stated in this Agreement shall be the Parties' respective addresses for service of notary and judicial instruments (including but not limited to statements of complaint/arbitration applications, evidence, subpoena, notices of response, notices of production of evidence, notices of court session, hearing notices, judgments/arbitral awards, rulings, mediation letters, notices of performance within subscribed time limit, etc. and other legal instruments at the case hearing and enforcement stages). Service by the court handling the case or a notary public to the above address in writing by means stipulated in this Agreement shall be deemed as effective service (the specific standards for effective service are set forth in the preceding paragraph).

12.4 The Parties agree that, for trade financing business applications, Party B only needs to affix its specimen seal/signature recorded at Party A, the effect of which is recognized by both Parties.

12.5 The Parties agree that, for credit business applications or business vouchers submitted by Party B via Party A's electronic platforms (including but not limited to corporate banking/corporate App), electronic signature generated from the digital certificate shall be deemed as Party B's valid signature, representing Party B's true intent. Party A has the right to prepare the relevant business vouchers based on the application information submitted online, and Party B recognizes the authenticity, accuracy and legitimacy thereof and shall be bound thereby.

12.6 To facilitate business handling, Party A's operations involving any transaction (including but not limited to the acceptance of applications, review of materials, loan disbursement, transaction confirmation, fund deduction, inquiry, receipt printing, collection, crediting and debiting of funds, and notifications) may be handled by any of its outlets within its jurisdiction, and such outlet may generate, make or issue the relevant correspondences accordingly. All business operations and correspondences made by Party A's outlets within Party A's jurisdiction shall be deemed as Party A's actions and be binding on Party B.

12.7 Appendixes hereto shall constitute an integral part of this Agreement and automatically apply to the relevant specific businesses which actually occur between the Parties.

12.8 Costs for notarization (excluding mandatory notarization) or for other services provided by a third party shall be borne by the entrusting Party. If the Parties jointly act as the entrusting party, each Party shall bear 50%.

If Party B fails to repay a debt to Party A under this Agreement on time, it shall bear all attorney's fees, litigation costs, travel expenses, announcement fees, delivery fees and other costs incurred by Party A to enforce its creditor's rights. Party B authorizes Party A to deduct such costs directly from its bank accounts opened with Party A. If there is a shortage, Party B warrants to make up for it in full upon receipt of Party A's notice without the need for Party A to provide any proof.

12.9 At Party A's request, Party B shall (tick "√" in the "□"):

Procure insurance for its core assets and name Party A as a beneficiary with top priority;

Not sell or mortgage the /assets designated by Party A until all credit debts are settled;

Impose the following restrictions on dividends to its shareholders as required by Party A until all credit debts are settled:

/

12.10 Party B shall ensure that all its financial indicators will not go below the following criteria during the credit term: /

12.11 Party B also recognizes the provisions of the Cooperation Agreement on Group Facility Business No. /between China Merchants Bank /Branch and Party B's parent company/ headquarters/ controlling company /_(fill in the enterprise name) (including the adjustment and supplementation made by the parties thereto from time to time), agrees to be bound by such agreement, and agrees to, as a subordinate unit under such agreement, bear the obligations imposed in such agreement on the subordinate units of the group. In the event of a violation of such agreement, it shall be deemed as a violation of this Agreement, and Party A has the right to take various remedy measures for violation provided in this Agreement.

12.12 Other matters agreed:

12.12.1 (1) Party B shall not use false contracts with affiliates, or bills, accounts receivable or other claims without a trade background to handle bills discounting, factoring, pledge, letters of credit, forfeiting or other businesses with Party A. If Party B uses a related-party transaction to damage or evade the claims of Party A or other branches of China Merchants Bank, a breach event shall be deemed to have occurred under this Agreement, which will entitle Party A to take the corresponding actions against the breach in accordance with this Agreement. (2) If an affiliate of Party B commits a breach against China Merchants Bank, a breach event shall be deemed to have occurred under the group's credit, which will entitle Party A to, based on the extent of impact of the breach event, decide whether to take actions against the breach in accordance with this Agreement, regardless of whether Party B has committed a breach under this Agreement. (3) A related-party transaction refers to a transfer of resources or obligations between related parties, regardless of whether a price is charged. A party is a related party of the other party if it is able to directly or indirectly control or jointly control the other party or exert significant influence on the other party's corporate finance and operation decisions. If two or more parties are controlled by the same party, they are also related parties. The Parties agree that the specific definition of related party shall be subject to Party A's determination. (4) A group refers to a group of legal persons in which one party directly or indirectly holds (controls) or is held (controlled) by the others, or a group of legal persons who are substantially or materially affiliated to each other in terms of risk (e.g., they are controlled by the same third party or have other affiliation relationships, which may result in a transfer of assets and profits not at a fair price). Controlling refers to a relationship in which Party B has actual control or significant influence over the other party's business decision-making, capital operations, and the appointment of its senior management personnel. The Parties agree that whether a party is a member of a group shall be subject to Party A's determination.

12.12.2 Party B is not performing any contract for domestic loans with foreign guarantee. If such a situation occurs, Party B shall report to Party A immediately, and Party A shall have the right to suspend the execution of new contracts for domestic loans with foreign guarantee or the handling of new withdrawals. Party B warrants that if there is any guaranteed performance under this Agreement, the sum of the balance of outstanding principal plus the balance of existing external liabilities will not exceed the balance of its cross-border financing risk weight. If the sum exceeds the balance of its cross-border financing risk weight, Party B shall bear all liability arising therefrom.

13. Account information

13.1 Special loan account (tick "√" in the "☐", if applicable)

The release and payment of all loan funds under this Agreement must be made through the following account:

Account name: ACM Research (Shanghai), Inc.

Account number: [***]

Opening bank: Business Department of China Merchants Bank Co., Ltd. Shanghai Branch

13.2 Fund retrieval account

13.2.1 The Parties agree to designate the following account as Party B's fund retrieval account:

Account name: ACM Research (Shanghai), Inc.

Account number: [***]

Opening bank: China Merchants Bank Co., Ltd. Shanghai Branch

13.2.2 The account above is subject to the following supervision requirements: /

Party A has the right to collect loans early based on Party B's fund retrieval results. That is, whenever a fund is retrieved into the account above, loans equivalent to the amount of such retrieved fund may be deemed to have matured early, and Party A may deduct the same amount directly from the account to repay the loans.

13.3 Party B shall provide a fund flow statement of the account above on a quarterly basis, and cooperate with Party A's supervision over the relevant accounts and retrieved funds.

14. Governing law and dispute resolution

14.1 The conclusion, interpretation and dispute resolution of/under this Agreement shall be governed by and the Parties' rights and interests shall be protected under the laws of the People's Republic of China (excluding the laws of Hong Kong, Macao and Taiwan).

14.2 Disputes between the Parties in the performance of this Agreement shall be resolved through consultation. If the consultation fails, either Party may (choose one of the options below by ticking "✓" in the corresponding "□"):

14.2.1 Bring a lawsuit to the people's court having jurisdiction at the domicile of Party A;

14.2.2 Bring a lawsuit to the people's court having jurisdiction at the place where this Agreement is signed, i.e., /;

14.2.3 Apply for arbitration with (insert name of the specific arbitration institution), with the venue of arbitration being /.

14.3 Once this Agreement and the specific business documents become enforceable after the Parties have them notarized, Party A may directly apply for enforcement hereof and thereof with a people's court having jurisdiction to recover the debts owed by Party B hereunder and thereunder.

15. Effectiveness

This Agreement shall take effect after the Parties affix official seals/contract seals on it, and shall be automatically terminated on the expiration date of the credit term or the date when all debts and other relevant costs owed by Party B to Party A under this Agreement are settled (whichever is later).

16. Supplementary provisions

This Agreement is made in three originals, with Party A, Party B, Shanghai Branch Release Center, and / each holding one original. All originals shall have the same legal effect.

Appendixes:

1. Special Provisions on Cross-border Trade Financing Business
 2. Special Provisions on Buyer/Import Factoring Business
 3. Special Provisions on Order Loan Business
 4. Special Provisions on Accepted Commercial Bills Discounting Business
 5. Special Provisions on Derivative Trading Business
 6. Special Provisions on Gold Leasing Business
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Special Provisions on Cross-border Trade Financing Business

1. Cross-border Linkage Trade Financing Business refers to the cross-border trade financing business that Party B applies with Party A based on Party B's true cross-border transactions with overseas companies, which is cooperatively provided by Party A and the overseas institution of China Merchants Bank (hereinafter referred to as the "Linkage Platform").

2. Cross-border linkage trade financing business covers the specific varieties of back-to-back L/C, entrusted issuance, entrusted overseas financing, certified bill payment, overseas credit granting with L/G, and cross-border trade financing shortcut. The specific meanings and business rules of various business varieties are stipulated in specific business agreements.

3. Under the back-to-back L/C business, the overriding credit that Party B applies to Party A shall directly utilize the credit line hereunder. Under the overriding credit, the bills of exchange or advance payments (whether they occur within the credit period) that Party A handles to fulfill the issuing bank obligation and the pertinent interests and expenses shall constitute Party B's financing debts owed to Party A, and shall be included in the scope of credit guarantee.

Under the entrusted issuance/entrusted overseas financing business, the L/C or trade financing that Party A entrusts the linkage platform to issue or provide to the overseas company according to Party B's application shall utilize the credit line hereunder. If Party A issues fund for inward bills purchased under collection or provides advance payment to Party B for external payments, such fund or advance payment (whether it occurs within the credit period) and the pertinent interests and expenses shall directly constitute Party B's financing debts owed to Party A, and shall be included in the scope of credit guarantee.

Under the certified bill payment business, Party A shall directly utilize the credit line hereunder and certify the payment of Party B's acceptance bills based on Party B's application. If Party B fails to pay the full amount of bills on time, Party A has the right to directly prepay on the certified bills. The prepayment (whether it occurs during the credit period) and the pertinent interests and expenses shall be included in the scope of credit guarantee.

Under the overseas credit granting with L/G business, Party A shall directly utilize the credit line hereunder in accordance with the L/G or standby L/C that Party B applies for issuance. After the overseas company transfers the right of payment collection (rather than the right of claim) under the L/G to the Linkage Platform and the Linkage Platform claims payment from Party A according to the L/G or standby L/C, Party A's prepayment (whether it occurs during the credit period) and the pertinent interests and expenses shall directly constitute Party B's financing debts owed to Party A and shall be included in the scope of credit guarantee.

Under the cross-border trade financing shortcut business, after Party A approves Party B's application for trade financing, the trade financing that the linkage platform directly provides to Party B shall utilize the credit line hereunder. If Party B fails to repay the linkage platform's trade financing in full, Party A is entitled to repay it by means of a bill of exchange or advance payment. The relevant bill of exchange or advance payment (whether it occurs during the credit period) and the pertinent interests and expenses shall directly constitute Party B's financing debts owed to Party A and shall be included in the scope of credit guarantee.

Special Provisions on Buyer/Import Factoring Business

1. Definitions

1.1 The buyer/import factoring business refers to that Party A, as the buyer/import factor, acquires the accounts receivable (of which Party B is the debtor) from the seller/export factor under the commercial contract, and provides the seller/export factor with comprehensive factoring services including certified payment, accounts receivable collection, and management.

Under the buyer/import factoring business, if Party B faces any buyer's credit risks, Party A shall assume the certified payment obligation to the seller/export factor. If a dispute arises during the performance of the commercial contract, Party A has the right to re-transfer the acquired accounts receivable to the seller/export factor.

1.2 The seller/export factor refers to the party who signs the factoring business agreement with the supplier/service provider (the accounts receivable creditor) under the commercial contract, and acquires the accounts receivable held by the accounts receivable creditor. Party A can act as the buyer/import factor and the seller/export factor at the same time.

1.3 Disputes refer to the defenses, counter-claims, offsets, or similar acts that Party B has against the accounts receivable acquired by Party A because of disputes between the accounts receivable creditor and Party B over the goods, services, invoices, or any other commercial contract issues, and third parties' claims for the accounts receivable hereunder or applications for inquiry, suspension, or deduction. A dispute is deemed to have occurred when any accounts receivable that Party A acquires cannot be realized in full or in part for reasons other than the buyer's credit risks.

1.4 A commercial Contract refers to the business contract signed between Party B and the accounts receivable creditor for the purpose of commodity trading and/or service trading, which takes sale on credit as the settlement method.

1.5 Certified Payment/Payment under Guarantee refers to that when Party B faces any buyer's credit risks, Party A shall pay the corresponding accounts receivable amount to the seller/export factor within a certain period after the due date of the accounts receivable.

2. At the request of Party B, Party A agrees to handle the buyer/import factoring business within the credit line for Party B, and Party B's accounts receivable acquired from the seller/export factor shall be deducted from/shall utilize the credit line hereunder based on the specific amount.

When Party A, as the buyer/import factor, fulfills its certified payment/payment guarantee obligations to make payments and pay the pertinent expenses, it shall be deemed as Party A's granting credit to Party B under the Facilities Agreement (the financing interest rate shall be / within 30 days from the release date, and be / beyond the previous period), and the payments and pertinent expenses shall be included in the scope of Party B's facility guarantee. Party A has the right to take measures stipulated under this Agreement to claim the certified payment/guaranteed payment from Party B. As long as the seller/export factor (whether it is Party A or not) has acquired the accounts receivable during the credit period, Party A has the right to claim payment from Party B in accordance with the Facilities Agreement and the commercial contract even if such claims are made beyond the credit period.

3. Buyer/import factoring fees

The factoring fees shall be the business management fees that Party A collects for providing the buyer/import factoring service. Party A shall collect the factoring fees from Party B at a certain ratio of the accounts receivable amount at the time of acquisition. The specific rate shall be reasonably determined by Party A according to its business rules.

4. For disputes arising out of the performance of the commercial contract, Party B shall waive its right to raise an objection. In view of this, regardless of whether there are other agreements, provided that Party B fails to make payment in accordance with the provisions of the commercial contract, it shall be deemed that Party B has a buyer's credit risk, Party A will proceed the certified payment, and Party B has no objection to this.

Special Provisions on Order Loan Business

1. The order loan business refers to the loan business that Party A, based on the commercial contracts (or engineering contracts) signed between Party B and its downstream customers (the payer), issues to Party B for the daily production and operation regarding the performance of its commercial contracts (or the performance of its engineering contracts) and uses the sales contract cash inflow (or project cash inflow) as the primary source of repayment.

2. Party B shall open a special account for the cash inflow of its sales orders under the commercial contracts (or engineering contracts) with Party A. The cash inflow of all sales orders under the commercial contracts (or engineering contracts) must be directly paid to the special account. The special account shall not be used or changed without the approval of Party A. Party B shall notify the payer that the special account is the only account for the cash inflow of its sales orders. Party A has the right to deduct funds from the special account for repayment of the principal, interest, default interest, and other related expenses of the order loan financing.

3. Upon the occurrence of any of the following circumstances, Party A may immediately stop Party B's utilization of the credit line under the Facilities Agreement and take default management measures accordingly:

3.1 Party B's downstream customers have delayed in making payment for three consecutive periods, and Party A, based on its reasonable judgment, believes that their financial position has deteriorated, which is not conducive to protecting Party A's rights as the creditor.

3.2 Party B is disqualified from being the supplier by its downstream customers because of Party B's delayed supply of goods, unstable product quality, construction without downstream customers' approval or failing to follow the engineering contract, lowered qualifications that fail to meet downstream customers' requirements, or operation difficulties and deteriorated financial position based on Party A's reasonable judgment, or because Party B's cash inflow from downstream customers is less than the total monthly due amount of financing contracts under this credit line for three consecutive months, or the downstream customers fail to make payment in installments in accordance with the engineering contract for two consecutive periods.

Special Provisions on Accepted Commercial Bills Discounting Business

1. The discounting of commercial acceptance bills refers to the discounting business that Party A offers to commercial acceptance bills accepted, endorsed or guaranteed by Party B, or that Party A allows the holder to process at any branches of China Merchants Bank (hereinafter referred to as “Other Discounting Acceptance Banks”). The holder (hereinafter referred to as the “Discounting Applicant”) may apply to Party A or other discounting acceptance banks for discounting of commercial acceptance bills. The discounting business shall all utilize the credit line under this Agreement.

Considering that Party A’s provision of the discounting service for commercial acceptance bill to Party B is the precondition for other discounting acceptance banks’ acceptance of bill holders’ discounting applications, other discounting acceptance banks are entitled to transfer the discounted bills to Party A after the discounting business is completed, and Party A is obliged to accept the transfer, for which Party B raises no objection.

2. The commercial acceptance bills mentioned in this clause include both paper commercial acceptance bills and electronic commercial acceptance bills (hereinafter referred to as “Electronic Bills”). Interests may be paid by the buyer, the seller, another party, or as provided in an agreement.

3. Party B shall open a commercial acceptance bill margin account with Party A (the account number shall be the one generated or recorded by Party A’s system when the margin is deposited) and before each bill is accepted, deposit a certain amount of funds to the margin account according to Party A’s requirements. The funds will be used as Party B’s payment bond for the acceptance of commercial acceptance bills that Party A or other discounting acceptance banks offer a discounting.

If Party B is the acceptor of a commercial acceptance bill, Party B shall deposit the full amount of payables to its margin account opened with Party A before the due date of each commercial acceptance bill, for the bills to be paid on time.

4. During the credit period, the discounting applicant may use commercial acceptance bills accepted, endorsed or guaranteed by Party B, to apply for discounting to Party A directly, or apply for discounting to other discounting acceptance banks. Party A or other discounting acceptance banks have the right to conduct qualification examinations on discounting applicants, request Party B to conduct audit verifications, and decide whether the corresponding discounting would be accepted.

After the other discounting acceptance banks have completed the discounting, they are entitled to endorse and transfer the discounted commercial acceptance bills to Party A in accordance with the relevant provisions of China Merchants Bank. After Party A has processed the discounting or accepted commercial acceptance bills from other discounting acceptance banks, Party B shall pay Party A the payables in full unconditionally and in a timely manner when required.

5. The issuance, acceptance, guarantee, endorsement, discounting, etc. of each Electronic Bill shall be subject to the business information stored in China bill exchange system or electronic commercial bill system, or the business records such as customer statements filled in or printed accordingly. The information stored in China bill exchange system or electronic commercial bill system, and the business records generated on the basis thereof, shall be an integral part of and have the same legal effect as this appendix. Party B acknowledges the accuracy, authenticity, and legitimacy of the foregoing.

6. If a dispute arises out of the underlying contract for commercial acceptance bills accepted by Party A, Party B and the parties concerned shall coordinate and resolve it, and Party B shall not be released from the obligations to pay for the margin and the bills in full and in a timely manner in accordance with Article 3.

7. If Party A has discounted a commercial bill accepted, endorsed, or guaranteed by Party B, or has accepted such a commercial bill from other discounting acceptance banks, Party A has the right to take collection measures directly against Party B, including deducting money from any of Party B's deposit accounts at China Merchants Bank for payment if the payer or Party B fails to pay the full amount before the due date of the commercial acceptance bill. If Party B fails to pay the full amount or Party A offers an advance payment because of insufficient balance in Party B's account, Party A shall collect a default interest at 0.05% of the advance payment per day in accordance with relevant provisions of the *Payment and Settlement Measures*.

Special Provisions on Derivative Trading Business

1. For derivatives transactions that Party A conducts upon acceptance of Party B's application, they may utilize the credit line at a certain ratio of the principal/transaction amount. When a derivative transaction has floating losses, Party A may increase the utilized credit line of Party B according to the specific agreement between the parties (when each transaction actually occurs, Party A shall determine the amount of the utilized credit line based on the type, deadline, and risk degree of the transaction, and/or the risk degree coefficient of the business corresponding to the deducted credit line, etc.). The amount of the credit line actually utilized shall be subject to records in transaction documents such as the credit line utilization notice and/or transaction confirmation/certificate issued by Party A.

2. Derivative transactions that have balances or losses during the credit period shall utilize the credit line in accordance with the provisions of the preceding article regardless of whether the date of the transaction falls within the credit period.

Special Provisions on Gold Leasing Business

1. "Gold leasing" refers to the business in which Party A leases physical gold to Party B, and upon expiration, Party B will return the same amount of gold of the same property and pay the lease fee in RMB to Party A on time.

2. Party A may handle the gold leasing business for Party B within the credit period and the credit line based on Party B's application. The physical gold leased by Party A shall utilize the credit line with the value prescribed in the gold lease agreement between both parties, and it shall constitute Party B's debt owed to Party A.

Special Notes:

Both parties have fully negotiated all terms of this Agreement (including appendixes hereto). Party A hereby reminds Party B of paying special attention to the terms regarding the exemption or restriction of Party A's liability, Party A's unilateral rights, the increase of Party B's liability, or restriction of Party B's rights, and requests Party B to fully and accurately understand these terms. Party A has made corresponding explanations on the above terms at the request of Party B. The parties to the agreement have a consistent understanding of the provisions of this Agreement.

(The remainder of this page is intentionally left blank)

(Signature page for the Facilities Agreement (Applicable to working capital loans not subject to a separate loan contract) No. 121XY2020018744)

Party A: China Merchants Bank Co., Ltd. Shanghai Branch [Stamp]

Contact address: 1088 Lujiazui Ring Road, Pudong New District, Shanghai

Unit email: /

Unit fax: /

Contact mobile number: [***]

Unit WeChat: /

Party B: ACM Research (Shanghai), Inc. [Stamp]

Contact address: Building 4, 1690 Cailun Road, Zhangjiang Hi-Tech Park, Pudong New District, Shanghai

Unit email: /

Unit fax: /

Contact mobile number: [***]

Unit WeChat: /

Signing date: August 3, 2020

[Barcode and stamp]

(Only for the verification of official stamp)

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, David H. Wang, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of ACM Research, 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 quarterly 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.
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.

Date: November 9, 2020

/s/ David H. Wang

David H. Wang
Chief Executive Officer and President
(Principal Executive Officer)

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Mark McKechnie, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of ACM Research, 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 quarterly 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.
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 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.

Date: November 9, 2020

/s/ Mark McKechnie

Mark McKechnie

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

**CERTIFICATION PURSUANT TO 18 U.S.C. 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of ACM Research, Inc. for the quarterly period ended September 30, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his or her knowledge on the date hereof:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of ACM Research, Inc. for the period presented therein.

Date: November 9, 2020

/s/ David H. Wang

David H. Wang
Chief Executive Officer and President
(Principal Executive Officer)

Date: November 9, 2020

/s/ Mark McKechnie

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

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Report or as a separate disclosure document.
