

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 March 31, 2022

or

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

For the transition period from _____ to _____

Commission File Number: 001-38029



AKOUSTIS TECHNOLOGIES, INC.
(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	33-1229046 (IRS Employer Identification No.)
9805 Northcross Center Court, Suite A Huntersville, NC (Address of principal executive offices)	28078 (Postal Code)

Registrant's telephone number, including area code: **1-704-997-5735**

Securities registered under Section 12(b) of the Act:

Title of Each Class:	Trading Symbol	Name of each exchange on which registered:
Common Stock, \$0.001 par value	AKTS	The Nasdaq Stock Market LLC (Nasdaq Capital Market)

Securities registered under Section 12(g) of the Act:

None

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

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

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

As of April 26, 2022, there were 55,962,798 shares of the registrant's common stock, \$0.001 par value per share, issued and outstanding.

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PART I - FINANCIAL INFORMATION**ITEM 1. FINANCIAL STATEMENTS.**

Akoustis Technologies, Inc.
Condensed Consolidated Balance Sheets
(In thousands, except share data)
(Unaudited)

	March 31, 2022	June 30, 2021
Assets		
Assets:		
Cash and cash equivalents	\$ 55,871	\$ 88,322
Accounts receivable	3,089	1,170
Inventory	3,429	1,390
Other current assets	3,884	2,314
Total current assets	66,273	93,196
Property and equipment, net	48,042	30,730
Goodwill	8,051	—
Intangibles, net	9,349	572
Operating lease right-of-use asset, net	317	471
Other assets	60	25
Total Assets	\$ 132,092	\$ 124,994
Liabilities and Equity		
Current Liabilities:		
Accounts payable and accrued expenses	\$ 10,025	\$ 6,954
Contingent consideration	744	—
Deferred revenue	115	41
Operating lease liability	292	270
Total current liabilities	11,176	7,265
Long-term Liabilities:		

Contingent consideration	535	—
Operating lease liability	18	202
Deferred tax liability	1,804	—
Other long-term liabilities	117	117
Total long-term liabilities	2,474	319
Total Liabilities	13,650	7,584
Equity		
Preferred stock, par value \$0.001: 5,000,000 shares authorized; none issued and outstanding	—	—
Common stock, \$0.001 par value; 100,000,000 shares authorized; 55,951,298 and 51,235,764 shares issued and outstanding at March 31, 2022 and June 30, 2021, respectively	56	51
Additional paid in capital	301,554	265,130
Accumulated deficit	(190,570)	(147,771)
Total Akoustis Technologies, Inc. Equity	\$ 111,040	\$ 117,410
Noncontrolling interest	7,402	—
Total Equity	118,442	117,410
Total Liabilities and Equity	\$ 132,092	\$ 124,994

See accompanying notes to the condensed consolidated financial statements

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Akoustis Technologies, Inc.
Condensed Consolidated Statements of Operations
(In thousands, except per share data)
(Unaudited)

	For the Three Months Ended March 31, 2022	For the Three Months Ended March 31, 2021	For the Nine Months Ended March 31, 2022	For the Nine Months Ended March 31, 2021
Revenue				
Revenue with customers	\$ 4,607	\$ 2,517	\$ 10,146	\$ 4,461
Cost of revenue	5,370	2,973	12,821	7,224
Gross profit (loss)	(763)	(456)	(2,675)	(2,763)
Operating expenses				
Research and development	8,314	5,225	25,481	17,171
General and administrative expenses	5,721	3,395	14,742	9,683
Total operating expenses	14,035	8,620	40,223	26,854
Loss from operations	(14,798)	(9,076)	(42,898)	(29,617)
Other (expense) income				
Interest (expense) income	25	(2,027)	88	(5,162)
Change in fair value of contingent consideration	(180)	—	(180)	—
Change in fair value of derivative liabilities	—	928	—	744
Total other (expense) income	(155)	(1,099)	(92)	(4,418)
Net loss before income taxes	\$ (14,953)	\$ (10,175)	\$ (42,990)	\$ (34,035)
Income Taxes	(128)	—	(70)	—
Net Loss	\$ (14,825)	\$ (10,175)	\$ (42,920)	\$ (34,035)
Net loss (income) attributable to noncontrolling interest	139	—	121	—
Net loss attributable to common stockholders	\$ (14,686)	\$ (10,175)	\$ (42,799)	\$ (34,035)
Net loss per common share - basic and diluted	\$ (0.27)	\$ (0.22)	\$ (0.80)	\$ (0.83)
Weighted average common shares outstanding - basic and diluted	55,217,220	45,620,610	53,177,679	41,047,723

See accompanying notes to the condensed consolidated financial statements.

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(In thousands)
(Unaudited)

	For the Three Months Ended March 31, 2022						
	Common Stock		Additional Paid In Capital	Accumulated Deficit	Total Akoustis Technologies, Inc. Equity	Noncontrolling Interest	Total Equity
	Shares	Par Value					
Balance, December 31, 2021	54,660	\$ 55	\$ 291,969	\$ (175,884)	\$ 116,140	\$ 7,528	\$ 123,668
Common stock issued for cash, net of issuance costs	1,158	1	6,840	—	6,841	—	6,841
Stock-based compensation	69	—	2,506	—	2,506	—	2,506
Common stock issued for exercise of warrants	12	—	10	—	10	—	10
Common stock issued for exercise of options	52	—	229	—	229	—	229
Noncontrolling interest acquired	—	—	—	—	—	13	13
Net loss	—	—	—	(14,686)	(14,686)	(139)	(14,825)
Balance, March 31, 2022	<u>55,951</u>	<u>\$ 56</u>	<u>\$ 301,554</u>	<u>\$ (190,570)</u>	<u>\$ 111,040</u>	<u>\$ 7,402</u>	<u>\$ 118,442</u>

	For the Three Months Ended March 31, 2021						
	Common Stock		Additional Paid In Capital	Accumulated Deficit	Total Akoustis Technologies, Inc. Equity	Noncontrolling Interest	Total Equity
	Shares	Par Value					
Balance, December 31, 2020	41,399	\$ 41	\$ 173,918	\$ (127,475)	\$ 46,484	\$ —	\$ 46,484
Common stock issued for cash, net of issuance costs	3,582	4	52,198	—	52,202	—	52,202
Common stock issued in note conversion	4,984	5	25,265	—	25,270	—	25,270
Stock-based compensation	96	—	1,991	—	1,991	—	1,991
Common stock issued for exercise of warrants	187	—	991	—	991	—	991
Common stock issued for exercise of options	118	—	746	—	746	—	746
Common stock issued in payment of note interest	8	—	121	—	121	—	121
Net loss	—	—	—	(10,175)	(10,175)	—	(10,175)
Balance, March 31, 2021	<u>50,374</u>	<u>\$ 50</u>	<u>\$ 255,230</u>	<u>\$ (137,650)</u>	<u>\$ 117,630</u>	<u>\$ —</u>	<u>\$ 117,630</u>

See accompanying notes to the condensed consolidated financial statements.

Akoustis Technologies, Inc.
Condensed Consolidated Statements of Changes in Equity
(In thousands)
(Unaudited)

	For the Nine Months Ended March 31, 2022						
	Common Stock		Additional Paid In Capital	Accumulated Deficit	Total Akoustis Technologies, Inc. Equity	Noncontrolling Interest	Total Equity
	Shares	Par Value					
Balance, June 30, 2021	51,236	\$ 51	\$ 265,130	\$ (147,771)	\$ 117,410	\$ —	\$ 117,410
Common stock issued for cash, net of issuance costs	3,644	3	25,627	—	25,630	—	25,630
Stock-based compensation	662	1	7,753	—	7,754	—	7,754
Common stock issued for exercise of warrants	21	—	67	—	67	—	67
Common stock issued for exercise of options	72	—	369	—	369	—	369
ESPP purchase	53	1	311	—	312	—	312
Common stock issued in acquisition	263	—	2,297	—	2,297	—	2,297

Noncontrolling interest acquired	—	—	—	—	—	7,523	7,523
Net loss	—	—	—	(42,799)	(42,799)	(121)	(42,920)
Balance, March 31, 2022	<u>55,951</u>	<u>\$ 56</u>	<u>\$ 301,554</u>	<u>\$ (190,570)</u>	<u>\$ 111,040</u>	<u>\$ 7,402</u>	<u>\$ 118,442</u>
For the Nine Months Ended March 31, 2021							
	<u>Common Stock</u>		<u>Additional</u>	<u>Accumulated</u>	<u>Total</u>	<u>Noncontrolling</u>	<u>Total</u>
	<u>Shares</u>	<u>Par Value</u>	<u>Paid In</u>	<u>Deficit</u>	<u>Akoustis</u>	<u>Interest</u>	<u>Equity</u>
			<u>Capital</u>		<u>Technologies, Inc.</u>		<u>Equity</u>
Balance, June 30, 2020	37,990	\$ 38	\$ 145,072	\$ (103,615)	\$ 41,495	\$ —	\$ 41,495
Common stock issued for cash, net of issuance costs	6,294	6	75,618	—	75,624	—	75,624
Common stock issued in note conversion	4,984	5	25,265	—	25,270	—	25,270
Stock-based compensation	574	1	6,083	—	6,084	—	6,084
Common stock issued for exercise of warrants	219	—	1,109	—	1,109	—	1,109
Common stock issued for exercise of options	209	—	1,270	—	1,270	—	1,270
ESPP purchase	32	—	204	—	204	—	204
Common stock issued in payment of note interest	72	—	609	—	609	—	609
Net loss	—	—	—	(34,035)	(34,035)	—	(34,035)
Balance, March 31, 2021	<u>50,374</u>	<u>\$ 50</u>	<u>\$ 255,230</u>	<u>\$ (137,650)</u>	<u>\$ 117,630</u>	<u>\$ —</u>	<u>\$ 117,630</u>

See accompanying notes to the condensed consolidated financial statements.

Akoustis Technologies, Inc.
Condensed Consolidated Statements of Cash Flows
(In thousands, except per share data)
(Unaudited)

	<u>Nine Months Ended March 31, 2022</u>	<u>Nine Months Ended March 31, 2021</u>
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (42,920)	\$ (34,035)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	5,492	3,284
Stock-based compensation	7,754	6,084
Amortization of debt discount	—	4,405
Amortization of operating lease right of use asset	202	168
Non cash interest payments	—	609
Change in fair value of derivative liabilities	—	(744)
Change in fair value of contingent consideration	180	—
Gain on disposal of fixed assets	(204)	—
Changes in operating assets and liabilities:		
Accounts receivable	(936)	(1,270)
Inventory	(1,841)	(1,310)
Other current assets	(1,558)	(164)
Accounts payable and accrued expenses	1,024	961
Lease liabilities	(210)	(170)
Other long term liabilities	(176)	—
Deferred revenue	(80)	123
Net Cash Used in Operating Activities	<u>(33,273)</u>	<u>(22,059)</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Cash paid for machinery and equipment	(21,794)	(9,884)
Acquisition of business, net of cash acquired	(4,078)	—
Cash received from sale of fixed assets	316	—
Cash paid for intangibles	—	(50)
Net Cash Used in Investing Activities	<u>(25,556)</u>	<u>(9,934)</u>
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from issuance of common stock	25,630	75,394
Proceeds from exercise of employee stock options	369	1,270
Proceeds from exercise of warrants	67	1,109

Proceeds from employee stock purchase plan	312	204
Net Cash Provided by Financing Activities	26,378	77,977
Net Increase (Decrease) in Cash, Cash Equivalents and Restricted Cash	(32,451)	45,984
Cash, Cash Equivalents and Restricted Cash - Beginning of Period	88,322	44,408
Cash, Cash Equivalents and Restricted Cash - End of Period	\$ 55,871	\$ 90,392
SUPPLEMENTARY CASH FLOW INFORMATION:		
Cash Paid During the Period for:		
Interest	—	325
SUPPLEMENTARY DISCLOSURE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:		
Common stock issued in payment of interest	—	(25,270)
Fixed assets included in accounts payable and accrued expenses	378	(1,467)
Stock issuance costs included in accounts payable and accrued expenses	—	(230)
Acquisition of Business		
Tangible assets, excluding cash and cash equivalents	1,346	—
Intangibles	9,452	—
Goodwill	8,051	—
Deferred tax liability	(1,980)	—
Contingent consideration	(1,099)	—
Liabilities assumed	(1,871)	—
Issuance of common stock for acquisition	(2,297)	—
Noncontrolling interest	(7,523)	—

See accompanying notes to the condensed consolidated financial statements

AKOUSTIS TECHNOLOGIES, INC.
Notes to the Condensed Consolidated Financial Statements
(Unaudited)

Note 1. Organization

Akoustis Technologies, Inc. (the “Company”) was incorporated on April 10, 2013, and effective December 15, 2016, the Company changed its state of incorporation to the State of Delaware. Through its wholly-owned subsidiary, Akoustis, Inc. (a Delaware corporation), the Company, headquartered in Huntersville, North Carolina, is focused on developing, designing, and manufacturing innovative radio frequency (“RF”) filter products for the wireless industry, including for products such as smartphones and tablets, cellular infrastructure equipment, Wi-Fi Customer Premise Equipment (“CPE”), and military and defense communication applications. Located between the device’s antenna and its digital backend, the RF front-end (“RFFE”) is the circuitry that performs the analog signal processing and contains components such as amplifiers, filters and switches. To construct the resonator devices that are the building blocks for its RF filters, the Company has developed a family of novel, high purity acoustic piezoelectric materials as well as a unique microelectromechanical system (“MEMS”) wafer process, collectively referred to as XBAW™ technology. The Company leverages its integrated device manufacturing (“IDM”) business model to develop and sell high performance RF filters using its XBAW™ technology. Filters are critical in selecting and rejecting signals, and their performance enables differentiation in the modules defining the RFFE. In October 2021, the Company acquired a 51% ownership interest in RFM Integrated Device, Inc. (“RFMi”), a fabless supplier of acoustic wave RF resonators and filters. Through RFMi, the Company makes sales of surface-acoustic-wave (“SAW”) resonators, RF filters, crystal (Xtal) resonators and oscillators, and ceramic products.

Note 2. Liquidity

As of March 31, 2022, the Company had cash and cash equivalents of \$5.9 million and working capital of \$55.1 million. The Company has historically incurred recurring operating losses and experienced net cash used in operating activities.

The Company expects cash and cash equivalents to be sufficient to fund its operations beyond the next twelve months from the date of filing of this Form 10-Q. These funds will be used to fund the Company’s operations, including capital expenditures, R&D, commercialization of our technology, development of our patent strategy and expansion of our patent portfolio, as well as to provide working capital and funds for other general corporate purposes. The Company has no commitments or arrangements to obtain any additional funds, and there can be no assurance such funds will be available on acceptable terms or at all. If the Company is unable to obtain additional financing in a timely fashion and on acceptable terms, its financial condition and results of operations may be materially adversely affected and it may not be able to continue operations or execute its stated commercialization plan.

Note 3. Summary of Significant Accounting Policies

Basis of Presentation

The Company’s unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”) and the rules and regulations of the Securities and Exchange Commission (“SEC”) for interim financial information and the instructions to Form 10-Q. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for annual financial statements. In the opinion of management, all adjustments (consisting of normal accruals) considered necessary for a fair presentation have been included. The Company has evaluated subsequent events through the filing of this Form 10-Q. Operating results for the quarter ended March 31, 2022 are not necessarily indicative of the results that may be expected for the year ending June 30, 2022 or any future interim period. The accompanying unaudited condensed consolidated financial statements should be read in conjunction with the Company’s audited consolidated financial statements and notes thereto included in the Company’s Form 10-K filed with the SEC on August 30, 2021 (the “2021 Annual Report”).

Principles of Consolidation

The accompanying unaudited condensed consolidated financial statements include the accounts of the Company and its wholly owned subsidiary, Akoustis, Inc. All significant intercompany accounts and transactions have been eliminated in consolidation. For RFMi, a consolidated entity in which we had 51% of ownership as of March 31, 2022, the Company records net loss (income) attributable to noncontrolling interest on the condensed consolidated statements of operations equal to the percentage of the ownership interest retained in such entity by the respective noncontrolling parties.

Significant Accounting Policies and Estimates

The Company's significant accounting policies are disclosed in Note. 3-Summary of Significant Accounting Policies in the 2021 Annual Report. Since the date of the 2021 Annual Report, there have been no material changes to the Company's significant accounting policies. The preparation of the unaudited condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the unaudited condensed consolidated financial statements and the accompanying notes thereto. The policies, estimates and assumptions include valuing equity securities, deferred taxes and related valuation allowances, contingent consideration, goodwill, intangible assets, initial fair value of the non-controlling interest, revenue recognition, and the fair values of long-lived assets. Actual results could differ from the estimates.

Business Combinations - Business combinations are accounted for under the acquisition method in accordance with ASC 805, Business Combinations. The acquisition method requires identifiable assets acquired and liabilities assumed and any noncontrolling interest in the business acquired be recognized and measured at fair value on the acquisition date, which is the date that the acquirer obtains control of the acquired business. The amount by which the fair value of consideration transferred as the purchase price exceeds the net fair value of assets acquired and liabilities assumed is recorded as goodwill. Transaction costs are expensed in a business combination.

Allowance for Doubtful Accounts

The Company provides an allowance for doubtful accounts equal to the estimated losses to be incurred in the collection of accounts receivable.

Recently Issued Accounting Pronouncements

Management does not believe that any recently issued, but not yet effective accounting pronouncements, when adopted, will have a material effect on the accompanying condensed consolidated financial statements.

Note 4. Revenue Recognition from Contracts with Customers

Disaggregation of Revenue

The Company's primary revenue streams include foundry fabrication services and product sales.

Foundry Fabrication Services

Foundry fabrication services revenue includes Non-Recurring Engineering ("NRE") and microelectromechanical systems ("MEMS") foundry services. Under these contracts, products are delivered to the customer at the completion of the service which represents satisfaction of the performance obligation as well as transfer of title. Depending on language with regards to enforceable right to payment for performance completed to date, related revenue will either be recognized over time or at a point in time.

Product Sales

Product sales revenue consists of sales of RF filters and amps which are sold with contract terms stating that title passes, and the customer takes control at the time of shipment. Revenue is then recognized when the devices are shipped, and the performance obligation has been satisfied. If devices are sold under contract terms that specify that the customer does not take ownership until the goods are received, revenue is recognized when the customer receives the goods.

The following table summarizes the revenues of the Company's reportable segments for the three months ended March 31, 2022 (in thousands):

	Foundry Fabrication Services Revenue	Product Sales Revenue	Total Revenue with Customers
NRE	\$ 407	—	\$ 407
Filters/Amps	—	4,200	4,200
Total	\$ 407	\$ 4,200	\$ 4,607

The following table summarizes the revenues of the Company's reportable segments for the nine months ended March 31, 2022 (in thousands):

	Foundry Fabrication Services Revenue	Product Sales Revenue	Total Revenue with Customers
NRE	\$ 1,204	—	\$ 1,204
Filters/Amps	—	8,942	8,942
Total	\$ 1,204	\$ 8,942	\$ 10,146

The following table summarizes the revenues of the Company's reportable segments for the three months ended March 31, 2021 (in thousands):

	Foundry Fabrication Services Revenue	Product Sales Revenue	Total Revenue with Customers
NRE - RF Filters	\$ 1,537	—	\$ 1,537
Filters/Amps	—	980	980

Total	\$ 1,537	\$ 980	\$ 2,517
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The following table summarizes the revenues of the Company's reportable segments for the nine months ended March 31, 2021 (in thousands):

	Foundry Fabrication Services Revenue	Product Sales Revenue	Total Revenue with Customers
NRE - RF Filters	\$ 2,264	\$ —	\$ 2,264
Filters/Amps	—	2,197	2,197
Total	\$ 2,264	\$ 2,197	\$ 4,461

Performance Obligations

The Company has determined that contracts for product sales revenue and foundry fabrication services revenue involve one performance obligation, which is delivery of the final product.

Contract Balances

The following table summarizes the changes in the opening and closing balances of the Company's contract asset and liability for the first nine months of fiscal years 2022 and 2021 (in thousands):

	Contract Assets	Contract Liability
Balance, June 30, 2021	\$ 411	\$ 41
Closing, March 31, 2022	936	115
Increase/(Decrease)	\$ 525	\$ 74
Balance, June 30, 2020	\$ 125	\$ —
Closing, March 31, 2021	6	123
Increase/(Decrease)	\$ (119)	\$ 123

The Company records a receivable when the title for goods has transferred. Generally, all sales are contract sales (with either an underlying contract or purchase order), resulting in all receivables being contract receivables. When invoicing occurs prior to revenue recognition a contract liability is recorded (as deferred revenue on the Condensed Consolidated Balance Sheets). The amount of revenue recognized in the nine months ended March 31, 2022 that was included in the opening contract liability balance was \$41 thousand which related to non-recurring engineering services.

Contract assets are recorded when revenue recognized exceeds the amount invoiced. The difference between the opening and closing balances of the Company's contract assets and contract liabilities primarily results from the timing difference between the Company's performance and the customer's payment. The amount of contract assets invoiced in the nine months ended March 31, 2022 that was included in the opening contract asset balance was \$293 thousand, which primarily related to non-recurring engineering services.

Backlog of Remaining Customer Performance Obligations

Revenue expected to be recognized and recorded as sales during this fiscal year from the backlog of performance obligations that are unsatisfied (or partially unsatisfied) was \$9.2 million at March 31, 2022.

Note 5: Inventory

Inventory is stated at the lower of cost or net realizable value using the first-in, first-out (FIFO) valuation method.

Inventory consisted of the following as of March 31, 2022 and June 30, 2021 (in thousands):

	March 31, 2022	June 30, 2021
Raw Materials	\$ 833	\$ 124
Work in Process	1,811	1,188
Finished Goods	785	78
Total Inventory	\$ 3,429	\$ 1,390

Note 6. Property and Equipment, net

Property and equipment, net consisted of the following as of March 31, 2022 and June 30, 2021 (in thousands):

	Estimated Useful Life	March 31, 2022	June 30, 2021
Land	n/a	\$ 1,000	\$ 1,000
Building	11 years	3,000	3,000
Equipment	2-10 years	53,563	35,120
Leasehold Improvements	*	4,237	1,946
Software	3 years	737	580
Furniture & Fixtures	5 years	216	73
Computer Equipment	3 years	740	310
Total		63,493	42,029
Less: Accumulated Depreciation		(15,451)	(11,299)

(*) Leasehold improvements are amortized on a straight-line basis over the term of the lease or the estimated useful lives, whichever is shorter.

The Company recorded depreciation expense of \$1.7 million and \$1.2 million for the three months ended March 31, 2022 and 2021, respectively. The Company recorded depreciation expense of \$4.8 million and \$3.3 million for the nine months ended March 31, 2022 and 2021, respectively.

As of March 31, 2022, equipment with a net book value totaling \$12.0 million had not been placed in service and therefore was not depreciated during the period. As of June 30, 2021, fixed assets with a net book value totaling \$4.9 million had not been placed in service and therefore was not depreciated during the period.

Note 7. Business Acquisition

On October 15, 2021, the Company acquired a majority ownership position in RFM Integrated Device, Inc. (“RFMi”), a fabless supplier of acoustic wave RF resonators and filters, to expand product offerings and provide access to new markets. The Company acquired a 51% ownership interest in RFMi from Tai-Saw Technology Co., Ltd. (“TST”) in exchange for \$6.0 million in cash and approximately \$2.5 million payable in common stock of the Company. On April 29, 2022, as described under Note 17. Subsequent Events, the Company exercised its option to acquire the remaining 49% ownership interest in RFMi from TST for an additional \$5.5 million in cash and approximately 420,053 shares of common stock of the Company with a fair value at closing of \$1.9 million.

Additionally, earn-out payments payable in cash and/or shares of common stock of the Company may be payable to TST based on the achievement of sales targets for RFMi products in each of calendar year 2022 and 2023, with potential payouts in the range of \$0 to \$3.0 million. The estimated fair value of the associated liability was based on the present value of the expected future payouts resulting from the projected RFMi product sales, applying a volatility rate of 30% against those future projected revenues and, using a discount rate of 9.9% and 10.2% for the first and second earnouts, respectively, and thus represented a Level 3 fair value measurement. The contingent consideration is re-measured to fair value at each reporting date until the contingency is resolved, and those changes in fair value are recognized in earnings. The fair value of the contingent consideration increased \$180 thousand during the nine months ended March 31, 2022.

The purchase price was preliminarily allocated based on the estimated fair values of the assets acquired and liabilities assumed as follows (in thousands):

Consideration:	
Cash paid	\$ 6,000
Common stock	2,297
Fair value of contingent consideration	1,099
Total consideration	<u>\$ 9,396</u>
Cash	\$ 1,921
Other tangible assets	1,346
Intangible assets	9,452
Goodwill	8,051
Liabilities assumed	(1,871)
Deferred tax liability	\$ (1,980)
Total assets acquired	\$ 16,919
Noncontrolling interest	(7,523)
Net assets acquired	<u>\$ 9,396</u>

The Company will continue to evaluate the fair market value and other estimates of certain assets, liabilities and tax estimates over the measurement period (up to one year from the acquisition date) as provided for in ASC 805-10.

The provisional values of the intangible assets acquired included trademarks of \$0.7 million, developed technology of \$1.3 million and customer relationships of \$7.5 million.

The fair value of the trademarks acquired was determined based on an income approach using the “relief-from-royalty” method which estimated the value of the intangible asset by discounting the future cash flows of the asset to present value. Key inputs include a royalty rate of 3% and a discount rate of 18.0% as of the valuation date. The acquired trademarks assets are being amortized on a straight-line basis over their estimated useful lives of five years.

The fair value of the developed technology acquired was determined based on an income approach using the “relief-from-royalty” method which estimated the value of the intangible asset by discounting the future cash flows of the asset to present value. Key inputs include a royalty rate of 4% and a discount rate of 18.0% as of the valuation date. The acquired developed technology assets are being amortized on a straight-line basis over their estimated useful lives of seven years.

The fair value of the customer relationships acquired was determined based on an income approach using the “multi-period excess earnings” method in which the value of the intangible asset is determined by discounting the future cash flows of the asset to present value. Key inputs include a discount rate of 18.0%, an attrition rate of 5% and an operating expense adjustment factor of 5% as of the valuation date. These customer relationships are being amortized on a straight-line basis over their estimated useful life of seven years.

The fair value of the noncontrolling interest was determined by applying a lack of control discount of 6.7% to the implied fair value based on the total consideration paid for the 51% ownership.

The goodwill resulting from the acquisition of RFMi, which has been recorded in the RF Product segment, is attributed to synergies and other benefits that are expected to be generated from this transaction and is not deductible for income tax purposes. During the three and nine months ended March 31, 2022, the Company recorded acquisition costs associated with the acquisition of RFMi totaling \$0.1 million in “General and administrative expenses” in the Condensed Consolidated Statements of Operations.

Pro Forma Results

The following unaudited pro forma financial information summarizes the revenues for the three and nine months ended March 31, 2022 and 2021, as if the acquisition had

been completed as of July 1, 2020 (in thousands). The unaudited pro forma information does not purport to be indicative of the results that would have been obtained if the acquisitions had actually occurred at the beginning of the year prior to acquisition, nor of the results that may be reported in the future. Pro-forma earnings were not materially different from reported results for the periods presented and thus have not been included.

	Three Months Ended		Nine Months Ended	
	March 31,		March 31,	
	2022	2021	2022	2021
	Unaudited Reported	Unaudited Proforma	Unaudited Proforma	Unaudited Proforma
Revenues	\$ 4,607	\$ 3,746	\$ 12,048	\$ 7,287

Note 8: Goodwill and Intangible Assets

Intangible assets consisted of the following as of March 31, 2022 (in thousands):

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life in Years
Goodwill	\$ 8,051	\$ —	\$ 8,051	indefinite
Trademarks	\$ 700	\$ (64)	\$ 636	5
Developed Technology	\$ 1,913	\$ (167)	\$ 1,746	10
Customer Relationships	\$ 7,455	\$ (488)	\$ 6,967	7
Total	\$ 18,119	\$ (719)	\$ 17,400	

Intangible assets consisted of the following as of June 30, 2021 (in thousands):

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life in Years
Developed Technology	\$ 634	\$ (62)	\$ 572	15

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Amortization expense totaled \$355 thousand for the three months ended March 31, 2022 and \$658 thousand for the nine months ended March 31, 2022. Estimated future amortization expense of intangible assets for each of the next five fiscal years and thereafter are as follows (in thousands):

2022	\$ 358
2023	\$ 1,431
2024	\$ 1,431
2025	\$ 1,431
2026	\$ 1,431
Thereafter	\$ 3,267
Total	\$ 9,349

Note 9. Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses consisted of the following at March 31, 2022 and June 30, 2021 (in thousands):

	March 31, 2022	June 30, 2021
Accounts payable	\$ 3,790	\$ 1,188
Accrued salaries and benefits	5,041	4,415
Accrued professional fees	548	49
Accrued utilities	116	127
Accrued goods received not invoiced	167	761
Other accrued expenses	363	414
Totals	\$ 10,025	\$ 6,954

Note 10. Concentrations

Vendors

Vendor concentration as a percentage of purchases for the three months ended March 31, 2022 and 2021 are as follows:

	Three Months 03/31/2022	Three Months 03/31/2021
Vendor 1	18%	—
Vendor 2	—	18%

Vendor concentration as a percentage of purchases for the nine months ended March 31, 2022 and 2021 are as follows:

	Three Months 03/31/2022	Three Months 03/31/2021
Vendor 1	12%	—

Customers

Customer concentration as a percentage of revenue for the three months ended March 31, 2022 and 2021 are as follows:

	Three Months 03/31/2022	Three Months 03/31/2021
Customer 1	—	57%
Customer 2	23%	34%

Customer concentration as a percentage of revenue for the nine months ended March 31, 2022 and 2021 are as follows:

	Nine Months 03/31/2022	Nine Months 03/31/2021
Customer 1	—	43%
Customer 2	25%	38%
Customer 3	11%	—

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Note 11. Equity

Equity Offering Program

Pursuant to an ATM Equity OfferingSM Sales Agreement with BofA Securities, Inc. and Piper Sandler & Co. (the “Sales Agreement”), the Company was able to sell from time-to-time shares of its common stock having an aggregate offering price of up to \$100 million (the “Equity Offering Program”). As of March 31, 2022, the Company had sold all \$100.0 million of its shares available to be sold in the Equity Offering Program.

The following table summarizes sales through the Equity Offering Program during the nine months ended March 31, 2022:

Three months ended	Avg price per share	Number of Shares	Gross Proceeds (in millions)	Offering Expenses (in millions)	Net Proceeds (in millions)
September 30, 2021	\$ 9.99	555,455	\$ 5.5	\$ 0.1	\$ 5.4
December 31, 2021	\$ 7.04	1,931,022	\$ 13.6	\$ 0.2	\$ 13.4
March 31, 2022	\$ 6.03	1,157,919	\$ 7.0	\$ 0.2	\$ 6.8
Total	<u>\$ 7.17</u>	<u>3,644,396</u>	<u>\$ 26.1</u>	<u>\$ 0.5</u>	<u>\$ 25.6</u>

Equity Incentive Plans

During the nine months ended March 31, 2022, the Company granted employees options to purchase an aggregate of approximately 0.6 million shares of common stock. The fair values of the Company’s options were estimated at the dates of grant using a Black-Scholes option pricing model with the following assumptions:

	Nine Months Ended March 31, 2022
Exercise price	\$ 5.63 – 10.15
Expected term (years)	4.75 – 5.00
Volatility	66-67%
Risk-free interest rate	0.76% – 2.18%
Dividend yield	0%
Weighted Average Grant Date Fair Value of Options granted during the period	\$ 4.94

During the nine months ended March 31, 2022 the Company awarded certain employees and directors grants of an aggregate of approximately 1.1 million restricted stock units (“RSUs”) with a weighted average grant date fair value of \$8.83. The RSUs will be expensed over the requisite service period. The terms of the RSUs include vesting provisions based solely on continued service. If the service criteria are satisfied, the RSUs will generally vest over 4 – 5 years.

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Compensation expense related to our stock-based awards described above was as follows (in thousands):

	Three Months Ended March 31,		Nine Months Ended March 31,	
	2022	2021	2022	2021
Research and Development	\$ 1,327	\$ 1,011	\$ 4,275	\$ 2,953
General and Administrative	1,179	980	3,479	3,131
Total	<u>\$ 2,506</u>	<u>\$ 1,991</u>	<u>\$ 7,754</u>	<u>\$ 6,084</u>

Unrecognized stock-based compensation expense and weighted-average years to be recognized are as follows (in thousands):

	As of March 31, 2022	
	Unrecognized stock-based compensation	Weighted- average years to be recognized
Options	\$ 3,714	2.47

Note 12. Commitments and Contingencies**Leases**

The Company leases office space and office equipment in Huntersville, NC as well as equipment in Canandaigua, NY. Our leases have remaining lease terms of up to five years, some of which include options to extend the leases for up to twenty-four months. Following adoption of ASC 842, lease expense excludes capital area maintenance and property taxes.

The components of lease expense were as follows:

	Three Months Ended March 31, 2022	Three Months Ended March, 2021	Nine Months Ended March 31, 2022	Nine Months Ended March 31, 2021
Operating Lease Expense	\$ 84	\$ 75	\$ 241	\$ 225

Supplemental balance sheet information related to leases was as follows (in thousands):

	Classification on the Condensed Consolidated Balance Sheet	March 31, 2022	June 30, 2021
Assets			
Operating lease right-of-use asset, net	Other non-current assets	\$ 317	\$ 471
Liabilities			
Operating lease liability - current	Current liabilities	292	270
Operating lease liability - long term	Other non-current liabilities	18	202
Weighted Average Remaining Lease Term:			
Operating leases		1.00	1.76
Weighted Average Discount Rate:			
Operating leases		11.6%	12.5%

The following table outlines the minimum future lease payments for the next five years and thereafter, (in thousands):

For the year ending June 30,	
2022	\$ 89
2023	232
2024	7
2025	—
Thereafter	—
Total lease payments (undiscounted cash flows)	328
Less imputed interest	(18)
Total	\$ 310

Ontario County Industrial Development Authority Agreement

On February 27, 2018, the Company entered into a Lease and Project Agreement (the "Lease and Project Agreement") and a Company Lease Agreement (the "Company Lease Agreement") and together with the Lease and Project Agreement, the "Agreements"), each dated as of February 1, 2018, with the Ontario County Industrial Development Agency, a public benefit corporation of the State of New York (the "OCIDA"). Pursuant to the Agreements, the Company leases for \$1.00 annually to the OCIDA an approximately 9.995 acre parcel of land in Canandaigua, New York, together with the improvements thereon (including the Company's New York fabrication facility), and transfer title to certain related equipment and personal property to the OCIDA (collectively, the "Facility"). The OCIDA leases the Facility back to the Company for annual rent payments specified in the Lease and Project Agreement for the Company's primary use as research and development, manufacturing, warehouse and professional office space in its business, and to be subleased, in part, by the Company to various existing tenants. The Company estimates substantial tax savings during the term of the Agreements, which expire on December 31, 2028. In addition, subject to the terms of the Lease and Project Agreement, certain purchases and leases of eligible items will be exempt from the imposition of sales and use taxes. Subject to the terms of the Lease and Project Agreement, the OCIDA has also granted to the Company an exemption from certain mortgage recording taxes for one or more mortgages securing an aggregate principal amount not to exceed \$12.0 million, or such greater amount as approved by the OCIDA in its sole and absolute discretion. The benefits provided to the Company pursuant to the terms of the Lease and Project Agreement are subject to claw back over the life of the Agreements upon certain recapture events, including certain events of default.

Litigation, Claims and Assessments

On October 4, 2021, the Company and its subsidiary, Akoustis, Inc., were named as defendants in a complaint filed by Qorvo, Inc. in the United States District Court for the District of Delaware alleging, among other things, patent infringement, false advertising, false patent marking, and unfair competition. The complaint alleges that the defendants misappropriated proprietary information, made misleading statements about the characteristics of certain of its products, and sold products infringing on the certain of the plaintiff's patents. The plaintiff seeks an injunction enjoining the defendants from the alleged infringement and damages, including punitive and statutory enhanced damages, in an unspecified amount. The Company believes this lawsuit is without merit and intends to defend against it vigorously. However, it can provide no assurance as to the outcome of such dispute, and such action may result in judgments against the Company for an injunction, significant damages or other relief, such as future royalty payments to Qorvo, Inc. Even if ultimately settled or resolved in the Company's favor, this action may result in significant expenses, diversion of management and technical personnel attention and disruptions and delays in the Company's business, all of which could have a material adverse effect on its business, financial condition and results of operations.

From time to time, the Company may become involved in lawsuits, investigations and claims that arise in the ordinary course of business. The Company believes it has

meritorious defenses against all pending claims and intends to vigorously pursue them. While it is not possible to predict or determine the outcomes of any pending actions, the Company believes that, as of March 31, 2022, the amount of liability, if any, with respect to such actions, would not materially affect its financial position, results of operations or cash flows.

Note 13. Segment Information

Operating segments are defined as components of an enterprise about which separate financial information is available and evaluated regularly by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company's chief operating decision maker is its Chief Executive Officer. The Company operates in two segments, Foundry Fabrication Services, which consists of engineering review services and STC-MEMS foundry services, and RF Product, which consists of amplifier and filter product sales, and grant revenue. The Company records all general and administrative costs in the RF Product segment.

The Company evaluates performance of its operating segments based on revenue and operating profit (loss). Segment information for the three and nine months ended March 31, 2022 and 2021 are as follows (in thousands):

	<u>Foundry/ Fabrication Services</u>	<u>RF Product</u>	<u>Total</u>
Three months ended March 31, 2022			
Revenue with customers	\$ 407	\$ 4,200	\$ 4,607
Cost of revenue	534	4,836	5,370
Gross margin	(127)	(636)	(763)
Research and development	—	8,314	8,314
General and administrative	—	5,721	5,721
Income (Loss) from Operations	\$ (127)	(14,671)	(14,798)
Three months ended March 31, 2021			
Revenue with customers	\$ 1,537	\$ 980	\$ 2,517
Cost of revenue	400	2,573	2,973
Gross margin	1,137	(1,593)	(456)
Research and development	—	5,225	5,225
General and administrative	—	3,395	3,395
Income (Loss) from Operations	\$ 1,137	(10,213)	(9,076)
Nine months ended March 31, 2022			
Revenue with customers	\$ 1,203	\$ 8,943	\$ 10,146
Cost of revenue	1,481	11,340	12,821
Gross margin	(278)	(2,397)	(2,675)
Research and development	—	25,481	25,481
General and administrative	—	14,742	14,742
Income (Loss) from Operations	\$ (278)	(42,620)	(42,898)
Nine months ended March 31, 2021			
Revenue with customers	\$ 2,264	\$ 2,197	\$ 4,461
Cost of revenue	803	6,421	7,224
Gross margin	1,461	(4,224)	(2,763)
Research and development	—	17,171	17,171
General and administrative	—	9,683	9,683
Income (Loss) from Operations	\$ 1,461	(31,078)	(29,617)
As of March 31, 2022			
Accounts receivable	\$ 27	\$ 3,062	\$ 3,089
As of June 30, 2021			
Accounts receivable	\$ 242	\$ 928	\$ 1,170

Note 14. Loss Per Share

Basic net loss per common share is computed by dividing net loss attributable to common stockholders by the weighted-average number of common shares outstanding during the period. Diluted net loss per common share is determined using the weighted-average number of common shares outstanding during the period, adjusted for the dilutive effect of common stock equivalents. In periods when losses are reported, which is the case for the three and nine months ended March 31, 2022 and March 31, 2021 presented in these condensed consolidated financial statements, the weighted-average number of common shares outstanding excludes common stock equivalents because their inclusion would be anti-dilutive.

The Company had the following common stock equivalents at March 31, 2022 and 2021:

	<u>March 31, 2022</u>	<u>March 31, 2021</u>
Options	2,996,264	2,484,477
Warrants	78,555	167,809
Total	3,074,819	2,652,286

Note 15. Income Taxes

On October 15, 2021, the Company acquired a majority ownership position in RFMi, a fabless supplier of acoustic wave RF resonators and filters. The Company acquired a 51% ownership interest in RFMi from Tai-Saw Technology Co., Ltd. (“TST”) in exchange for \$6.0 million in cash and approximately \$2.5 million payable of common stock of the Company. The Company’s preliminary allocation of purchase price for this acquisition is included in Note 7 – Business Acquisition, and includes an approximately \$2.0 million deferred tax liability related to the acquired identifiable intangible assets. AKTS and RFMi will not file a consolidated tax return. Therefore, the valuation allowance remains in place on the net AKTS deferred tax assets.

The Company’s income tax expense (benefit) was (\$128) thousand and (\$70) thousand for the three and nine months ended March 31, 2022 respectively and (\$0) for the three and nine months ended March 31, 2021. The Company’s effective tax rate was 0.9% and 0.2% for the three and nine months ended March 31, 2022 and 0.0% for the three and nine months ended March 31, 2021.

The Company’s effective tax rate for the three and nine months ended March 31, 2022 and March 31, 2021, differed from the statutory rate primarily due to state taxes and the recording of a valuation allowance against certain separate company deferred tax assets.

Note 16. Fair Value Measurement

Fair value is defined as the price that would be received upon selling an asset or the price paid to transfer a liability on the measurement date. It focuses on the exit price in the principal or most advantageous market for the asset or liability in an orderly transaction between willing market participants. A three-tier fair value hierarchy is established as a basis for considering such assumptions and for inputs used in the valuation methodologies in measuring fair value. This hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs. The three levels of inputs used to measure fair values are as follows:

Level 1: Observable prices in active markets for identical assets and liabilities.

Level 2: Observable inputs other than quoted prices in active markets for identical assets and liabilities.

Level 3: Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities.

The following table sets forth a summary of the changes in the fair value of Level 3 contingent consideration that are measured at fair value on a recurring basis:

	March 31, 2022	March 31, 2021
Contingent consideration		
Beginning balance	\$ —	\$ —
Initial fair value of contingent consideration	1,099	—
Change in fair value of contingent consideration	180	—
Ending balance	\$ 1,279	\$ —

The fair value of contingent consideration liabilities that was classified as Level 3 in the table above was estimated using a Monte Carlo simulation in an option pricing framework with significant inputs that are not observable in the market and thus represents a Level 3 fair value measurement as defined in ASC 820. The significant inputs in the Level 3 measurement not supported by market activity include the probability assessments of expected future sales revenue of RFMi products in each of calendar year 2022 and 2023 and the volatility of those revenues, appropriately discounted considering the uncertainties associated with the obligation, and as calculated in accordance with the terms of the acquisition agreements. The development and determination of the unobservable inputs for Level 3 fair value measurements and the fair value calculations are the responsibility of the Company’s chief financial officer and are approved by the chief executive officer.

Note. 17. Subsequent Events

RFMi Second Closing

The Company previously announced its acquisition of a 51% ownership interest in RFMi. On April 29, 2022, the Company acquired the remaining 49% ownership interest in RFMi by exercising its option to do so under the acquisition agreement, for an additional \$3.5 million in cash and 420,053 shares of the Company’s common stock with a fair value at closing of \$1.9 million.

ATM Sales Agreement

On May 2, 2022 the Company entered into an ATM Sales Agreement with Oppenheimer & Co. Inc., Craig-Hallum Capital Group LLC and Roth Capital Partners, LLC pursuant to which the Company may sell from time to time shares of its common stock having an aggregate offering price of up to \$50,000,000.

ITEM 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

References in this report to “Akoustis,” the “Company,” “we,” “us,” and “our” refer to Akoustis Technologies, Inc. and its consolidated subsidiaries.

Cautionary Note Regarding Forward-Looking Statements

This quarterly report on Form 10-Q contains forward-looking statements that relate to our plans, objectives, estimates, and goals. Any and all statements contained in this report that are not statements of historical fact may be deemed to be forward-looking statements. Terms such as “may,” “might,” “would,” “should,” “could,” “project,” “estimate,” “predict,” “potential,” “strategy,” “anticipate,” “attempt,” “develop,” “plan,” “help,” “believe,” “continue,” “intend,” “expect,” “future,” and terms of similar import (including the negative of any of the foregoing) may identify forward-looking statements. However, not all forward-looking statements may contain one or more of these identifying terms. Forward-looking statements in this report may include, without limitation, statements regarding (i) the plans and objectives of management for future operations, including plans or objectives relating to the development of commercially viable radio frequency (“RF”) filters, (ii) projections of income (including income/loss), earnings (including earnings/loss) per share, capital expenditures, dividends, capital structure or other financial items, (iii) our future financial performance, including any such statement contained in this management’s discussion and analysis of financial condition or in the results of operations included pursuant to the rules and regulations of the Securities and Exchange Commission (the “SEC”), (iv) our ability to efficiently utilize cash and cash equivalents to support our operations for a given period of time, (v) our ability to engage customers while maintaining ownership of our intellectual property, and (vi) the assumptions underlying or relating to any statement described in (i), (ii), (iii), (iv) or (v) above.

Forward-looking statements are not meant to predict or guarantee actual results, performance, events or circumstances and may not be realized because they are based upon our current projections, plans, objectives, beliefs, expectations, estimates, and assumptions and are subject to a number of risks and uncertainties and other influences, many of which are beyond our control. Actual results and the timing of certain events and circumstances may differ materially from those described by the forward-looking statements as a result of these risks and uncertainties. Factors that may influence or contribute to the inaccuracy of the forward-looking statements or cause actual results to differ materially from expected or desired results may include, without limitation, our inability to obtain adequate financing and sustain our status as a going concern; our limited

operating history; our inability to generate revenues or achieve profitability; the results of our research and development (“R&D”) activities; our inability to achieve acceptance of our products in the market; the impact of the COVID-19 pandemic on our operations, financial condition and the worldwide economy, including its impact on our ability to access the capital markets; general economic conditions, including upturns and downturns in the industry; shortages in supplies needed to manufacture our products, or needed by our customers to manufacture devices incorporating our products; our limited number of patents; failure to obtain, maintain, and enforce our intellectual property rights; claims of infringement, misappropriation or misuse of third party intellectual property that, regardless of merit, could result in significant expense and loss of our intellectual property rights; our inability to attract and retain qualified personnel; the outcome of current and any future litigation; our inability to attract and retain qualified personnel; our reliance on third parties to complete certain processes in connection with the manufacture of our products; product quality and defects; existing or increased competition; our ability to market and sell our products; our inability to successfully manufacture, market and sell products based on our technologies; our ability to meet the required specifications of customers and achieve qualification of our products for commercial manufacturing in a timely manner; our inability to successfully scale our New York wafer fabrication facility and related operations while maintaining quality control and assurance and avoiding delays in output; contracting with customers and other parties with greater bargaining power and agreeing to terms and conditions that may adversely affect our business; the possibility that the anticipated benefits from our business acquisitions (including the acquisition of RFM Integrated Device, Inc. (“RFMi”)) will not be realized in full or at all or may take longer to realize than expected; the possibility that costs or difficulties related to the integration of acquired businesses’ (including RFMi’s) operations will be greater than expected and the possibility of disruptions to our business during integration efforts and strain on management time and resources; risks related to doing business in foreign countries, including China; any security breaches, cyber-attacks or other disruptions compromising our proprietary information and exposing us to liability; our failure to innovate or adapt to new or emerging technologies; our failure to comply with regulatory requirements; results of any arbitration or litigation that may arise; stock volatility and illiquidity; our failure to implement our business plans or strategies; and our failure to maintain effective internal control over financial reporting.

These and other risks and uncertainties, which are described in more detail in Part II, Item 1A. “Risk Factors” of this report and in our Annual Report on Form 10-K, filed with the SEC on August 30, 2021 (the “2021 Annual Report”), could cause our actual results to differ materially from those expressed or implied by the forward-looking statements in this report. Readers are cautioned not to place undue reliance on forward-looking statements because of the risks and uncertainties related to them. Except as may be required by law, we do not undertake any obligation to update the forward-looking statements contained in this report to reflect any new information or future events or circumstances or otherwise.

Overview

Akoustis® is an emerging commercial product company focused on developing, designing, and manufacturing innovative RF filter solutions for the wireless industry, including for products such as smartphones and tablets, network infrastructure equipment, Wi-Fi Customer Premise Equipment (“CPE”) and defense applications. Filters are critical in selecting and rejecting signals, and their performance enables differentiation in the modules defining the RF front-end (“RFFE”). Located between the device’s antenna and its digital backend, the RFFE is the circuitry that performs the analog signal processing and contains components such as amplifiers, filters and switches. We have developed a proprietary microelectromechanical system (“MEMS”) based bulk acoustic wave (“BAW”) technology and a unique manufacturing process flow, called “XBAW®”, for our filters produced for use in RFFE modules. Our XBAW® filters incorporate optimized high purity piezoelectric materials for high power, high frequency and wide bandwidth operation. We are developing RF filters for 5G, Wi-Fi and defense bands using our proprietary resonator device models and product design kits (PDKs). As we qualify our RF filter products, we are engaging with target customers to evaluate our filter solutions. Our initial designs target UHB, sub 7 GHz 5G, Wi-Fi and defense bands. We expect our filter solutions will address problems (such as loss, bandwidth, power handling, and isolation) created by the growing number of frequency bands in the RFFE of mobile devices, infrastructure and premise equipment to support 5G, and Wi-Fi. We have prototyped, sampled and begun commercial shipment of our single-band low loss BAW filter designs for 5G frequency bands and 5 GHz and 6 GHz Wi-Fi bands which are suited to competitive BAW solutions and historically cannot be addressed with low-band, lower power handling surface acoustic wave (“SAW”) technology. Additionally, through our majority-owned subsidiary, RFMi, we make sales of complementary SAW resonators, RF filters, crystal (Xtal) resonators and oscillators, and ceramic products.

We own and/or have filed applications for patents on the core resonator device technology, manufacturing facility and intellectual property (“IP”) necessary to produce our RF filter chips and operate as a “pure-play” RF filter supplier, providing discrete filter solutions direct to Original Equipment Manufacturers (“OEMs”) and aligning with the front-end module manufacturers that seek to acquire high performance filters to expand their module businesses. We believe this business model is the most direct and efficient means of delivering our solutions to the market.

Technology. Our device technology is based upon bulk-mode acoustic resonance, which we believe is superior to surface-mode resonance for high-band and ultra-high-band (“UHB”) applications that include 4G/LTE, 5G, Wi-Fi, and defense applications. Although some of our target customers utilize or manufacture the RFFE module, they may lack access to critical UHB filter technology that we produce, which is necessary to compete in high frequency applications.

Manufacturing. We currently manufacture Akoustis’ high-performance RF filter circuits, using our first generation XBAW® wafer process, in our 120,000-square foot wafer-manufacturing facility located in Canandaigua, New York (the “NY Facility”), which we acquired in June 2017. RFMi products are manufactured by a third party and sold either directly to consumers or sold and shipped with Akoustis products.

Intellectual Property. As of April 15, 2022, our IP portfolio included 58 patents, including a blocking patent that we have licensed from Cornell University. Additionally, as of April 15, 2022, we have 100 pending patent applications. These patents cover our XBAW® RF filter technology from raw materials through the system architectures.

By designing, manufacturing, and marketing our RF filter products to mobile phone OEMs, defense OEMs, network infrastructure OEMs, and Wi-Fi CPE OEMs, we seek to enable broader competition among the front-end module manufacturers.

Since we own and/or have filed applications for patents on the core technology and control access to our intellectual property, we expect to offer several ways to engage with potential customers. First, we intend to engage with multiple wireless markets, providing standardized filters that we design and offer as standard catalog components. Second, we expect to deliver unique filters to customer-supplied specifications, which we will design and fabricate on a customized basis. Finally, we may offer our models and design kits for our customers to design their own filters utilizing our proprietary technology.

We have earned minimal revenue from operations since inception, and we have funded our operations primarily with development contracts, RF filter and production orders, government grants, foundry and engineering services, and sales of debt and equity securities. The Company has incurred losses, primarily the result of material and processing costs associated with developing and commercializing our technology, as well as personnel costs, professional fees (primarily accounting and legal), and other general and administrative (“G&A”) expenses. We expect to continue to incur substantial costs for commercialization of our technology on a continuous basis because our business model involves materials and solid-state device technology development and engineering of catalog and custom filter design solutions.

To succeed, we must convince mobile phone OEMs, RFFE module manufacturers, network infrastructure OEMs, Wi-Fi CPE OEMs and defense customers to use our

XBAW[®] filter technology in their systems and modules. Since there are two dominant BAW filter suppliers in the industry that have high-band technology, and both utilize such technology as a competitive advantage at the module level, we expect customers that lack access to high-band filter technology will be open to engage with our pure-play filter company.

We plan to pursue RF filter design and R&D development agreements and potentially joint ventures with target customers and other strategic partners, although we cannot guarantee we will be successful in these efforts. These types of arrangements may subsidize technology development costs and qualification, filter design costs, and offer complementary technology and market intelligence and other avenues to revenue. However, we intend to retain ownership of our core technology, intellectual property, designs, and related improvements. We expect to pursue development of catalog designs for multiple customers and to offer such catalog products in multiple sales channels.

Impact of COVID-19 on our Business

Although the ultimate impact of the COVID-19 pandemic on our business is unknown, in an effort to protect the health and safety of our employees, we have taken proactive, precautionary action, including when warranted by state and local guidelines. Our actions continue to evolve in response to new government measures and scientific knowledge regarding COVID-19. In an effort to contain COVID-19 or slow its spread, governments around the world have also enacted various measures, including orders to close all businesses not deemed “essential,” isolate residents to their homes or places of residence, and practice social distancing when engaging in essential activities. These measures have impacted the method and timing of certain business meetings and deliverables to certain customers, as well as our ability to obtain certain materials, equipment and services from suppliers.

These actions and the global health crisis caused by COVID-19 have negatively impacted business activity across the globe. We have observed declining demand and price reductions in the electronics industry as business and consumer activity has decelerated. Additionally, COVID-19 has contributed to some of the delays we have observed in certain suppliers’ shipment of materials necessary for us to manufacture our products and in certain vendors’ ability to deliver equipment for installation at our facilities. When COVID-19 is demonstrably contained, we anticipate that its effects on global commerce will subside; however, the timing and extent of this is uncertain.

We will continue to actively monitor the situation and may take further actions altering our business operations that we determine are in the best interests of our employees, customers, partners, suppliers, and stakeholders, or as required by federal, state, or local authorities. It is not clear what the ultimate effects any such alterations or modifications may have on our business, including the effects on our customers, employees, and prospects, or on our financial results for the remainder of fiscal year 2022 or beyond.

Recent Developments

On January 31, 2022, Akoustis announced that it had received five new design wins, increasing the total number of Wi-Fi design wins from eight to thirteen.

On February 10, 2022, the Company announced the appointment of Ken Boller as its new Chief Financial Officer.

On February 22, 2022, Akoustis announced that it had received a 5G mobile XBAW filter order from a new Tier-1 radio frequency module and filter maker.

Critical Accounting Policies

There have been no material changes to our critical accounting policies and estimates from the information provided in Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” included in our 2021 Annual Report.

Results of Operations

Three Months Ended March 31, 2022 and 2021

Revenue

The Company recorded revenue of \$4.6 million for the three months ended March 31, 2022 as compared to \$2.5 million for the three months ended March 31, 2021. The increase of \$2.1 million was primarily due to an increase in RF product revenue of \$3.2 million or 328%, which includes revenue from sales of RFMi products. Partially offsetting this increase was a decrease in non-recurring engineering services of \$1.1 million.

Cost of Revenue

Cost of revenue includes direct labor, material, net realizable value (NRV) adjustments, and facility costs primarily associated with foundry services revenue, manufacturing of filter products and engineering services. The Company recorded cost of revenue of \$5.4 million for the three months ended March 31, 2022 as compared to \$3.0 million for the three months ended March 31, 2021. The \$2.4 million increase is primarily due to costs associated with RF product revenue which increased by \$2.3 million, which includes cost of revenue from sales of RFMi products.

Research and Development Expenses

R&D expenses were \$8.3 million for the three months ended March 31, 2022 and were \$3.1 million, or 59% higher than the prior year amount for the same period of \$5.2 million. Personnel costs, including stock-based compensation, were \$4.1 million compared to \$3.1 million in the prior year period, an increase of \$1.0 million or 33.8%. Facility costs, including depreciation, of \$1.8 million primarily associated with the NY Facility were \$0.9 million higher than the prior period. Lastly, R&D material costs were \$1.3 million higher than the prior period.

General and Administrative Expense

General and administrative (“G&A”) expenses include salaries and wages for executive and administrative staff, stock-based compensation, professional fees, insurance costs and other general costs associated with the administration of our business. G&A expenses for the three months ended March 31, 2022 were \$5.7 million, which is an increase of \$2.3 million compared to the three months ended March 31, 2021. Year-over-year changes within G&A expenses include an increase in employee compensation (including stock-based compensation) of \$0.9 million as well as increased general expenses of \$1.5 million, primarily professional fees and intangible amortization.

Other expense for the three months ended March 31, 2022 was \$155 thousand, which was comprised of a loss the change in fair value of contingent consideration of \$180 thousand partially offset by interest income. Other expenses for the three months ended March 31, 2021 were \$1.1 million, consisting of \$2.0 million of debt discount amortization and interest expense which was partially offset by a gain on fair value of derivative liability of \$0.9 million.

Net Loss

The Company recorded a net loss of \$14.8 million for the three months ended March 31, 2022, compared to a net loss of \$10.2 million for the three months ended March 31, 2021. The period-over-period incremental loss of \$4.6 million, or 45%, was primarily driven by an increase in cost of revenue of \$2.4 million, an increase in G&A expenses and R&D expenses of \$5.4 million. These expense increases were partially offset by a revenue increase of \$2.1 million and a decrease in other expenses of \$0.9 million.

Nine Months Ended March 31, 2022 and 2021

Revenue

The Company recorded revenue of \$10.1 million for the nine months ended March 31, 2022 as compared to \$4.5 million for the nine months ended March 31, 2021. The increase of \$5.7 million was primarily due to an increase in RF product revenue of \$7.0 million or 350%, which includes revenue from sales of RFMi products. This increase was partially offset by a decrease in non-recurring engineering services of \$1.1 million.

Cost of Revenue

Cost of revenue includes direct labor, material, net realizable value (NRV) adjustments, and facility costs primarily associated with foundry services revenue, manufacturing of filter products and engineering services. The Company recorded cost of revenue of \$12.8 million for the nine months ended March 31, 2022 as compared to \$7.2 million for the nine months ended March 31, 2021. The \$5.6 million increase is primarily due to costs associated with RF product revenue which increased by \$5.0 million, which includes cost of revenue from sales of RFMi products. In addition, non-recurring engineering costs increased by \$0.6 million.

Research and Development Expenses

R&D expenses were \$25.5 million for the nine months ended March 31, 2022 and were \$8.3 million, or 48.4% higher than the prior year amount for the same period of \$17.2 million. Personnel costs, including stock-based compensation, were \$13.7 million compared to \$9.6 million in the prior year period, an increase of \$4.1 million or 42.7%. Facility costs, including depreciation, of \$5.8 million primarily associated with the NY Facility were \$2.7 million higher than the prior period. R&D material costs of \$5.6 million were \$1.6 million higher than the prior period.

General and Administrative Expense

General and administrative (“G&A”) expenses include salaries and wages for executive and administrative staff, stock-based compensation, professional fees, insurance costs and other general costs associated with the administration of our business. G&A expenses for the nine months ended March 31, 2022 were \$14.7 million, which is an increase of \$5.0 million compared to the nine months ended March 31, 2021. Year-over-year changes within G&A expenses include an increase in employee compensation (including stock-based compensation) of \$2.1 million as well as increased general expenses of \$3.1 million, primarily related to professional fees, insurance expense and intangible amortization.

Other (Expense)/Income

Other expense for the nine months ended March 31, 2022 was \$92 thousand, which was comprised of a loss on the fair value of contingent consideration of \$180 thousand partially offset by interest income. Other expenses for the nine months ended March 31, 2021 were \$4.4 million, consisting of \$5.2 million of debt discount amortization and interest expense offset by a gain on derivative liability valuation of \$0.7 million.

Net Loss

The Company recorded a net loss of \$42.9 million for the nine months ended March 31, 2022, compared to a net loss of \$34.0 million for the nine months ended March 31, 2021. The period-over-period incremental loss of \$8.9 million, or 26.1%, was primarily driven by an increase in cost of revenue of \$5.6 million, an increase in G&A expenses and R&D expenses of \$13.4 million. These expense increases were partially offset by a revenue increase of \$5.7 million and a decrease in other expenses of \$4.3 million.

Liquidity and Capital Resources

Financing Activities

During the nine months ended March 31, 2022, the Company sold a total of 3,644,396 shares of its common stock at a price to the public of an average of \$7.17 per share under the ATM Equity OfferingSM Sales Agreement with BofA Securities, Inc. and Piper Sandler & Co., as amended on February 19, 2021 (the “Sales Agreement”) for aggregate gross proceeds of approximately \$26.1 million, before deducting compensation paid to the sales agents and other offering expenses of approximately \$0.5 million.

Balance Sheet and Working Capital

The Company had \$55.9 million of cash and cash equivalents on hand as of March 31, 2022, which reflects a decrease of \$32.4 million compared to \$88.3 million as of June 30, 2021. The decrease is primarily due to cash used in operations of \$33.3 million and cash used for investing activities of \$25.6 million. These cash uses were partially offset by cash provided by financing activities of \$26.4 million. The Company estimates that cash on hand will be sufficient to fund its operations, including current capital expense commitments, beyond the next twelve months from the date of filing of this Form 10-Q. However, the Company has historically incurred recurring operating losses and will continue to do so until it generates sufficient revenues from operations; as a result, we may need to obtain additional capital through the sale of additional equity securities, debt, or otherwise, to fund operations past that date. There is no assurance that the Company’s projections and estimates are accurate. The Company is actively managing and controlling the Company’s cash outflows to mitigate liquidity risks.

March 31, 2022 compared to June 30, 2021

As of March 31, 2022, the Company had current assets of \$66.3 million made up primarily of cash on hand of \$55.9 million. As of June 30, 2021, current assets were \$93.2 million comprised primarily of cash on hand of \$88.3 million.

Property, Plant and Equipment was \$48.0 million as of March 31, 2022 as compared to a balance of \$30.7 million as of June 30, 2021.

Total assets as of March 31, 2022 and June 30, 2021 were \$132.1 million and \$125.0 million, respectively.

Current liabilities as of March 31, 2022 and June 30, 2021 were \$11.2 million and \$7.3 million, respectively.

Long-term liabilities totaled \$2.5 million as of March 31, 2022, compared to \$0.3 million as of June 30, 2021. The increase is primarily due to the contingent liability and deferred tax liability which are discussed in Note 7 – Business Acquisition.

Equity was \$118.4 million as of March 31, 2022, compared to \$117.4 million as of June 30, 2021, an increase of \$1.0 million, or 0.8%. This increase was primarily due to the increase in additional paid-in-capital (“APIC”) of \$36.4 million for the nine months ended March 31, 2022 which was offset by the net loss for the nine months ended March 31, 2022 of \$42.9 million. The increase in APIC was primarily due to common stock issued for cash of \$25.6 million and common stock issued for services of \$7.8 million.

Cash Flow Analysis

Operating activities used cash of \$33.3 million during the nine months ended March 31, 2022 and \$22.1 million during the comparative period ended March 31, 2021. The \$11.2 million period-over-period increase in cash used was attributable to higher operating expenses associated with the ramp of development and commercialization activities (primarily R&D and production personnel and material costs).

Investing activities used cash of \$25.6 million for the nine months ended March 31, 2022 compared to \$9.9 million for the comparative period ended March 31, 2021. The \$15.6 million period-over-period increase was primarily due to increased purchases of production equipment of \$11.9 million and net cash paid for acquisitions of \$4.1 million. On October 15, 2021, the Company acquired a 51% ownership interest in RFMi from Tai-Saw Technology Co., Ltd. (“TST”) in exchange for \$6.0 million in cash and approximately \$2.5 million payable in common stock of the Company. On April 29, 2022, the Company acquired the remaining 49% ownership interest in RFMi from TST for an additional \$3.5 million in cash and 420,053 shares of the Company’s common stock with a fair value at closing of \$1.9 million. Additionally, earn-out payments aggregating up to \$3.0 million payable in cash and/or shares of common stock of the Company may be payable to TST based on the future operating results of RFMi.

Financing activities increased cash by \$26.4 million during the nine months ended March 31, 2022 primarily due to proceeds from issuance of common stock pursuant to the Sales Agreement. In addition, stock option grants, warrant exercises and the employee stock purchase plan resulted in cash proceeds of \$0.7 million.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Not applicable to smaller reporting companies.

ITEM 4. CONTROLS AND PROCEDURES

Management’s Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), is (1) recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms and (2) accumulated and communicated to our management, including our principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure.

As of March 31, 2022, our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). Our 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. Our Chief Executive Officer and Chief Financial Officer have concluded based upon the evaluation described above that, as of March 31, 2022, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

During the quarter ended March 31, 2022, there were no changes in our internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15(d)-15(f) promulgated under the Securities Exchange Act of 1934, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

From time to time, we may become involved in various lawsuits and legal proceedings that arise in the ordinary course of business. Litigation is subject to inherent uncertainties, and an adverse result in these or other matters may arise from time to time that may have an adverse effect on our business, financial condition or results of operations and prospects.

Except for the matter described under “Litigation, Claims and Assessments” in “Note-12 – Commitments and Contingencies” of the condensed consolidated financial statements in this Item 1 of Part I of this Quarterly Report on Form 10-Q, which description is incorporated in this “Item 1. Legal Proceedings” by reference, we are currently not aware of any material pending legal proceedings to which we are a party or of which any of our property is the subject, nor are we aware of any such proceedings that are contemplated by any governmental authority.

ITEM 1A. RISK FACTORS.

In addition to the risk factors set forth below and the other information set forth in this report, you should carefully consider the factors discussed under Part I, Item 1A, “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended June 30, 2021. These factors could materially adversely affect our business, financial condition, liquidity, results of operations and capital position, and could cause our actual results to differ materially from our historical results or the results contemplated by the forward-looking statements contained in this report. Except as set forth below, there have been no material changes to the risk factors described in Part I, Item 1A, “Risk Factors,” included in our 2021 Annual Report.

We are, and may become, subject to claims of infringement, misappropriation or misuse of third party intellectual property that, regardless of merit, could result in

significant expense and loss of our intellectual property rights.

The semiconductor industry is characterized by the vigorous pursuit and protection of intellectual property rights. We have not undertaken a comprehensive review of the rights of third parties in our field. From time to time, we may be named in lawsuits or receive notices or inquiries from third parties regarding our products or the manner in which we conduct our business suggesting that we may be infringing, misappropriating or otherwise misusing patent, copyright, trademark, trade secret and other intellectual property rights. Any claims that our technology infringes, misappropriates or otherwise misuses the rights of third parties, regardless of their merit or resolution, could be expensive to litigate or settle and could divert the efforts and attention of our management and technical personnel, cause significant delays and materially disrupt the conduct of our business. We may not prevail in such proceedings given the complex technical issues and inherent uncertainties in intellectual property litigation. If such proceedings result in an adverse outcome, we could be required to:

- pay substantial damages, including treble damages if we were held to have willfully infringed;
- cease the manufacture, offering for sale or sale of the infringing technology or processes;
- expend significant resources to develop non-infringing technology or processes;
- obtain a license from a third party, which may not be available on commercially reasonable terms, or may not be available at all; or
- lose the opportunity to license our technology to others or to collect royalty payments based upon successful protection and assertion of our intellectual property against others.

On October 4, 2021, the Company was named as a defendant in a complaint filed by Qorvo, Inc. in the United States District Court for the District of Delaware alleging, among other things, patent infringement, false advertising, false patent marking, and unfair competition. The plaintiff seeks an injunction enjoining us from the alleged infringement and damages, including punitive and statutory enhanced damages, in an unspecified amount. We believe this lawsuit is without merit and intend to defend against it vigorously. However, we can provide no assurance as to the outcome of such dispute, and such action may result in judgments against us for an injunction, significant damages or other relief, such as future royalty payments to Qorvo, Inc. or restrictions on certain of our activities. Resolution of such matter may be prolonged and costly, and the ultimate result or judgment is uncertain due to the inherent uncertainty in litigation and other proceedings. Even if ultimately settled or resolved in our favor, this and other possible future actions may result in significant expenses, diversion of management and technical personnel attention and disruptions and delays in our business and product development, and other collateral consequences, all of which could have a material adverse effect on our business, financial condition and results of operations. Any out-of-court settlement of this or other actions may also have an adverse effect on our business, financial condition and results of operations, including, but not limited to, substantial expenses, the payment of royalties, licensing or other fees payable to third parties, or restrictions on our ability to develop, manufacture and sell our products.

Defense of any intellectual property infringement claims against us, regardless of their merit, would involve substantial litigation expense and would be a significant diversion of resources from our business. In the event of the foregoing or another successful claim of infringement against us, we may have to pay substantial damages, obtain one or more licenses from third parties, limit our business to avoid the infringing activities, pay royalties and/or redesign our infringing technology or alter related formulations, processes, methods or other technologies, any or all of which may be impossible or require substantial time and monetary expenditure. The occurrence of any of the above events could prevent us from continuing to develop and commercialize our filters and our business could materially suffer.

In addition, our agreements with prospective customers and manufacturing partners may require us to indemnify such customers and manufacturing partners for third party intellectual property infringement claims. Pursuant to such agreements, we may be required to defend such customers and manufacturing partners against certain claims that could cause us to incur additional costs. While we endeavor to include as part of such indemnification obligations a provision permitting us to assume the defense of any indemnification claim, not all of our current agreements contain such a provision and we cannot provide any assurance that our future agreements will contain such a provision, which could result in increased exposure to us in the case of an indemnification claim.

We have recently engaged, and may in the future engage, in acquisitions that could disrupt our business, cause dilution to our shareholders and harm our financial condition and operating results.

In October 2021, we acquired a majority ownership position in RFM Integrated Device, Inc. ("RFMi") and, on April 29, 2022, exercised the right to acquire the remaining 49%. The consideration for the acquisition includes cash and common stock as well as possible earn-out payments that may be paid in cash or common stock based on its future trading price. We may in the future make additional acquisitions of, or investments in, companies that we believe have products or capabilities that are a strategic or commercial fit with our current business or otherwise offer opportunities for our company. In connection with these acquisitions or investments, we may:

- issue common stock or other forms of equity that would dilute our existing shareholders' percentage of ownership,
- incur debt and assume liabilities, and
- incur amortization expenses related to intangible assets or incur large and immediate write-offs.

We may not be able to complete acquisitions on favorable terms, if at all. If we do complete an acquisition, such as of RFMi, we cannot assure you that it will ultimately strengthen our competitive position, that it will be viewed positively by customers, financial markets or investors or that we will otherwise realize the expected benefits of such an acquisition to the anticipated extent or at all. Furthermore, the acquisition of RFMi and any future acquisitions could pose numerous additional risks to our expected operations, including, but not limited to:

- problems integrating the purchased business, products or technologies,
- challenges in achieving strategic objectives, cost savings and other anticipated benefits,
- increases to our expenses,
- the assumption of significant liabilities, which may have been previously unknown or not discoverable through diligence, that exceed the limitations of any applicable indemnification provisions or the financial resources of any indemnifying party,
- inability to maintain relationships with prospective key customers, vendors and other business partners of the acquired businesses,
- diversion of management's attention from its day-to-day responsibilities,
- difficulty in maintaining controls, procedures and policies during the transition and integration,
- entrance into marketplaces where we have no or limited prior experience and where competitors have stronger marketplace positions,
- potential loss of key employees, particularly those of the acquired entity, and

- historical financial information may not be representative or indicative of our results as a combined company.

The ongoing COVID-19 pandemic and a supply shortage experienced by the semiconductor industry have disrupted and will likely continue to disrupt normal business activity, and may have an adverse effect on our results of operations.

The global spread of COVID-19 and the efforts to control it have disrupted, and reduced the efficiency of, normal business activities in much of the world. The pandemic has resulted in authorities around the world implementing numerous unprecedented measures such as travel restrictions, quarantines, shelter in place orders, factory and office shutdowns and vaccine mandates. COVID-19 measures have impacted, and will likely continue to impact, our operations and those of our customers, contract manufacturers, suppliers and logistics providers. At the same time, and to some extent relatedly, the global silicon semiconductor industry is experiencing a shortage in supply and difficulties in ability to meet customer demand. In particular, the recent government-mandated COVID-19 containment measures in China have impacted supply shipments and created ongoing risk and uncertainty. These issues have led to an increase in lead-times of the production of semiconductor chips and components.

We have experienced, and expect to continue to experience, disruption to parts of our semiconductor supply chain, including procuring necessary components and inputs, such as wafers and substrates, in a timely fashion, with suppliers increasing lead times or placing products on allocation and raising prices. We have also incurred higher costs to secure available inventory, or have extended our purchase commitments or placed non-cancellable orders with suppliers, which introduces inventory risk if our forecasts and assumptions are inaccurate. In addition, disruptions to commercial transportation infrastructure have increased delivery times for materials and components to our facilities and, in some cases, our ability to timely ship our products to customers. We have seen some of our customers become more conservative in response to these complications by reducing their purchases and inventories or postponing capital expenditures, including product orders from us.

We believe the global supply chain challenges and their adverse impact on our business will persist and the degree to which the pandemic ultimately impacts our business and results of operations will depend on future developments beyond our control.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS.

Unregistered Sales of Equity Securities

Other than any sales previously reported in the Company's Current Reports on Form 8-K, the Company did not sell any unregistered securities during the period covered by this report.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES.

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

ITEM 5. OTHER INFORMATION.

The information set forth below is included herein for the purpose of providing disclosure under Item 1.01 (Entry into a Material Definitive Agreement) of Form 8-K.

On May 2, 2022, the Company entered into an ATM Sales Agreement (the "Sales Agreement") with Oppenheimer & Co. Inc., Craig-Hallum Group LLC and Roth Capital Partners, LLC (each, a "Sales Agent" and, together, the "Sales Agents"). Pursuant to the terms of the Sales Agreement, the Company may sell from time to time through the Sales Agents shares of the Company's common stock having an aggregate offering price of up to \$50,000,000 (the "Shares"). Sales of Shares, if any, may be made by means of transactions that are deemed to be "at the market" offerings as defined in Rule 415 under the Securities Act, including block trades, ordinary brokers' transactions on the Nasdaq Capital Market or otherwise at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices or by any other method permitted by law. The Company intends to use the net proceeds from the offering, after deducting the Sales Agents' commissions and the Company's offering expenses, for general corporate purposes.

Under the terms of the Sales Agreement, the Company may also sell Shares to any of the Sales Agents as principal for its own accounts at a price to be agreed upon at the time of sale. Any sale of Shares to a Sales Agent as principal would be pursuant to the terms of a separate terms agreement between the Company and such Sales Agent.

The Company has no obligation to sell any of the Shares under the Sales Agreement and may at any time suspend solicitation and offers under the Sales Agreement.

The Shares will be offered and sold pursuant to the Company's registration statement on Form S-3 (File No. 333-262540), as supplemented by the prospectus supplement dated May 2, 2022.

The foregoing summary of the Sales Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of the Sales Agreement, which is attached as a Exhibit 1.1 to this Quarterly Report on Form 10-Q and incorporated by reference into this Item 5.

A copy of the opinion of K&L Gates LLP relating to the legality of the issuance and sale of the Shares is attached as Exhibit 5.1 hereto.

ITEM 6. EXHIBITS.

The exhibits in the Exhibit Index below are filed or furnished, as applicable, as part of this report.

EXHIBIT INDEX

Exhibit Number	Description
1.1*	ATM Sales Agreement, dated May 2, 2022 by and among the Company, as issuer, and Oppenheimer & Co. Inc., Craig-Hallum Group LLC and Roth Capital Partners, LLC, as sales agents.

3.1	Articles of Conversion of the Company, as filed with the Nevada Secretary of State on December 15, 2016 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on December 16, 2016)
3.2	Certificate of Conversion of the Company, as filed with the Delaware Secretary of State on December 15, 2016 (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed with the SEC on December 16, 2016)
3.3	Certificate of Incorporation, as filed with the Delaware Secretary of State on December 15, 2016 (incorporated by reference to Exhibit 3.3 to the Company's Current Report on Form 8-K filed with the SEC on December 16, 2016)
3.4	Amended and Restated Bylaws of the Company (incorporated by reference to Exhibit 3.5 to the Company's Quarterly Report on Form 10-Q filed with the SEC on May 1, 2020)
5.1*	Opinion of K&L Gates LLP with respect to the Shares.
31.1*	Rule 13(a)-14(a)/15(d)-14(a) Certification of Principal Executive Officer
31.2*	Rule 13(a)-14(a)/15(d)-14(a) Certification of Principal Financial Officer
32.1*	Section 1350 Certification of Principal Executive Officer
32.2*	Section 1350 Certification of Principal Financial Officer
101*	Interactive Data Files of Financial Statements and Notes
101.INS*	Inline XBRL Instance Document
101.SCH*	Inline XBRL Taxonomy Extension Schema Document.
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

* Filed herewith

† Management contract or compensatory plan or arrangement

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SIGNATURES

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.

Dated: May 02, 2022

Akoustis Technologies, Inc.

By: /s/ Kenneth E. Boller
Kenneth E. Boller
Chief Financial Officer
(Principal Financial and Accounting Officer)

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Akoustis Technologies, Inc.

Common Stock
(\$0.001 par value)

ATM SALES AGREEMENT

May 2, 2022

Oppenheimer & Co. Inc.
Craig-Hallum Capital Group LLC
Roth Capital Partners, LLC
c/o Oppenheimer & Co., Inc.
85 Broad Street
New York, New York 10005

Ladies and Gentlemen:

Akoustis Technologies, Inc., a Delaware corporation (the “Company”), proposes, subject to the terms and conditions stated herein, to issue and sell from time to time to or through Oppenheimer & Co. Inc. (“Oppenheimer”), Craig-Hallum Capital Group LLC (“Craig-Hallum”) or Roth Capital Partners, LLC (“Roth”), each as sales agent and/or principal (each, an “Agent” and together, the “Agents”), shares (the “Shares”) of the Company’s common stock, \$0.001 par value (the “Common Stock”), having an aggregate gross sales price not to exceed \$50,000,000, on the terms set forth in this ATM Sales Agreement. The Company agrees that whenever it determines to sell Shares directly to an Agent as principal it will enter into a separate written Terms Agreement (each, a “Terms Agreement”), in substantially the form of Annex I hereto, relating to such sale in accordance with Section 2(k) hereof. References herein to “this Agreement” or to matters contained “herein” or “hereunder”, or words of similar import, mean this ATM Sales Agreement and any applicable Terms Agreement.

The Company has prepared and filed with the Securities and Exchange Commission (the “Commission”), in accordance with the Securities Act of 1933, as amended (the “1933 Act”), and the rules and regulations promulgated thereunder (the “1933 Act Regulations”), a shelf registration statement on Form S-3 (File No. 333-262540) covering the public offering and sale of certain securities of the Company, including the Shares, which shelf registration statement was declared effective by the Commission on February 15, 2022. The “Registration Statement”, as of any time, means such registration statement as amended by any post-effective amendments thereto at such time, including the exhibits and any schedules thereto at such time, the documents incorporated or deemed to be incorporated by reference therein at such time pursuant to Item 12 of Form S-3 under the 1933 Act and the documents otherwise deemed to be a part thereof as of such time pursuant to Rule 430B of the 1933 Act Regulations (“Rule 430B”); provided, however, that the “Registration Statement” without reference to a time means such registration statement as amended by any post-effective amendments thereto as of the time of the first contract of sale for the Shares, which time shall be considered the “new effective date” of the Registration Statement with respect to the Shares within the meaning of paragraph (f)(2) of Rule 430B (“Rule 430B(f)(2)”), including the exhibits and schedules thereto at such time, the documents incorporated or deemed to be incorporated by reference therein at such time pursuant to Item 12 of Form S-3 under the 1933 Act and the documents otherwise deemed to be a part thereof as of such time pursuant to Rule 430B; and *provided, further*, that if the Company files a registration statement with the Commission pursuant to Rule 462(b) of the 1933 Act Regulations relating to the Shares (a “Rule 462 Registration Statement”), then, after such filing, any reference herein to the term “Registration Statement” shall be deemed to include such Rule 462 Registration Statement. The base prospectus filed as part of the Registration Statement at the time the Registration Statement became effective, as amended in the form in which it has been filed most recently with the Commission in accordance with Section 3(b) or 3(c) hereof, including the documents incorporated or deemed incorporated by reference therein pursuant to Item 12 of Form S-3 under the 1933 Act, is referred to herein as the “Base Prospectus”. Promptly after the execution and delivery of this Agreement, the Company will prepare and file a prospectus supplement relating to the Shares in accordance with the provisions of Rule 424(b) of the 1933 Act Regulations (“Rule 424(b)”). Such final prospectus supplement, as amended by the prospectus supplement filed most recently with the Commission in accordance with Section 3(b), 3(c) or 3(n) hereof, as the case may be, including the documents incorporated or deemed to be incorporated by reference therein pursuant to Item 12 of Form S-3 under the 1933 Act, is referred to herein as the “Prospectus Supplement”. The Base Prospectus, as amended by the Prospectus Supplement and any applicable pricing supplement thereto, in the form the Base Prospectus, the Prospectus Supplement and any such pricing supplement are furnished to the Agents for use in connection with the offering and sale of Shares, are collectively referred to herein as the “Prospectus.” For purposes of this Agreement, all references to the Registration Statement, any preliminary prospectus or the Prospectus or any amendment or supplement thereto shall be deemed to include the copy filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval system (or any successor system) (“EDGAR”).

As used in this Agreement:

“Applicable Time” means, with respect to any offer and sale of Shares, the time immediately prior to the first contract of sale for such Shares, or such other time as agreed by the Company and the applicable Agent.

“General Disclosure Package” means each Issuer General Use Free Writing Prospectus, if any, issued prior to the Applicable Time, the most recent Prospectus filed with the Commission in accordance with Section 3(b), 3(c) or 3(n) hereof that is distributed to investors prior to the Applicable Time and the number of Shares and the initial offering price per Share, all considered together.

“Issuer Free Writing Prospectus” means any “issuer free writing prospectus,” as defined in Rule 433 of the 1933 Act Regulations (“Rule 433”), including, without limitation, any “free writing prospectus” (as defined in Rule 405 of the 1933 Act Regulations (“Rule 405”)) relating to the Shares that is (i) required to be filed with the Commission by the Company, (ii) a “road show that is a written communication” within the meaning of Rule 433(d)(8)(i), whether or not required to be filed with the Commission, or (iii) exempt from filing with the Commission pursuant to Rule 433(d)(5)(i) because it contains a description of the Shares or of the offering thereof that does not reflect the final terms, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company’s records pursuant to Rule 433(g).

“Issuer General Use Free Writing Prospectus” means any Issuer Free Writing Prospectus approved by the Agents or, in the case of a specific offer and sale of Shares, the applicable Agent, pursuant to Section 3(l) hereof that is furnished to the Agents or such Agent, as the case may be, for general distribution to investors, as evidenced by communications between the Company and the Agents or such Agent, as the case may be.

“Issuer Limited Use Free Writing Prospectus” means any Issuer Free Writing Prospectus that is not an Issuer General Use Free Writing Prospectus.

All references in this Agreement to financial statements and schedules and other information which is “contained,” “included,” “made,” “stated” or “referred to” (or other references of like import) in the Registration Statement, any preliminary prospectus or the Prospectus shall be deemed to include all such financial statements and schedules and other information incorporated or deemed incorporated by reference in the Registration Statement, any preliminary prospectus or the Prospectus, as the case may

be, prior to the Applicable Time relating to the particular Shares; and all references in this Agreement to amendments or supplements to the Registration Statement, any preliminary prospectus or the Prospectus shall be deemed to include the filing of any document under the Securities Exchange Act of 1934, as amended (the “1934 Act”), and the rules and regulations promulgated thereunder (the “1934 Act Regulations”) incorporated or deemed to be incorporated by reference in the Registration Statement, such preliminary prospectus or the Prospectus, as the case may be, at or after the Applicable Time relating to the particular Shares.

Section 1. Representations and Warranties. The Company represents and warrants to the Agents at the date of this Agreement, the First Delivery Date (as defined in Section 5(b) hereof), each Registration Statement Amendment Date (as defined in Section 3(o) hereof), each Company Periodic Report Date (as defined in Section 3(n) hereof), each Applicable Company Earnings Report Date (as defined in Section 3(o) hereof), each Request Date (as defined in Section 3(o) hereof), each Applicable Time and each Settlement Date (as defined in Section 2(h) hereof) (collectively, a “Representation Date”), and agrees with the Agents, as follows:

(i) Compliance of the Registration Statement, the Prospectus and Incorporated Documents The Company meets the requirements for use of Form S-3 under the 1933 Act without reliance on General Instruction I.B.6. thereof. The Company has filed the Registration Statement with the Commission. As of each Representation Date other than the date of this Agreement, the Registration Statement and any post-effective amendment thereto has become effective under the 1933 Act. No stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued under the 1933 Act, no notice of objection of the Commission to the use of the Registration Statement or any post-effective amendment thereto pursuant to Rule 401(g)(1) of the 1933 Act Regulations (“Rule 401(g)(1)”) has been received by the Company, no order preventing or suspending the use of any preliminary prospectus or the Prospectus or any amendment or supplement thereto has been issued and no proceedings for any of those purposes have been instituted or are pending or, to the Company’s knowledge, contemplated. The Company has complied with each request (if any) from the Commission for additional information.

Each of the Registration Statement and any post-effective amendment thereto, at the time of its effectiveness and as of each deemed effective date with respect to the Agents pursuant to Rule 430B(f)(2), complied or will comply in all material respects with the requirements of the 1933 Act and the 1933 Act Regulations. Each of any preliminary prospectus and the Prospectus and any amendment or supplement thereto, at the time it was filed with the Commission, complied in all material respects with the requirements of the 1933 Act and the 1933 Act Regulations and is identical to the electronically transmitted copy thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

The documents incorporated or deemed to be incorporated by reference in the Registration Statement, any preliminary prospectus and the Prospectus, when they became or will become effective or at the time they were or hereafter are filed with the Commission, complied and will comply in all material respects with the requirements of the 1934 Act and the 1934 Act Regulations.

(ii) Accurate Disclosure. Neither the Registration Statement nor any amendment thereto, at its effective time or at any Settlement Date, contained, contains or will contain an untrue statement of a material fact or omitted, omits or will omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. At each Applicable Time, neither (A) the General Disclosure Package nor (B) any individual Issuer Limited Use Free Writing Prospectus, when considered together with the General Disclosure Package, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. Neither the Prospectus nor any amendment or supplement thereto (including any prospectus wrapper), as of its issue date, at the time of any filing with the Commission pursuant to Rule 424(b) or at any Settlement Date, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The documents incorporated or deemed to be incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus, at the time the Registration Statement becomes effective or when such documents incorporated by reference were or hereafter are filed with the Commission, as the case may be, when read together with the other information in the Registration Statement, the General Disclosure Package or the Prospectus, as the case may be, did not, do not and will not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading.

(iii) Issuer Free Writing Prospectuses No Issuer Free Writing Prospectus conflicts or will conflict with the information contained in the Registration Statement, any preliminary prospectus or the Prospectus or any amendment or supplement thereto, including any document incorporated by reference therein, that has not been superseded or modified.

(iv) Company Not Ineligible Issuer. (A) At the time of filing the Registration Statement and any post-effective amendment thereto, (B) at the earliest time thereafter that the Company or another offering participant made a *bona fide* offer (within the meaning of Rule 164(h)(2) of the 1933 Act Regulations) of the Shares, (C) at the date of this Agreement and any Terms Agreement and (D) at each Applicable Time, the Company was not and is not an “ineligible issuer,” as defined in Rule 405, without taking account of any determination by the Commission pursuant to Rule 405 that it is not necessary that the Company be considered an ineligible issuer.

(v) Independent Accountants. The accountants who certified the financial statements and supporting schedules included in the Registration Statement, the General Disclosure Package and the Prospectus are independent public accountants as required by the 1933 Act, the 1933 Act Regulations, the 1934 Act, the 1934 Act Regulations and the Public Company Accounting Oversight Board.

(vi) Financial Statements: Non-GAAP Financial Measures. The financial statements of the Company included in the Registration Statement, the General Disclosure Package and the Prospectus, together with the related schedules and notes, present fairly in all material respects the financial position of the Company and its consolidated subsidiaries at the dates indicated and the statements of operations, changes in stockholders’ equity and cash flows of the Company and its consolidated subsidiaries for the periods specified; said financial statements have been prepared in conformity with U.S. generally accepted accounting principles (“GAAP”) applied on a consistent basis throughout the periods involved. The financial statements of the businesses or properties acquired or proposed to be acquired, if any, included in the Registration Statement, the General Disclosure Package and the Prospectus present fairly in all material respects the information set forth therein, have been prepared in conformity with GAAP applied on a consistent basis and otherwise have been prepared in accordance with, in the case of businesses acquired or to be acquired, the applicable financial statement requirements of Rule 3-05 or, in the case of real estate operations acquired or to be acquired, Rule 3-14 of Regulation S-X. The supporting schedules, if any, present fairly in all material respects in accordance with GAAP the information required to be stated therein. The selected financial data and the summary financial information included in the Registration Statement, the General Disclosure Package and the Prospectus, if any, present fairly in all material respects the information shown therein and have been compiled on a basis consistent with that of the audited financial statements included therein. Any pro forma financial statements and the related notes thereto included in the Registration Statement, the General Disclosure Package and the Prospectus present fairly in all material respects the information shown therein, have been prepared in accordance with the Commission’s rules and guidelines with respect to pro forma financial statements and have been properly compiled on the bases described therein, and the assumptions used in the preparation thereof are reasonable and the adjustments used therein are appropriate to give effect to the transactions and circumstances referred to therein. Except as included in the Registration Statement, the General Disclosure Package and the Prospectus, no historical or pro forma financial statements or supporting schedules are required to be included in the Registration Statement, any preliminary prospectus or the Prospectus under the 1933 Act or the 1933 Act Regulations. All disclosures contained in the Registration Statement, the General Disclosure Package or the Prospectus, if any, regarding “non-GAAP financial measures” (as such term is defined by the rules and regulations of the Commission) comply in all material

respects with Regulation G under the 1934 Act and Item 10 of Regulation S-K under the 1933 Act, to the extent applicable. The interactive data in eXTensible Business Reporting Language, if any, incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus fairly presents in all material respects the required information and has been prepared in accordance with the Commission's rules and guidelines applicable thereto.

(vii) No Material Adverse Change. Except as stated in the Registration Statement, the General Disclosure Package and the Prospectus, since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, (A) there has been no material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company and its subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business (a "Material Adverse Change"), (B) there have been no transactions entered into by the Company or any of its subsidiaries, other than those in the ordinary course of business, which are material with respect to the Company and its subsidiaries considered as one enterprise, and (C) there has been no dividend or distribution of any kind declared, paid or made by the Company on any class or series of its capital stock.

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(viii) Good Standing of the Company. The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the state of Delaware and has all requisite corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus and to enter into and perform its obligations under, and to consummate the transactions contemplated in, this Agreement. The Company is duly qualified as a foreign corporation to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure so to qualify or to be in good standing would not, singly or in the aggregate, result in a material adverse effect in (A) the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company and its subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business, or (B) the ability of the Company to enter into and perform any of its obligations under, or to consummate any of the transactions contemplated in, this Agreement (collectively, a "Material Adverse Effect").

(ix) Good Standing of Subsidiaries. Each "significant subsidiary" of the Company (as such term is defined in Rule 1-02 of Regulation S-X) (each, a "Significant Subsidiary" and, collectively, the "Significant Subsidiaries") has been duly organized and is validly existing in good standing under the laws of the jurisdiction of its incorporation or organization, has all requisite corporate, limited liability company or partnership, as applicable, power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure so to qualify or to be in good standing would not, singly or in the aggregate, result in a Material Adverse Effect. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, all of the outstanding shares of capital stock of or other equity interests in each Significant Subsidiary have been duly authorized and validly issued, are fully paid and non-assessable and are owned by the Company, directly or through other subsidiaries of the Company, free and clear of any security interest, mortgage, pledge, lien, encumbrance, claim or equity. None of the outstanding shares of capital stock of or other equity interests in any Significant Subsidiary were issued in violation of the preemptive or similar rights of any securityholder of such Significant Subsidiary or any other person or entity.

(x) Capitalization; Listing of Common Stock. The authorized, issued and outstanding shares of capital stock of the Company are as set forth in the Registration Statement and the Prospectus. The outstanding shares of capital stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable. None of the outstanding shares of capital stock of the Company were issued in violation of the preemptive or other similar rights of any securityholder of the Company or any other person or entity. The Company's Common Stock has been registered pursuant to Section 12(b) of the 1934 Act, the shares of Common Stock have been listed, and the Company has filed a notification with respect to the inclusion of the Shares, on the Nasdaq Capital Market ("Nasdaq"), and the Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Common Stock under the 1934 Act or the listing of the Common Stock (including the Shares) on Nasdaq, nor has the Company received any notification that the Commission or Nasdaq is contemplating terminating such registration or listing.

(xi) Authorization of this Agreement. This Agreement has been duly authorized, executed and delivered by the Company.

(xii) Authorization and Description of Shares. The Shares have been duly authorized for issuance and sale by the Company pursuant to this Agreement and, when issued and delivered by the Company pursuant to this Agreement against payment of the consideration set forth in this Agreement, will be validly issued and fully paid and non-assessable. The issuance of the Shares is not subject to the preemptive or other similar rights of any securityholder of the Company or any other person or entity. The Common Stock conforms to all statements relating thereto contained in the Registration Statement, the General Disclosure Package and the Prospectus and such statements conform to the rights set forth in the instruments defining the same. No holder of Shares will be subject to personal liability by reason of being such a holder.

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(xiii) Registration Rights. There are no persons with registration rights or other similar rights to have any securities registered for sale pursuant to the Registration Statement or otherwise registered for sale or sold by the Company under the 1933 Act pursuant to this Agreement, other than those rights that have been disclosed in the Registration Statement, the General Disclosure Package and the Prospectus and have been waived.

(xiv) Absence of Violations, Defaults and Conflicts. Neither the Company nor any of its subsidiaries are (A) in violation of its charter, by-laws or similar organizational document, (B) in default in the performance or observance of any obligation, agreement, covenant or condition contained in any contract, indenture, mortgage, deed of trust, loan or credit agreement, note, lease or other agreement or instrument to which the Company or any of its subsidiaries are a party or by which it or any of them may be bound or to which any of the properties, assets or operations of the Company or any of its subsidiaries are subject (collectively, "Agreements and Instruments"), except for such defaults that would not, singly or in the aggregate, result in a Material Adverse Effect, or (C) in violation of any law, statute, rule, regulation, judgment, order, writ or decree of any arbitrator, court, governmental body, regulatory body, administrative agency or other authority, body or agency having jurisdiction over the Company or any of its subsidiaries or any of their respective properties, assets or operations (each, a "Governmental Entity"), except for such violations that would not, singly or in the aggregate, result in a Material Adverse Effect. The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated herein and in the Registration Statement, the General Disclosure Package and the Prospectus (including the issuance and sale of Shares and the use of the proceeds from the sale thereof as described therein under the caption "Use of Proceeds") and compliance by the Company with its obligations hereunder have been duly authorized by all requisite corporate action and do not and will not, whether with or without the giving of notice or passage of time or both, conflict with or constitute a breach of, or default or Repayment Event (as defined below) under, or result in the creation or imposition of any lien, charge or encumbrance upon any properties, assets or operations of the Company or any of its subsidiaries pursuant to, the Agreements and Instruments (except for such conflicts, breaches, defaults or Repayment Events or liens, charges or encumbrances that would not, singly or in the aggregate, result in a Material Adverse Effect), nor will such action result in any violation of the provisions of the charter, by-laws or similar organizational document of the Company or any of its subsidiaries or any law, statute, rule, regulation, judgment, order, writ or decree of any Governmental Entity. As used herein, a "Repayment Event" means any event or condition which gives the holder of any note, debenture or other financing instrument (or any person acting on such holder's behalf) the right to require the repurchase, redemption or repayment of all or a portion of the related financing by the Company or any of its subsidiaries.

(xv) Absence of Labor Dispute. No labor dispute with the employees of the Company or any of its subsidiaries exists or, to the knowledge of the Company, is imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its or any of its subsidiaries' principal suppliers, manufacturers, customers or contractors, which could, singly or in the aggregate, result in a Material Adverse Effect.

(xvi) Absence of Proceedings. Except as stated in the Registration Statement, the General Disclosure Package and the Prospectus, there is no action, suit, proceeding, inquiry or investigation before or brought by any Governmental Entity now pending, or, to the knowledge of the Company, threatened, against or affecting the Company or any of its subsidiaries, which could, singly or in the aggregate, result in a Material Adverse Effect. The aggregate of all pending legal or governmental proceedings to which the Company or any of its subsidiaries are a party or of which any of their respective properties, assets or operations are the subject which are not described in the Registration Statement, the General Disclosure Package and the Prospectus, including ordinary routine litigation incidental to the business, would not, singly or in the aggregate, result in a Material Adverse Effect.

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(xvii) Accuracy of Exhibits. There are no contracts or documents which are required to be described in the Registration Statement, any preliminary prospectus or the Prospectus or to be filed as exhibits to the Registration Statement which have not been so described and filed as required.

(xviii) Absence of Further Requirements. No filing with, or authorization, approval, consent, license, order, registration, qualification or decree of, any Governmental Entity is necessary or required for the Company's due authorization, execution and delivery of, or performance of its obligations under, this Agreement or for the offering, issuance, sale or delivery of Shares or the consummation of the transactions contemplated in this Agreement, except such as have been already obtained or as may be required under the 1933 Act, the 1933 Act Regulations, the rules of Nasdaq, the securities laws of any state or non-U.S. jurisdiction or the rules of Financial Industry Regulatory Authority, Inc. ("FINRA").

(xix) Possession of Licenses and Permits. The Company and its subsidiaries possess such permits, licenses, approvals, consents and other authorizations (collectively, "Governmental Licenses") issued by the appropriate Governmental Entities necessary to conduct the business now operated by them, except where the failure so to possess would not, singly or in the aggregate, result in a Material Adverse Effect. The Company and its subsidiaries are in compliance with the terms and conditions of all Governmental Licenses, except where the failure so to comply would not, singly or in the aggregate, result in a Material Adverse Effect. All of the Governmental Licenses are valid and in full force and effect, except when the invalidity of such Governmental Licenses or the failure of such Governmental Licenses to be in full force and effect would not, singly or in the aggregate, result in a Material Adverse Effect. Neither the Company nor any of its subsidiaries has received any notice of proceedings relating to the revocation or modification of any Governmental Licenses which, if the subject of an unfavorable decision, ruling or finding, could, singly or in the aggregate, result in a Material Adverse Effect.

(xx) Title to Property. The Company and its subsidiaries have good and marketable title to all real property owned by them and good title to all other properties owned by them, in each case, free and clear of all mortgages, pledges, liens, security interests, claims, restrictions or encumbrances of any kind except such as (A) are described in the Registration Statement, the General Disclosure Package and the Prospectus or (B) do not, singly or in the aggregate, materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company or any of its subsidiaries. All of the leases and subleases material to the business of the Company and its subsidiaries, considered as one enterprise, and under which the Company or any of its subsidiaries holds properties described in the Registration Statement, the General Disclosure Package or the Prospectus, are in full force and effect, and neither the Company nor any such subsidiary has any notice of any material claim of any sort that has been asserted by anyone adverse to its rights under any of the leases or subleases mentioned above or affecting or questioning its rights to the continued possession of the leased or subleased premises under any such lease or sublease.

(xxi) Intellectual Property. (A) The Company and its subsidiaries exclusively own or have the right to use, pursuant to a valid and enforceable written license or other legally enforceable right, all Intellectual Property necessary for the conduct of the Company's and its subsidiaries' businesses as now conducted and as described in the Registration Statement, the General Disclosure Package and the Prospectus except (x) as stated in the Registration Statement, the General Disclosure Package or the Prospectus and (y) where the failure to so own or have the right to use would not result in a Material Adverse Effect. "Intellectual Property" means, in any and all jurisdictions worldwide, all (i) patents, patent applications, utility models, inventions and discoveries, statutory invention registrations, mask works, nonpublic invention disclosures, and industrial designs, community designs and other designs, (ii) trademarks, service marks, trade names, business names, logos, slogans, trade dress, Internet domain names and other identifiers of source or goodwill, including the goodwill symbolized thereby or associated therewith, (iii) works of authorship, registered and unregistered copyrights (including copyrights in software), design rights and database rights therein and thereto, (iv) rights in confidential and proprietary information, including data, trade secrets, technology, and know-how, (v) registrations, applications, licenses, renewals, continuations-in-part, divisionals, reissues, reexaminations and extensions for any of the foregoing in (i)-(iv), and (vi) any and all other intellectual property and proprietary rights.

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(B) There is no infringement, misappropriation or other violation by third parties of any Intellectual Property owned or exclusively licensed by the Company or its subsidiaries (collectively, the "Company IP"), except as would not, individually or in the aggregate, have a Material Adverse Effect. Except as (x) described in the Registration Statement, the General Disclosure Package or the Prospectus or (y) would not, individually or in the aggregate, have a Material Adverse Effect, (i) there is no pending or, to the knowledge of the Company, threatened, action, suit, proceeding or claim by any third party challenging the Company's or its subsidiaries' rights in or to any Company IP, and (ii) the Company is unaware of any facts which would form a reasonable basis for any such claim. Except as described in the Registration Statement, the General Disclosure Package or the Prospectus, the Company IP (i) is subsisting and, to the knowledge of the Company, valid and enforceable and (ii) has not been adjudged invalid or unenforceable, in whole or in part, except in each case, for the avoidance of doubt, for any prosecutions, amendments or other ordinary course administrative actions with respect to the Company IP. Except as described in the Registration Statement, the General Disclosure Package or the Prospectus, there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by any third party challenging the validity, ownership, registrability, enforceability or scope of any Company IP, as applicable, and neither the Company nor any of its subsidiaries has received any written notice of such claim or is aware of any facts which would form a reasonable basis for any such claim, except as would not, individually or in the aggregate, have a Material Adverse Effect. Except as (x) described in the Registration Statement, the General Disclosure Package or the Prospectus or (y) would not, individually or in the aggregate, have a Material Adverse Effect, (i) neither the Company nor any of its subsidiaries is engaging or has engaged in conduct that has infringed, misappropriated or otherwise violated any Intellectual Property of any third party, (ii) there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by any third party that the Company or its subsidiaries is or has, infringed, misappropriated or otherwise violated any Intellectual Property of any third party, and (iii) neither the Company nor any of its subsidiaries has received any written notice of such claim or is aware of any facts which would form a reasonable basis for any such claim. The Company and its subsidiaries have complied in all material respects with the terms of each agreement pursuant to which Company IP has been licensed to the Company or its subsidiaries. Neither the Company nor any of its subsidiaries has received any written notice alleging any such noncompliance or is aware of any facts which would form a reasonable basis for any such claim. No university, military, educational institution, research center, Governmental Entity or other organization has funded, sponsored or contributed to research and development conducted in connection with the business of the Company or any of its subsidiaries that (i) has any claim of right to, ownership of or other lien on any Company IP or (ii) would affect the proprietary nature of any Company IP or restrict the ability of the Company or any of its subsidiaries to enforce, license or exclude others from using any Company IP, except as would not, individually or in the aggregate, have a Material Adverse Effect. Neither the Company nor any of its subsidiaries is nor ever was a member or promoter of, or a contributor to, any industry standards

or standards-setting body or other organization, or has participated in any standards-setting activity, that could require or obligate the Company or such subsidiary to grant or offer to any other person any license or right to any Company IP or restrict the ability of the Company or such subsidiary to enforce, license or exclude others from using any Company IP, except as would not, individually or in the aggregate, have a Material Adverse Effect.

(C) Each person who is or was an employee or contractor of the Company or any of its subsidiaries and who is or was involved in the creation or development of any Intellectual Property for or on behalf of the Company or any of its subsidiaries has executed a valid agreement containing an assignment to the Company or any of its subsidiaries of such person's rights in and to such Intellectual Property, and no employee of the Company or any subsidiary is in or, to the knowledge of the Company, has ever been in violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, noncompetition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Company or any subsidiary or actions undertaken by the employee while employed with the Company or any subsidiary, except as would not, individually or in the aggregate, have a Material Adverse Effect.

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(D) The Company and its subsidiaries have taken all commercially reasonable measures necessary to protect the secrecy, confidentiality and value of all of the material trade secrets and other material confidential Intellectual Property included in the Company IP and the confidentiality of such material trade secrets and material confidential Company IP has not, to the Company's knowledge, been compromised or disclosed to or accessed by any third party except pursuant to appropriate nondisclosure and confidentiality agreements.

(E) All registrations and pending applications for registration of any Company IP before any Governmental Entity (collectively, the "Company Registrations") and Company Internet domain name registrations before any domain registrar ("Company Domains") have been or were duly and properly filed. All Company Registrations and Company Domains have been duly maintained and are in full force and effect, except as would not, individually or in the aggregate, have a Material Adverse Effect. There are no material defects in, including in the filing or prosecuting of, any of the Company Registrations or any Company Domain Names, except as would not, individually or in the aggregate, have a Material Adverse Effect.

(F) The Company and its subsidiaries have complied with their duty of candor and disclosure to the U.S. Patent and Trademark Office, the U.S. Copyright Office, and any applicable foreign or international intellectual property office with respect to the Company Registrations and there are no facts required to be disclosed that were not disclosed and which would preclude the grant of any registrations of Intellectual Property applications included in the Company Registrations. The Company has no knowledge of any facts which would preclude it or any applicable subsidiary from having clear title to the Company Registrations.

(xxii) Environmental Laws. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus or would not, singly or in the aggregate, result in a Material Adverse Effect, (A) neither the Company nor any of its subsidiaries is in violation of any federal, state, local or foreign statute, law, rule, regulation, ordinance, code, policy or rule of common law or any judicial or administrative interpretation thereof, including any judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health and safety, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to the release or threatened release of chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum or petroleum products, asbestos-containing materials or mold (collectively, "Hazardous Materials") or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, "Environmental Laws"), (B) the Company and its subsidiaries have all permits, authorizations and approvals required under any applicable Environmental Laws and are each in compliance with their requirements, (C) there are no pending or threatened administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of noncompliance or violation, investigation or proceedings relating to any Environmental Law against the Company or any of its subsidiaries and (D) there are no events or circumstances that would reasonably be expected to form the basis of an order for clean-up or remediation, or an action, suit or proceeding by any private party or Governmental Entity, against or affecting the Company or any of its subsidiaries relating to Hazardous Materials or any Environmental Laws.

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(xxiii) Accounting Controls and Disclosure Controls. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, the Company and each of its subsidiaries maintain effective internal control over financial reporting (as defined under Rule 13a-15 and Rule 15d-15 of the 1934 Act Regulations) and a system of internal accounting controls sufficient to provide reasonable assurances that: (A) transactions are executed in accordance with management's general or specific authorization; (B) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets; (C) access to assets is permitted only in accordance with management's general or specific authorization; (D) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences; and (E) the interactive data in eXtensible Business Reporting Language, if any, incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus fairly presents in all material respects the required information and is prepared in accordance with the Commission's rules and guidelines applicable thereto. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, since the end of the Company's most recent audited fiscal year, there has been (1) no material weakness in the Company's internal control over financial reporting (whether or not remediated) and (2) no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, the Company and each of its subsidiaries maintain an effective system of disclosure controls and procedures (as defined in Rule 13a-15 and Rule 15d-15 of the 1934 Act Regulations) that are designed to ensure that the information required to be disclosed by the Company in the reports that it files or submits under the 1934 Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms, and is accumulated and communicated to the Company's management, including its principal executive officer or officers and principal financial officer or officers, as appropriate, to allow timely decisions regarding disclosure.

(xxiv) Compliance with the Sarbanes-Oxley Act. There is and has been no failure on the part of the Company or any of the Company's directors or officers, in their capacities as such, to comply in all material respects with any provision of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith, including, without limitation, Section 402 related to loans and Sections 302 and 906 related to certifications.

(xxv) Payment of Taxes. All United States federal income tax returns of the Company and its subsidiaries required by law to be filed have been filed and all taxes shown by such returns or otherwise assessed, which are due and payable, have been paid, except assessments against which appeals have been or will be promptly taken and as to which adequate reserves have been provided. The United States federal income tax returns of the Company and its subsidiaries through the most recently completed fiscal year for which tax returns are due have been settled and no assessment in connection therewith has been made against the Company or any of its subsidiaries. The Company and its subsidiaries have filed all other tax returns that are required to have been filed by them pursuant to applicable foreign, state, local or other law except insofar as the failure to file such returns would not, singly or in the aggregate, result in a Material Adverse Effect, and has paid all taxes due pursuant to such returns or pursuant to any assessment received by the Company or any of its subsidiaries, except for such taxes, if any, as are being contested in good faith and as to which adequate reserves have been established by the Company. The charges, accruals and reserves on the books of the Company in respect of any income and corporation tax liability for any years not finally determined are adequate to meet any assessments or re-assessments for additional income tax for any years not finally determined, except to the extent of any inadequacy that would not, singly or in the aggregate, result in a Material Adverse Effect.

(xxvi) Insurance. The Company and its subsidiaries carry or are entitled to the benefits of insurance, with financially sound and reputable insurers, in such amounts and covering such risks as is generally maintained by companies of established repute engaged in the same or similar business, and all such insurance is in full force and effect. The Company has no reason to believe that it or any of its subsidiaries will not be able (A) to renew its existing insurance coverage as and when such policies expire or (B) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not, singly or in the aggregate, result in a Material Adverse Effect. Neither of the Company nor any of its subsidiaries has been denied any insurance coverage which it has sought or for which it has applied.

(xxvii) Investment Company Act. The Company is not required, and upon the issuance and sale of the Shares as contemplated herein and the application of the net proceeds therefrom as described in the Registration Statement, the General Disclosure Package and the Prospectus will not be required, to register as an “investment company” under the Investment Company Act of 1940, as amended (the “1940 Act”).

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(xxviii) Absence of Manipulation. Neither the Company nor any affiliate of the Company has taken, nor will the Company or any such affiliate take, directly or indirectly, any action which is designed, or would be expected, to cause or result in, or which constitutes, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any Shares or to result in a violation of Regulation M under the 1934 Act.

(xxix) Foreign Corrupt Practices Act. None of the Company, any of its subsidiaries or, to the knowledge of the Company, any director, officer, agent, employee, affiliate or other person acting on behalf of the Company or any of its subsidiaries is aware of or has taken any action, directly or indirectly, that would result in a violation by such persons of either (A) the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the “FCPA”), including, without limitation, making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any “foreign official” (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA or (B) the U.K. Bribery Act 2010 (the “Bribery Act”), and the Company, its subsidiaries and, to the knowledge of the Company, its other affiliates have conducted their businesses in compliance with the FCPA and the Bribery Act and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith.

(xxx) Money Laundering Laws. The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any Governmental Entity (collectively, the “Money Laundering Laws”). No action, suit or proceeding by or before any Governmental Entity involving the Company or any of its subsidiaries with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(xxxi) OFAC. None of the Company, any of its subsidiaries or, to the knowledge of the Company, any director, officer, agent, employee, affiliate or other person acting on behalf of the Company or any of its subsidiaries is (A) an individual or entity (“Person”) currently the subject or target of any sanctions administered or enforced by the United States Government, including, without limitation, the U.S. Department of the Treasury’s Office of Foreign Assets Control, the United Nations Security Council, the European Union, Her Majesty’s Treasury, or other relevant sanctions authority (collectively, “Sanctions”), or (B) located, organized or resident in a country or territory that is the subject of Sanctions. The Company will not, directly or indirectly, use the proceeds of the sale of the Shares, or lend, contribute or otherwise make available such proceeds to any of its subsidiaries, joint venture partners or other Persons, to fund any activities of or business with any Person, or in any country or territory, that, at the time of such funding, is the subject of Sanctions or in any other manner that will result in a violation by any Person (including any Person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions.

(xxxii) Lending Relationship. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus the Company (i) does not have any material lending or other relationship with the Agents or any bank, lending or other affiliate of an Agent and (ii) does not intend to use any of the proceeds from the sale of the Shares to repay any outstanding debt owed to an Agent or any affiliate of an Agent.

(xxxiii) Statistical and Market-Related Data. Any statistical and market-related data included in the Registration Statement, the General Disclosure Package or the Prospectus are based on or derived from sources that the Company believes, after reasonable inquiry, to be reliable and accurate and, to the extent required, the Company has obtained the written consent to the use of such data from such sources.

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(xxxiv) No Commissions. Neither the Company nor any of its subsidiaries is a party to any contract, agreement or understanding with any person (other than as contemplated by this Agreement) that would give rise to a valid claim against the Company or any of its subsidiaries or the Agents for a brokerage commission, finder’s fee or like payment in connection with the offering and sale of any Shares.

(xxxv) Actively-Traded Security. The Common Stock is an “actively-traded security” exempted from the requirements of Rule 101 of Regulation M under the 1934 Act by subsection (c)(1) of such rule.

(xxxvi) Cybersecurity and Data Protection. (A) There has been no security breach or incident, unauthorized access or disclosure, or other compromise of or relating to the Company’s or its subsidiaries’ information technology and computer systems, networks, hardware, software, data and databases (including the data and information of their respective customers, employees, suppliers, vendors and any third party data maintained, processed or stored by the Company or its subsidiaries, and any such data processed or stored by third parties on behalf of the Company or its subsidiaries), equipment or technology (collectively, “IT Systems and Data”), except as would not, individually or in the aggregate, have a Material Adverse Effect; (B) neither the Company nor its subsidiaries have been notified of, or have any knowledge of any event or condition that could result in, any security breach or incident, unauthorized access or disclosure of or other compromise to their IT Systems and Data and (C) the Company and its subsidiaries have implemented appropriate controls, policies, procedures, and technological safeguards to maintain and protect the integrity, continuous operation, redundancy and security of their IT Systems and Data reasonably consistent with industry standards and practices, or as required by applicable regulatory standards. The Company and its subsidiaries are presently in compliance in all material respects with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems and Data, including the collection, use, transfer, processing, disposal, disclosure, handling, storage and analysis of personally identifiable information, consumer information and other confidential information of the Company, its subsidiaries and any third parties in their possession (“Sensitive Company Data”), and to the protection of such IT Systems and Data from unauthorized use, access, misappropriation or modification. The Company and its subsidiaries have taken all reasonable steps necessary to maintain the confidentiality of the Sensitive Company Data. The Company and its subsidiaries have not received any notice, claim, complaint, demand or letter from any person in respect of their businesses under applicable data security and data protection laws and regulations and industry standards regarding misuse, loss, unauthorized destruction or unauthorized disclosure of any Sensitive Company Data. There has been no unauthorized or illegal use of or access to any Sensitive Company Data by any third party. The Company and its subsidiaries have not been required to notify any individual or data protection

(xxxvii) ERISA and Employee Benefits Matters. (A) To the knowledge of the Company, no “prohibited transaction” as defined under Section 406 of ERISA or Section 4975 of the Code and not exempt under ERISA Section 408 and the regulations and published interpretations thereunder has occurred with respect to any Employee Benefit Plan; (B) at no time has the Company or, to the knowledge of the Company, any ERISA Affiliate, maintained, sponsored, participated in, contributed to or has or had any liability or obligation in respect of any Employee Benefit Plan subject to Part 3 of Subtitle B of Title I of ERISA, Title IV of ERISA, or Section 412 of the Code or any “multiemployer plan” as defined in Section 3(37) of ERISA or any multiple employer plan for which the Company has incurred or could incur liability under Section 4063 or 4064 of ERISA; (C) no Employee Benefit Plan that is not a PEO Plan and, to the knowledge of the Company, no PEO Plan, provides or promises retiree health, retiree life insurance, or other retiree welfare benefits except as may be required by the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended, or similar state law, and except for continued broad-based benefit plan participation for a specified period following a qualifying termination of employment; (D) with respect to each Employee Benefit Plan that is not a PEO Plan and, to the knowledge of the Company, each PEO Plan, is and has been operated in material compliance with its terms and all applicable laws, including but not limited to ERISA and the Code and, to the knowledge of the Company, no event has occurred (including a “reportable event” as such term is defined in Section 4043 of ERISA) and no condition exists that would subject the Company to any material tax, fine, lien, penalty or liability imposed by ERISA, the Code or other applicable law; (E) with respect to each Employee Benefit Plan that is not a PEO Plan and, to the knowledge of the Company, each PEO Plan, intended to be qualified under Code Section 401(a) is so qualified and has a favorable determination or opinion letter from the Internal Revenue Service upon which it can rely, and any such determination or opinion letter remains in effect and has not been revoked and, to the knowledge of the Company, nothing has occurred since the date of any such determination or opinion letter that is reasonably likely to adversely affect such qualification; (F) with respect to each Foreign Benefit Plan, such Foreign Benefit Plan (1) if intended to qualify for special tax treatment, meets, in all material respects, the requirements for such treatment, and (2) if required to be funded, is funded to the extent required by applicable law, and with respect to all other Foreign Benefit Plans, adequate reserves therefor have been established on the accounting statements of the applicable Company or subsidiary; and (G) neither the Company nor any of its subsidiaries has any obligations under any collective bargaining agreement with any union and, to the knowledge of the Company, no organization efforts are underway with respect to employees of the Company or any of its subsidiaries. As used in this Agreement, “Code” means the Internal Revenue Code of 1986, as amended; “Employee Benefit Plan” means any “employee benefit plan” within the meaning of Section 3(3) of ERISA, including, without limitation, all stock purchase, stock option, stock-based severance, employment, change-in-control, medical, disability, fringe benefit, bonus, incentive, deferred compensation, employee loan and all other employee benefit plans, agreements, programs, policies or other arrangements, whether or not subject to ERISA, under which (1) any current or former employee, director or independent contractor of the Company or its subsidiaries has any present or future right to benefits and which are contributed to, sponsored by or maintained by the Company or any of its subsidiaries or (2) the Company or any of its subsidiaries has had or has any present or future obligation or liability; “ERISA” means the Employee Retirement Income Security Act of 1974, as amended; “ERISA Affiliate” means any member of the Company’s controlled group as defined in Code Section 414(b), (c), (m) or (o); “Foreign Benefit Plan” means any Employee Benefit Plan established, maintained or contributed to outside of the United States of America or which covers any employee working or residing outside of the United States; and “PEO Plan” means an Employee Benefit Plan sponsored and maintained by TriNet Group, Inc.

(xxxviii) No Restrictions on Subsidiary Payments to the Company. No subsidiary of the Company is currently prohibited, directly or indirectly, from paying any dividends to the Company, from making any other distribution on such subsidiary’s capital stock, from repaying to the Company any loans or advances to such subsidiary from the Company or from transferring any of such subsidiary’s property or assets to the Company or any other subsidiary of the Company, except (A) as provided by applicable state law, or (B) as described in or contemplated by the Registration Statement, General Disclosure and the Prospectus.

Any certificate signed by any officer or other authorized signatory of the Company and delivered to the Agents or to counsel for the Agents shall be deemed a representation and warranty by the Company to the Agents as to the matters covered thereby.

Section 2. Sale and Delivery of Shares.

(a) Subject to the terms and conditions set forth herein, the Company agrees to issue and sell Shares through the applicable Agent acting as sales agent or directly to the applicable Agent acting as principal from time to time. Sales of the Shares, if any, through an Agent acting as sales agent or directly to an Agent acting as principal will be made by means of transactions that are deemed to be “at-the-market” offerings as defined in Rule 415 under the 1933 Act, including block trades, ordinary brokers’ transactions on Nasdaq or otherwise at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices, or by any other method permitted by law.

(b) The Shares are to be sold to an Agent on an agent basis on any day (other than a day on which Nasdaq is closed or scheduled to close prior to its regular weekday closing time) (each, a “Trading Day”) on which (i) the Company has instructed such Agent to make such sales and (ii) the Company has satisfied its covenants and conditions specified in Sections 4 and 5 hereof. On any Trading Day, the Company may sell Shares through only one Agent and, if it determines to do so, shall instruct the applicable Agent by telephone (confirmed promptly by teletype or email, which confirmation will be promptly acknowledged by such Agent) as to the maximum number of Shares to be sold on such Trading Day and the minimum price per Share at which such Shares may be sold (such instruction, an “Issuance Notice”). Subject to the terms and conditions specified herein (including, without limitation, the accuracy of the representations and warranties of the Company and the performance by the Company of its covenants and other obligations, contained herein and the satisfaction of the additional conditions specified in Section 5 hereof), such Agent shall use its commercially reasonable efforts, consistent with its normal trading and sales practices and applicable law and regulations, to sell all of the Shares so designated by the Company as sales agent in accordance with such instruction. On any Trading Day, the Company shall give at least one business day’s prior written notice by teletype or email to the Agents as to any change of the Agent through whom sales of Shares as sales agent will be made. For the avoidance of doubt, the foregoing limitation shall not apply to sales solely to employees or security holders of the Company or its subsidiaries or to a trustee or other person acquiring Shares for the accounts of such persons in which either Oppenheimer, Craig-Hallum or Roth is acting for the Company in a capacity other than as Agent under this Agreement. The Company and the Agents each acknowledge and agree that (A) there can be no assurance that any Agent will be successful in selling any Shares and (B) no Agent will incur any liability or obligation to the Company if it fails to sell Shares for any reason other than a failure to use its commercially reasonable efforts, consistent with its normal trading and sales practices and applicable law and regulations, to sell such Shares as required by this Agreement.

(c) The Company or the Agent through whom the sale of Shares are to be made as sales agent on any Trading Day may, upon notice to the other parties hereto by telephone (confirmed promptly by teletype or email, which confirmation will be promptly acknowledged by the receiving party), suspend the offering of Shares with respect to which such Agent is acting as sales agent for any reason and at any time; provided, however, that such suspension shall not affect or impair the parties’ respective obligations with respect to the Shares sold, or with respect to Shares that the Company has agreed to sell, hereunder prior to the giving of such notice.

(d) The gross sales price of any Shares sold pursuant to this Agreement by the applicable Agent acting as sales agent of the Company shall be equal to, in the discretion of such Agent but subject to the specific instructions of the Company, the market price prevailing at the time of sale for the Shares sold by such Agent on Nasdaq or otherwise, at prices related to prevailing market prices or at negotiated prices. The compensation payable to an Agent for sales of Shares with respect to which such Agent acts as sales agent shall be up to 3.0% of the gross sales price for such Shares. The remaining proceeds, after further deduction for any transaction fees, transfer taxes or similar taxes or fees imposed by any Governmental Entity or self-regulatory organization in respect of such sales, shall constitute the net proceeds to the Company for such sales (the “Net Proceeds”). The applicable Agent shall notify the Company as promptly as practicable if any deduction referenced in the preceding sentence will be made. Notwithstanding the

foregoing, in the event the Company engages an Agent as sales agent for the sale of Shares that would constitute a “distribution” within the meaning of Rule 100 of Regulation M under the 1934 Act, the Company and such Agent will agree to compensation for such Agent that is customary for such sales.

(e) If acting as sales agent hereunder, the applicable Agent shall provide written confirmation to the Company following the close of trading on Nasdaq on each Trading Day on which Shares are sold under this Agreement setting forth the number of Shares sold on such day, the aggregate gross sales proceeds of the Shares, the aggregate Net Proceeds to the Company and the aggregate compensation payable by the Company to such Agent with respect to such sales.

(f) Under no circumstances shall the aggregate gross sales price or number, as the case may be, of Shares offered or sold pursuant to this Agreement, or which are the subject of instructions to an Agent as sales agent pursuant to Section 2(b) hereof, exceed the aggregate gross sales price or number, as the case may be, of Shares (i) referred to in the preamble paragraph of this Agreement, as reduced by prior sales of Shares under this Agreement, (ii) available for sale under the Registration Statement or (iii) duly authorized from time to time to be issued and sold under this Agreement by the Company or included for listing on Nasdaq, and, in each case referred to in clause (ii) and (iii), notified to the Agents in writing. In addition, under no circumstances shall any Shares with respect to which the Agent acts as sales agent be offered or sold, or be the subject of instructions to an Agent as sales agent pursuant to Section 2(b) hereof, at a price lower than the minimum price therefor duly authorized from time to time by the Company and notified to the Agents in writing. The Agents shall have no responsibility for maintaining records with respect to Shares available for sale under the Registration Statement or for determining the aggregate gross sales price, number or minimum price of Shares duly authorized by the Company.

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(g) If the exemptive provisions set forth in Rule 101(c)(1) of Regulation M under the 1934 Act are not satisfied with respect to the Company or the Shares, the Company shall promptly notify the Agents and future offers and sales of Shares through the Agents on an agented basis under this Agreement shall be suspended until that or other exemptive provisions have been satisfied in the judgment of each party.

(h) Settlement for sales of Shares will occur on the second business day that is also a Trading Day following the trade date on which such sales are made, unless another date shall be agreed to in writing by the Company and the applicable Agent (each such day, a “Settlement Date”). On each Settlement Date for the sale of Shares through an Agent as sales agent, such Shares shall be delivered by the Company to such Agent in book-entry form to such Agent’s account at The Depository Trust Company against payment by such Agent of the Net Proceeds from the sale of such Shares in same day funds delivered to an account designated by the Company. If the Company shall default on its obligation to deliver Shares through an Agent as sales agent on any Settlement Date, the Company shall (i) indemnify and hold such Agent harmless against any loss, claim or damage arising from or as a result of such default by the Company and (ii) pay such Agent any commission to which it would otherwise be entitled absent such default.

(i) Notwithstanding any other provision of this Agreement, the Company shall not offer or sell, or instruct an Agent to offer or sell, any Shares through an Agent as sales agent (and, by notice to the Agents given by telephone (confirmed promptly by teletype or email), shall cancel any instructions for any such offer or sale of any Shares prior to the commencement of the periods referenced below), and the Agents shall not be obligated to make any such offer or sale of Shares, (i) prior to the time that the Registration Statement becomes effective, (ii) during any period in which the Company is, or could be deemed to be, in possession of material non-public information or (iii) except as provided in Section 2(j) hereof, at any time during the period commencing on the 10th business day prior to the time the Company issues a press release containing, or shall otherwise publicly announce, its earnings, revenues or other operating results for a fiscal period or periods (each, an “Earnings Announcement”) through and including the time that is 24 hours after the time that the Company files a Quarterly Report on Form 10-Q or an Annual Report on Form 10-K (a “Filing Time”) that includes consolidated financial statements as of and for the same fiscal period or periods, as the case may be, covered by such Earnings Announcement.

(j) Notwithstanding clause (iii) of Section 2(i) hereof, if the Company wishes to offer or sell Shares to an Agent as sales agent at any time during the period from and including an Earnings Announcement through and including the corresponding Filing Time, the Company shall first (i) prepare and deliver to such Agent (with a copy to counsel for the Agents) a Current Report on Form 8-K that includes substantially the same financial and related information (together with management’s discussion and analysis thereof) that was included in such Earnings Announcement (other than any earnings projections and similar forward-looking data and officers’ quotations) (each, an “Earnings 8-K”), in form and substance reasonably satisfactory to such Agent, and, prior to its filing, obtain the written consent of such Agent to such filing (which consent shall not be unreasonably withheld), (ii) provide such Agent with the officers’ certificate, opinions and letters of counsel and accountants’ letter specified in Section 3(o), (p) and (q), respectively, hereof, (iii) afford such Agent the opportunity to conduct a due diligence review in accordance with Section 3(t) hereof prior to filing such Earnings 8-K and (iv) file such Earnings 8-K with the Commission (the date that such Earnings 8-K is so filed, a “Company Earnings Report Date”). For purposes of clarity, the parties hereto agree that (A) the delivery of any officers’ certificate, opinion or letter of counsel or accountants’ letter pursuant to this Section 2(j) shall not relieve the Company from any of its obligations under this Agreement with respect to any Quarterly Report on Form 10-Q or Annual Report on Form 10-K, as the case may be, including, without limitation, the obligation to deliver officers’ certificates, opinions and letters of counsel and accountants’ letters as provided in Section 3(o), (p) and (q), respectively, hereof, and (B) this Section 2(j) shall in no way affect or limit the operation of clause (i) of Section 2(i) hereof, which shall have independent application.

(k) No Agent shall have any obligation to purchase Shares as principal, whether from the Company or otherwise, unless the Company and the applicable Agent agree as set forth below. For the avoidance of doubt, no Agent shall purchase Shares as principal prior to the time that the Registration Statement has become effective. Shares purchased from the Company by an Agent, individually or in a syndicate, as principal shall be made in accordance with terms agreed upon between such Agent and the Company as evidenced by a Terms Agreement. The applicable Agent’s commitment to purchase Shares from the Company as principal shall be deemed to have been made on the basis of the accuracy of the representations and warranties of the Company, and performance by the Company of its covenants and other obligations, herein contained and shall be subject to the terms and conditions herein set forth. At the time of each Terms Agreement, the applicable Agent shall specify the requirements, if any, for the officers’ certificate, opinions and letters of counsel and accountants’ letter pursuant to Section 3(o), (p) and (q), respectively, hereof. In the event of a conflict between the terms of this ATM Sales Agreement and a Terms Agreement, the terms of such Terms Agreement shall control.

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Section 3. Covenants. The Company agrees with the Agents:

(a) *Compliance with Securities Regulations and Commission Requests*. The Company, subject to Section 3(b) and 3(c) hereof, will comply with the requirements of Rule 430B, and will notify the Agents promptly, and confirm the notice in writing, (i) when any post-effective amendment to the Registration Statement or any new registration statement relating to the Shares has been filed and/or has become effective or any amendment or supplement to the Prospectus shall have been filed (other than an amendment or supplement providing solely for the determination of the terms of an offering of securities unless related to an offering of Shares, as to which the Company will only be obligated to notify the applicable Agent), (ii) of the receipt of any comments from the Commission, (iii) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to the Prospectus, including any document incorporated by reference therein, or for additional information, (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto or any notice of objection to the use of the Registration Statement or any post-effective amendment thereto pursuant to Rule 401(g)(1) or of the issuance of any order preventing or suspending the use of any preliminary prospectus or the Prospectus or any amendment or supplement thereto, or of the suspension of the qualification of any Shares for offering or sale in any jurisdiction, or of the initiation or threatening of any proceedings for any of such purposes or of any examination pursuant to Section 8(d) or 8(e) of the 1933 Act concerning the Registration Statement and (v) if the Company becomes the subject of a proceeding under Section 8A of the 1933 Act in connection with any offering of Shares. In connection with a Terms Agreement, the Company will prepare and file with the Commission, subject to Section 3(c) hereof, a pricing supplement with respect to the offer and sale of Shares covered by

such Terms Agreement. The Company will effect all filings required under Rule 424(b), in the manner and within the time period required by Rule 424(b) (without reliance on Rule 424(b)(8)), and will take such steps as it deems necessary to ascertain promptly whether the form of prospectus transmitted for filing under Rule 424(b) was received for filing by the Commission and, in the event that it was not, it will promptly file such prospectus. The Company will make every reasonable effort to prevent the issuance of any stop, prevention or suspension order and, if any such order is issued, to obtain the lifting thereof at the earliest possible moment. In the event of any issuance of a notice of objection, by the Commission, the Company shall take all necessary action to permit offers and sales of Shares by or through the Agents, including, without limitation, amending the Registration Statement or filing a new shelf registration statement relating thereto.

(b) *Continued Compliance with Securities Laws.* The Company will comply with the 1933 Act, the 1933 Act Regulations, the 1934 Act and the 1934 Act Regulations so as to permit the completion of sales of Shares as contemplated in this Agreement and in the Registration Statement, the General Disclosure Package and the Prospectus. If any event shall occur or condition shall exist as a result of which it is necessary, in the opinion of counsel for the Agents or counsel to the Company, to (i) amend the Registration Statement in order that the Registration Statement will not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) amend or supplement the General Disclosure Package or the Prospectus in order that the General Disclosure Package or the Prospectus, as the case may be, will not include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein not misleading in the light of the circumstances existing at the time it is delivered to a purchaser or (iii) amend the Registration Statement or amend or supplement the General Disclosure Package or the Prospectus, as the case may be, including, without limitation, the filing of any document incorporated by reference therein, in order to comply with the requirements of the 1933 Act, the 1933 Act Regulations, the 1934 Act or the 1934 Act Regulations, the Company will promptly (A) give the Agents or, in the case of an offer and sale of Shares to an Agent as principal, such Agent written notice of such event or condition, (B) prepare any amendment or supplement as may be necessary to correct such statement or omission or to comply with such requirements and, a reasonable amount of time prior to any proposed filing or use, furnish the Agents or such Agent, as the case may be, with copies of any such amendment or supplement and (C) file with the Commission any such amendment or supplement and use its best efforts to have any amendment to the Registration Statement declared effective by the Commission as soon as possible; provided, however, that the Company shall not file or use any such amendment or supplement to which the Agents or such Agent, as the case may be, or counsel for the Agents shall reasonably object.

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(c) *Filing or Use of Amendments and Supplements.* The Company will give the Agents or, in the case of an offer and sale of Shares to an Agent as principal, such Agent written notice of its intention to file or use (i) any amendment to the Registration Statement or any amendment or supplement to the General Disclosure Package or the Prospectus (other than an amendment or supplement thereto relating solely to the offering of securities unless related to an offering of Shares), whether pursuant to the 1933 Act, the 1934 Act or otherwise, (ii) any new Prospectus Supplement that includes information in addition to the information referred to in Section 3(n) hereof or (iii) a pricing supplement disclosing the offer and sale of Shares covered by a Terms Agreement, will furnish the Agents or such Agent, as the case may be, with copies of any such document a reasonable amount of time prior to such proposed filing or use, as the case may be, and will not file or use any such document to which the Agents or such Agent, as the case may be, or counsel for the Agents shall reasonably object.

(d) *Delivery of Registration Statements.* The Company has furnished or will deliver to the Agents and counsel for the Agents, without charge, signed copies of the Registration Statement as originally filed and each amendment thereto (including exhibits filed therewith or incorporated by reference therein and documents incorporated or deemed to be incorporated by reference therein) and signed copies of all consents and certificates of experts. The signed copies of the Registration Statement and each amendment thereto furnished to the Agents and counsel for the Agents will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(e) *Delivery of Prospectuses.* The Company will furnish to the Agents or, in the case of an offer and sale of Shares to an Agent as principal, such Agent, without charge, upon execution of this Agreement and thereafter during the period in which a prospectus is (or, but for the exception afforded by Rule 172 of the 1933 Act Regulations (“Rule 172”), would be) required by the 1933 Act to be delivered in connection with any offer or sale of Shares, such number of copies of the Prospectus (as amended or supplemented) as the Agents or such Agent, as the case may be, may reasonably request. The Company will also furnish, upon request of the Agents or such Agent, as the case may be, copies of the Prospectus (as amended or supplemented) to each exchange or market on which sales of Shares were made as may be required by the rules and regulations of such exchange or market. The Prospectus and any amendments or supplements thereto furnished in accordance with this Section will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(f) *Reporting Requirements.* The Company, during the period in which a prospectus is (or, but for the exception afforded by Rule 172, would be) required by the 1933 Act to be delivered in connection with any offer or sale of Shares, will file all documents required to be filed with the Commission pursuant to the 1934 Act within the time periods prescribed by, and meeting the requirements of, the 1934 Act and the 1934 Act Regulations. Additionally, the Company shall report the use of the net proceeds from the sale of any Shares as may be required under the 1933 Act and the 1933 Act Regulations, including, if applicable, Rule 463 of the 1933 Act Regulations.

(g) *Blue Sky Qualifications.* The Company will use its best efforts, in cooperation with the Agents or, in the case of an offer and sale of Shares to an Agent as principal, such Agent to qualify the Shares for offering and sale under the applicable securities laws of such states and non-U.S. jurisdictions as the Agents or such Agent, as the case may be, may, from time to time, designate and to maintain such qualifications in effect so long as required to complete the sale of the Shares contemplated by this Agreement; provided, however, that the Company shall not be obligated to file any general consent to service of process or to qualify as a foreign corporation or as a dealer in securities in any jurisdiction in which it is not so qualified or to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise so subject.

(h) *Earnings Statement.* The Company will timely file such reports pursuant to the 1934 Act as are necessary in order to make generally available to its securityholders as soon as practicable an earnings statement for the purposes of, and to provide to the Agents the benefits contemplated by, the last paragraph of Section 11(a) of the 1933 Act.

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(i) *Use of Proceeds.* The Company will use the net proceeds received by it from the sale of the Shares pursuant to this Agreement in the manner specified in the Registration Statement, the General Disclosure Package and the Prospectus under “Use of Proceeds.”

(j) *Listing.* The Company will use its best efforts to effect and maintain the listing of the Shares on, and satisfy the requirements of, Nasdaq.

(k) *Notice of Certain Actions.* The Company will not, without the prior written consent of the Agents, during the period beginning on the third Trading Day immediately prior to the date on which an Issuance Notice is delivered to any Agent hereunder and ending on the third Trading Day immediately following the Settlement Date with respect to the Shares sold pursuant to the Issuance Notice, (i) directly or indirectly offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of any shares of Common Stock or any securities convertible into or exercisable or exchangeable for shares of Common Stock or file any registration statement under the 1933 Act with respect to any of the foregoing or (ii) enter into any swap or any other agreement or transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of the Common Stock, whether any such swap, agreement or transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise. The foregoing sentence shall not apply to (A) the Shares to be sold hereunder, (B) any shares of Common Stock issued by the Company upon the exercise of an option or warrant or the conversion of a security outstanding on the date hereof and referred to in the Registration Statement, the General Disclosure Package and the Prospectus, (C) any shares of Common Stock issued or options to purchase Common Stock granted pursuant to existing employee benefit plans of the Company referred to in the Registration Statement, the

General Disclosure Package and the Prospectus, (D) any shares of Common Stock issued pursuant to any non-employee director stock plan or dividend reinvestment plan referred to in the Registration Statement, the General Disclosure Package and the Prospectus, (E) any issuance of shares of Common Stock in connection with mergers or acquisitions of business, entities, property or other assets, joint ventures or strategic alliances, provided that the aggregate number of shares of Common Stock issuance under this clause (E) pursuant to any such arrangement shall not exceed five percent (5%) of the number of shares of Common Stock outstanding immediately prior to giving effect to such issuance. Upon receipt of any written notice contemplated above, an Agent may suspend its activity under this Agreement for such period of time as deemed appropriate by such Agent.

(l) *Issuer Free Writing Prospectuses.* The Company agrees that, unless it obtains the prior written consent of the applicable Agent, it will not make any offer relating to the Shares that would constitute an Issuer Free Writing Prospectus or that would otherwise constitute a “free writing prospectus,” or a portion thereof, required to be filed by the Company with the Commission or retained by the Company under Rule 433. The Company represents that it has treated or agrees that it will treat each such free writing prospectus consented to by the applicable Agent as an “issuer free writing prospectus,” as defined in Rule 433, and that it will comply with the applicable requirements of Rule 433 with respect thereto, including timely filing with the Commission where required, legending and record keeping. If at any time following issuance of an Issuer Free Writing Prospectus any event shall occur or condition shall exist as a result of which such Issuer Free Writing Prospectus conflicted or would conflict with the information contained in the Registration Statement, any preliminary prospectus or the Prospectus or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the applicable Agent and will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.

(m) *No Stabilization or Manipulation.* The Company agrees that neither it nor any affiliate of the Company will take, directly or indirectly, any action which is designed, or would be expected, to cause or result in, or which constitutes, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any Shares or to result in a violation of Regulation M under the 1934 Act.

(n) *Update of Activity under this Agreement.* The Company shall disclose (i) in each Annual Report on Form 10-K or Quarterly Report on Form 10-Q filed by the Company in respect of any fiscal quarterly period (which, in the case of an Annual Report on Form 10-K, would mean the last quarterly period of the fiscal year) in which sales of Shares were made by or through an Agent under this Agreement (each date on which any such document or amendment thereto is filed, a “Company Periodic Report Date”), or (ii) to the extent required by applicable law and/or interpretations of the Commission, in Prospectus Supplements for each such fiscal quarterly period, the number of Shares sold by or through the Agents under this Agreement during such fiscal quarterly period and the net proceeds received by the Company and the aggregate compensation paid by the Company to the Agents with respect to such sales.

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(o) *Delivery of Future Officers' Certificates.* Upon commencement of the offering of Shares under this Agreement and subject to Section 5(r), (A) each time Shares are delivered to an Agent as principal on a Settlement Date, (B) promptly after each (i) date on which the Registration Statement shall be amended or a new registration statement relating to the Shares shall become effective or the Prospectus shall be amended or supplemented (other than (1) by an amendment or supplement providing solely for the determination of the terms of securities, including the Shares, (2) in connection with the filing of a Prospectus Supplement that contains solely the information referred to in Section 3(n) hereof, or (3) in connection with the filing of any Current Report on Form 8-K (other than an Earnings 8-K and any other Current Report on Form 8-K which contains financial statements, supporting schedules or other financial data, including any Current Report on Form 8-K under Item 2.02 of such form that is considered “filed” under the 1934 Act) (each such date, a “Registration Statement Amendment Date”), (ii) Company Earnings Report Date with respect to which the Company is required to provide an Agent with an officers' certificate, opinions and letters of counsel and accountants' letter pursuant to Section 2(j) hereof (an “Applicable Company Earnings Report Date”) and (iii) Company Periodic Report Date, and (C) promptly after each reasonable request by the Agents (each date of any such request by the Agents, a “Request Date”), the Company will furnish or cause to be furnished to the Agents or, in the case of clause (A) above, the applicable Agent, an officers' certificate, dated such Settlement Date, such Registration Statement Amendment Date, such Applicable Company Earnings Report Date, such Company Periodic Report Date or such Request Date, as the case may be, in form and substance reasonably satisfactory to the Agents, or, in the case of clause (A) above, such Agent, as the case may be, to the effect that the statements contained in the officers' certificate referred to in Section 5(e) hereof that was last furnished to the Agents or, in the case of clause (A) above, such Agent, as the case may be, are true and correct as of the date of such certificate as though made at and as of the date of such certificate (except that such statements shall be deemed to relate to the Registration Statement, the General Disclosure Package and the Prospectus as amended and supplemented at the date of such certificate) or, in lieu of such certificate, a certificate of the same tenor as the certificate referred to in Section 5(e) hereof that, but modified as necessary to relate to the Registration Statement, the General Disclosure Package and the Prospectus as amended and supplemented at the date of such certificate. As used in this Section 3(o), to the extent there shall be a sale of Shares on or following any Registration Statement Amendment Date, Applicable Company Earnings Report Date, Company Periodic Report Date or Request Date, “promptly” shall be deemed to be at or prior to the Applicable Time for such sale.

(p) *Delivery of Future Opinions and Letters of Counsel.* Upon commencement of the offering of Shares under this Agreement and subject to Section 5(r), (A) each time Shares are delivered to an Agent as principal on a Settlement Date and (B) promptly after each (i) Registration Statement Amendment Date, (ii) Applicable Company Earnings Report Date, (iii) Company Periodic Report Date or (iv) Request Date, the Company will furnish or cause to be furnished to the Agent or, in the case of clause (A) above, the applicable Agent the written opinions and letters of each of counsel to the Company (who shall be reasonably acceptable to the Agents) or, in the case of clause (A) above, such Agent, as the case may be) and counsel to the Agents, dated such Settlement Date, such Registration Statement Amendment Date, such Applicable Company Earnings Report Date, such Company Periodic Report Date or such Request Date, as the case may be, in form and substance reasonably satisfactory to the Agents, or, in the case of clause (A) above, such Agent, as the case may be, of the same tenor as the respective opinions and letters referred to in Section 5(b) and 5(c), as applicable, hereof but modified as necessary to relate to the Registration Statement, the General Disclosure Package and the Prospectus as amended and supplemented to the date of such opinion and letter or, in lieu of any such opinion and letter, counsel last furnishing such opinion and letter to the Agents or, in the case of clause (A) above, such Agent, as the case may be, shall furnish the Agents or, in the case of clause (A) above, such Agent, as the case may be, with a letter substantially to the effect that the Agents or, in the case of clause (A) above, such Agent, as the case may be, may rely on such counsel's last opinion and letter to the same extent as though each were dated the date of such letter authorizing reliance (except that statements in such last opinion and letter shall be deemed to relate to the Registration Statement, the General Disclosure Package and the Prospectus as amended and supplemented to the date of such letter authorizing reliance). As used in this Section 3(p), to the extent there shall be a sale of Shares on or following any Registration Statement Amendment Date, Applicable Company Earnings Report Date, Company Periodic Report Date or Request Date, “promptly” shall be deemed to be at or prior to the Applicable Time for such sale.

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(q) *Delivery of Future Accountants' Letters.* Upon commencement of the offering of Shares under this Agreement and subject to Section 5(r), (A) each time Shares are delivered to an Agent as principal on a Settlement Date and (B) promptly after each (i) Registration Statement Amendment Date, (ii) Applicable Company Earnings Report Date, (iii) Company Periodic Report Date or (iv) Request Date, the Company will cause its independent accountants to furnish to the Agents or, in the case of clause (A) above, such Agent a letter, dated such Settlement Date, such Registration Statement Amendment Date, such Applicable Company Earnings Report Date, such Company Periodic Report Date or such Request Date, as the case may be, in form and substance reasonably satisfactory to the Agents, or, in the case of clause (A) above, such Agent, as the case may be, of the same tenor as the letter referred to in Section 5(d) hereof but modified as necessary to relate to the Registration Statement, the General Disclosure Package and the Prospectus as amended and supplemented to the date of such letter. As used in this paragraph, to the extent there shall be a sale of Shares on or following any Registration Statement Amendment Date, Applicable Company Earnings Report Date, Company Periodic Report Date or Request Date, “promptly” shall be deemed to be at or prior to the

Applicable Time for such sale.

(r) *Waiver of Future Delivery Obligations.* The Company may notify the Agents by telephone (confirmed promptly by electronic mail), or by such other method as the Company and the Agents shall mutually agree in writing, at any time until 5:00 p.m., New York City time, on the second business day preceding any Representation Date (other than the Company Periodic Report Date relating to the date of filing of the Company's Annual Report on Form 10-K) that it does not intend to sell Shares under this Agreement for the period commencing on such Representation Date and continuing until the next succeeding Representation Date. If the Company shall have provided such notice, the requirements to provide the certificate pursuant to Section 5(o) hereunder, legal opinions and negative assurance letters, as the case may be, pursuant to Section 5(p) hereunder, a letter or letters from accountants pursuant to Section 5(q) hereunder shall be waived in respect of such Representation Date. Notwithstanding the foregoing, if the Company delivers an Issuance Notice to an Agent at a time that is (i) following a Representation Date in respect of which deliveries to the Agents of the documents required by any of Section 5(o), Section 5(p), and Section 5(q) hereunder were waived, and (ii) prior to the next Representation Date, such Agent shall not be obligated to sell any Shares pursuant to such Issuance Notice until all documents required by each such applicable section of this Agreement shall have been provided to such Agent and the Company shall have provided such Agent with a customary due diligence update.

(s) *Trading in the Common Stock.* The Company consents to the Agents trading in the Company's Common Stock for their own account and for the account of their clients at the same time as sales of Shares occur pursuant to this Agreement.

(t) *Non-Consummation Offer.* If, to the knowledge of the Company, any filing required by Rule 424(b) in connection with an offering of Shares shall not have been made or the representations and warranties of the Company contained in this Agreement shall not be true and correct on the applicable Settlement Date, the Company will offer to any person who has agreed to purchase Shares from or through an Agent the right to refuse to purchase and pay for such Shares.

(u) *Due Diligence Review.* The Company will cooperate with any due diligence review reasonably requested by the Agents or counsel for the Agents, fully and in a timely manner, in connections with offers and sales of Shares from time to time, including, without limitation, and upon reasonable notice, providing information and making available documents and appropriate corporate officers, during regular business hours and at the Company's principal offices.

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(v) *Renewal Deadline.* If, immediately prior to the third anniversary of the initial effective date of the Registration Statement (the "Renewal Deadline"), this Agreement is still in effect or any Shares purchased by an Agent as principal remain unsold, the Company will, prior to the Renewal Deadline, (i) promptly notify the Agents and (ii) promptly file, if it is eligible to do so, an automatic shelf registration statement relating to the Shares, in a form and substance satisfactory to the Agents. If, at the time the Company intends to file such an automatic shelf registration statement, it is not eligible to do so, the Company will, prior to the Renewal Deadline, promptly notify the Agents, (ii) promptly file a new shelf registration statement on the proper form relating to the Shares, in a form and substance satisfactory to the Agents, (iii) use its best efforts to cause such new shelf registration statement to be declared effective within 60 days after the Renewal Deadline and (iv) promptly notify the Agents of such effectiveness. The Company will take all other action necessary or appropriate to permit the offering and sale of the Shares to continue as contemplated in the expired Registration Statement. References herein to the "Registration Statement" shall include such new automatic shelf registration statement or such new shelf registration statement, as the case may be.

(w) *Ceasing Eligibility For Use of Shelf Registration Statement Form* If, at any time, when Shares purchased by an Agent as principal remain unsold, the Company receives a notice from the Commission pursuant to Rule 401(g)(1) or otherwise ceases to be eligible to use the shelf registration statement form, the Company will (i) promptly notify the Agents, (ii) promptly file a new registration statement or post-effective amendment on the proper form relating to such Shares, in form and substance satisfactory to the Agents, (iii) use its best efforts to cause such new registration statement or post-effective amendment to be declared effective as soon as practicable and (iv) promptly notify the Agents of such effectiveness. The Company will take all other action necessary or appropriate to permit the offering and sale of the Shares to continue as contemplated in the Registration Statement that was the subject to the Rule 401(g)(1) notice or for which the Company has otherwise become ineligible. References herein to the "Registration Statement" shall include such new registration statement or post-effective amendment, as the case may be.

Section 4. Payment of Expenses.

(a) *Expenses.* The Company will pay or cause to be paid all expenses incident to the performance of its obligations under this Agreement, including (i) the preparation, printing and filing of the Registration Statement (including financial statements and exhibits) as originally filed and each amendment thereto, (ii) the preparation, printing and delivery to the Agents of copies of any preliminary prospectus, any Issuer Free Writing Prospectus and the Prospectus and any amendments or supplements thereto and any costs associated with electronic delivery of any of the foregoing by the Agents to investors, (iii) the preparation, issuance and delivery of the certificates for the Shares, including any stock or other transfer taxes and any stamp or other duties payable upon the sale, issuance or delivery of the Shares to the Agents, (iv) the fees and disbursements of the Company's counsel, accountants and other advisors, (v) the qualification of the Shares under securities laws in accordance with the provisions of Section 3(g) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Agents in connection therewith and in connection with the preparation of the Blue Sky Survey and any supplement thereto, (vi) the fees and expenses of any transfer agent or registrar for the Shares, (vii) the costs and expenses of the Company relating to investor presentations on any "road show" undertaken in connection with the marketing of the Shares, (viii) the filing fees incident to, and the reasonable fees and disbursements of counsel for the Agents in connection with, the review by FINRA of the terms of sales of Shares, (ix) the fees and expenses incurred in connection with the listing of the Shares on Nasdaq, (x) the reasonable documented out-of-pocket expenses of the Agents, including the reasonable fees, disbursements and expenses of counsel for the Agents in connection with the matters referenced in clause (v) above, the negotiation of this Agreement and the preparation and review of the Prospectus Supplement, which amount shall not exceed (A) \$90,000 in the aggregate (including amounts previously paid by the Company) for expenses incurred on or prior to the date of this Agreement and (B) \$5,000 for each quarterly update, if any, occurring after the date of this Agreement, and (xi) the costs and expenses (including, without limitation, any damages or other amounts payable in connection with legal or contractual liability) associated with the reforming of any contracts for the sale of Shares caused by a breach of the representation contained in the second sentence of Section 1(ii) hereof.

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Section 5. Conditions of Agents' Obligations. The obligations of the Agents hereunder are subject to the accuracy of the representations and warranties of the Company contained herein or in certificates of any officer of the Company or any of its subsidiaries delivered pursuant to the provisions hereof at each Representation Date, to the performance by the Company of its covenants and other obligations hereunder, and to the following further conditions:

(a) *Effectiveness of Registration Statement and Filing of Prospectus.* The Company shall have filed the Registration Statement with the Commission and the Registration Statement was declared effective by the Commission not earlier than three years prior to the date hereof. The Company shall have filed with the Commission the Prospectus and any subsequent Base Prospectus or Prospectus Supplement prior to any Applicable Time and related Settlement Date, as applicable, in each case in the manner and within the time period required by Rule 424(b), and each Issuer Free Writing Prospectus, if any, in the manner and within the time period required by Rule 433. No stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto shall have been issued under the 1933 Act, no notice of objection of the Commission to the use of the Registration Statement or any post-effective amendment thereto pursuant to Rule 401(g)(1) shall have been received by the Company, no order preventing or suspending the use of any preliminary prospectus or the Prospectus or any amendment or supplement thereto shall have been issued and no proceedings for any of those purposes shall have been instituted or are pending or, to the Company's knowledge, contemplated. The Company shall have complied with any and all requests for additional information on the part of the Commission to the reasonable satisfaction of the Agents.

(b) *Opinion of Counsel for the Agents.* On or prior to the date that the first sales instruction pursuant to section 2(b) hereof is provided by the Company to an Agent (the “First Sales Instruction Date”), the Agents shall have received the favorable written opinion and negative assurance letter of Lowenstein Sandler LLP, counsel for the Agents, dated such date (the date of such delivery, together with deliveries pursuant to Section 5(c), (d), (e), (f) and (h), the “First Delivery Date”), with respect to such matters as the Agents may reasonably request. In giving such opinion or opinions, such counsel may rely, as to all matters governed by the laws of jurisdictions other than the laws of the State of New York, the General Corporation Law of the State of Delaware and the federal securities laws of the United States, upon the opinions of counsel satisfactory to the Agents. Such counsel may also state that, insofar as such opinion involves factual matters, they have relied, to the extent they deem proper, upon certificates of officers and other representatives of the Company and its subsidiaries and certificates of public officials.

(c) *Opinion of Counsel to the Company.* On or prior to the First Sales Instruction Date, the Agents shall have received (i) the favorable written opinion and negative assurance letter of K&L Gates LLP, counsel to the Company, and (ii) the favorable written opinion of Ogawa Professional Corporation, intellectual property counsel to the Company, each dated such date, to the effect set forth in Exhibit A and Exhibit B hereto.

(d) *Accountants’ Letter.* On or prior to the First Sales Instruction Date, the Agents shall have received a letter from Marcum LLP, dated such date, in form and substance satisfactory to the Agents, containing statements and information of the type ordinarily included in accountants’ “comfort letters” to underwriters with respect to the financial statements and other financial information included in the Registration Statement, the General Disclosure Package and the Prospectus or any amendment or supplement thereto.

(e) *Officers’ Certificate for the Company.* On or prior to the First Sales Instruction Date, there shall not have been, since the date of the latest audited financial statements included in the Registration Statement, the General Disclosure Package and the Prospectus or since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package and the Prospectus, any Material Adverse Change, and the Agents shall have received a certificate of the Chief Executive Officer or President of the Company and of the Chief Financial Officer or Chief Accounting Officer of the Company, dated such date, to the effect that (A) there has been no such Material Adverse Change, (B) the representations and warranties of the Company in this Agreement are true and correct with the same force and effect as though expressly made on and as of such date, (C) the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied on or prior to such date and (iv) no stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued under the 1933 Act, no notice of objection of the Commission to the use of the Registration Statement or any post-effective amendment thereto pursuant to Rule 401(g)(1) has been received by the Company, no order preventing or suspending the use of any preliminary prospectus or the Prospectus or any amendment or supplement thereto has been issued and no proceedings for any of those purposes have been instituted or are pending or, to their knowledge, contemplated.

(f) *Listing.* The Shares shall have been approved for listing, subject to official notice of issuance, on Nasdaq.

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(g) *Additional Documents.* On or prior to the First Sales Instruction, counsel for the Agents shall have been furnished with such documents and opinions as they may require for the purpose of enabling them to render the opinions or make the statements requested by the Agents, or in order to evidence the accuracy of any of the representations or warranties, or the fulfillment of any of the covenants, obligations or conditions, contained herein; and all proceedings taken by the Company in connection with the issuance and sale of the Shares as contemplated herein shall be satisfactory in form and substance to the Agents and counsel for the Agents.

(h) *Termination of this Agreement.* If any condition specified in this Section shall not have been fulfilled when and as required to be fulfilled, this Agreement may be terminated by the applicable Agent by notice to the Company at any time, and any such termination shall be without liability of any party to any other party except the provisions of Sections 1, 3(h), 4, 6, 7, 8, 13, 14, 15 and 16 hereof shall remain in full force and effect notwithstanding such termination.

Section 6. Indemnification.

(a) *Indemnification of the Agents.* The Company agrees to indemnify and hold harmless the Agents, their respective affiliates (as such term is defined in Rule 501(b) of the 1933 Act Regulations (each, an “Affiliate”), selling agents, officers and directors and each person, if any, who controls an Agent within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act as follows:

(i) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, arising out of any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto), including any information deemed to be a part thereof pursuant to Rule 430B, or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading or arising out of any untrue statement or alleged untrue statement of a material fact included (A) in any preliminary prospectus, any Issuer Free Writing Prospectus, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) or (B) in any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of any offering of Shares (“Marketing Materials”), including any roadshow or investor presentations made to investors by the Company (whether in person or electronically), or the omission or alleged omission in any preliminary prospectus, any Issuer Free Writing Prospectus, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) or in any Marketing Materials of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(ii) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, to the extent of the aggregate amount paid in settlement of any litigation, or any investigation or proceeding by any Governmental Entity, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission; provided that (subject to Section 6(d) below) any such settlement is effected with the written consent of the Company;

(iii) against any and all expense whatsoever, as incurred (including the fees and disbursements of counsel chosen by the Agents), reasonably incurred in investigating, preparing or defending against any litigation, or any investigation or proceeding by any Governmental Entity, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission, to the extent that any such expense is not paid under (i) or (ii) above;

provided, however, that this indemnity agreement shall not apply to any loss, liability, claim, damage or expense to the extent arising out of any untrue statement or omission or alleged untrue statement or omission made in the Registration Statement (or any amendment thereto), including any information deemed to be a part thereof pursuant to Rule 430B, or in the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with information furnished to the Company by the Agents in writing expressly for use therein.

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(b) *Indemnification of Company, Directors and Officers.* Each Agent, severally and not jointly, agrees to indemnify and hold harmless the Company, its directors, each of its officers who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the

1934 Act against any and all loss, liability, claim, damage and expense described in the indemnity contained in Section 6(a) hereof, as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement (or any amendment thereto), including any information deemed to be a part thereof pursuant to Rule 430B, or in the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with the information furnished to the Company by such Agent in writing expressly for use therein.

(c) *Actions against Parties; Notification.* Each indemnified party shall give notice as promptly as reasonably practicable to each indemnifying party of any action commenced against it in respect of which indemnity may be sought hereunder, but failure to so notify an indemnifying party shall not relieve such indemnifying party from any liability hereunder to the extent it is not materially prejudiced as a result thereof and in any event shall not relieve it from any liability which it may have otherwise than on account of this indemnity agreement. In the case of parties indemnified pursuant to Section 6(a) hereof, counsel to the indemnified parties shall be selected by the Agents, and, in the case of parties indemnified pursuant to Section 6(b) hereof, counsel to the indemnified parties shall be selected by the Company. An indemnifying party may participate at its own expense in the defense of any such action; provided, however, that counsel to the indemnifying party shall not (except with the prior written consent of the indemnified party) also be counsel to the indemnified party. In no event shall the indemnifying parties be liable for fees and expenses of more than one counsel (in addition to any local counsel) separate from their own counsel for all indemnified parties in connection with any one action or separate but similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances. No indemnifying party shall, without the prior written consent of the indemnified parties, settle or compromise or consent to the entry of any judgment with respect to any litigation, or any investigation or proceeding by any Governmental Entity, commenced or threatened, or any claim whatsoever in respect of which indemnification or contribution could be sought under this Section 6 or Section 7 hereof (whether or not the indemnified parties are actual or potential parties thereto), unless such settlement, compromise or consent (i) includes an unconditional release of each indemnified party from all liability arising out of such litigation, investigation, proceeding or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

(d) *Settlement without Consent if Failure to Reimburse.* If at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 6(a)(ii) hereof effected without its written consent if (i) such settlement is entered into more than 45 days after receipt by such indemnifying party of the aforesaid request, (ii) such indemnifying party shall have received notice of the terms of such settlement at least 30 days prior to such settlement being entered into and (iii) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement.

Section 7. Contribution. If the indemnification provided for in Section 6 hereof is for any reason unavailable to or insufficient to hold harmless an indemnified party in respect of any losses, liabilities, claims, damages or expenses referred to therein, then each indemnifying party shall contribute to the aggregate amount of such losses, liabilities, claims, damages and expenses incurred by such indemnified party, as incurred, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company, on the one hand, and the applicable Agent, on the other hand, from the applicable offering of Shares or (ii) if the allocation provided by clause (i) is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company, on the one hand, and the applicable Agent, on the other hand, in connection with the statements or omissions which resulted in such losses, liabilities, claims, damages or expenses, as well as any other relevant equitable considerations.

The relative benefits received by the Company, on the one hand, and the applicable Agent, on the other hand, in connection with the applicable offering of Shares shall be deemed to be in the same proportion as the total net proceeds from such offering (before deducting expenses) received by the Company, on the one hand, bear to the total commissions or underwriting discounts received by the applicable Agent, on the other hand.

The relative fault of the Company, on the one hand, and the applicable Agent, on the other hand, shall be determined by reference to, among other things, whether any such untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or by the applicable Agent and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The Company and the Agents agree that it would not be just and equitable if contribution pursuant to this Section 7 were determined by pro rata allocation (even if the applicable Agents were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above in this Section 7. The aggregate amount of losses, liabilities, claims, damages and expenses incurred by an indemnified party and referred to above in this Section 7 shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in investigating, preparing or defending against any litigation, or any investigation or proceeding by any Governmental Entity, commenced or threatened, or any claim whatsoever based upon any such untrue or alleged untrue statement or omission or alleged omission.

Notwithstanding the provisions of this Section 7, no Agent shall be required to contribute any amount in excess of the total commissions or underwriting discounts received by such Agent in connection with the applicable offering of Shares placed or underwritten by it for sale to the public.

No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

For purposes of this Section 7, each person, if any, who controls an Agent within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act and an Agent's Affiliates, selling agents, officers and directors shall have the same rights to contribution as such Agent, and each director of the Company, each officer of the Company who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act shall have the same rights to contribution as the Company. The Agents' respective obligations to contribute pursuant to this Section 7 are several in proportion to the number of Shares placed or underwritten by it in the applicable offering.

Section 8. Representations, Warranties and Agreements to Survive. All representations, warranties and agreements contained in this Agreement or in certificates of officers of the Company or any of its subsidiaries submitted pursuant hereto, shall remain operative and in full force and effect regardless of (i) any investigation made by or on behalf of an Agent or its Affiliates, selling agents, officers or directors or any person controlling such Agent, or the Company or its officers or directors, or any person controlling the Company and (ii) delivery of and payment for the Shares.

Section 9. Termination.

(a) This Agreement may be terminated for any reason, at any time, by either the Company or an Agent, as to itself, upon the giving of two days prior written notice to the other parties hereto.

(b) The applicable Agent or Agents may terminate a Terms Agreement to which they are or it is, as the case may be, a party, at any time at or prior to the Settlement Date, (i) if there has been, in the judgment of the applicable Agent or Agents, since the time of execution of such Terms Agreement or since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, any Material Adverse Change, or (ii) if there has occurred any material adverse change in the financial markets in the United States or the international financial markets, any outbreak of hostilities or escalation thereof or other calamity or crisis or any change or development involving a prospective change in national or international political, financial or economic conditions, in each case the effect of which is such as to make it, in the judgment of the applicable Agent or Agents, impracticable or inadvisable to proceed with the completion of the offering of Shares contemplated by such Terms Agreement or to enforce contracts for the sale of such Shares, or (iii) if trading in any securities of the Company has been suspended or materially limited by the Commission or Nasdaq, or (iv) if trading generally on the NYSE, the NYSE American or Nasdaq has been suspended or materially limited, or minimum or maximum prices for trading have

been fixed, or maximum ranges for prices have been required, by any of said exchanges or by order of the Commission, FINRA or any other Governmental Entity, or (v) if a material disruption has occurred in commercial banking or securities settlement or clearance services in the United States or with respect to the systems of Clearstream Banking, S.A., or Euroclear Bank, SA/NV, in Europe, or (vi) if a banking moratorium has been declared by either Federal or New York authorities.

(c) If the Company and multiple Agents enter into a Terms Agreement pursuant to which such Agents agree to purchase Shares from the Company as principal and one of the Agents shall fail at the Settlement Date to purchase the Shares which it is obligated to purchase (the “Defaulted Shares”), then the nondefaulting Agent(s) shall have the right, within 24 hours thereafter, to make arrangements to purchase all, but not less than all, of the Defaulted Shares in such amounts as may be agreed upon and upon the terms herein set forth; provided, however, that if such arrangements shall not have been completed within such 24-hour period, then:

(i) if the number of Defaulted Shares does not exceed 10% of the number of Shares to be so purchased by such Agents on the Settlement Date, the nondefaulting Agent(s) shall be obligated to purchase the full amount thereof; or

(ii) if the number of Defaulted Shares exceeds 10% of the number of Shares to be so purchased by such Agents on the Settlement Date, such Terms Agreement shall terminate without liability on the part of the nondefaulting Agent(s).

No action taken pursuant to this Section 9(c) shall relieve any defaulting Agent from liability in respect of its default. In the event of any such default which does not result in a termination of such Terms Agreement, either the nondefaulting Agent(s) or the Company shall have the right to postpone the Settlement Date for a period not exceeding seven days in order to effect any required changes in the Registration Statement, the General Disclosure Package or the Prospectus or in any other documents or arrangements.

(d) In the event of any termination under this Section 9, no party will have any liability to the other parties hereto, except that (i) the Agents shall be entitled to any commissions earned in accordance with Section 2(b) hereof, (ii) if at the time of termination (a) an Agent shall own any Shares purchased by it as principal or (b) an offer to purchase any Shares has been accepted by the Company but the Settlement Date has not occurred, the covenants set forth in Section 3 hereof shall remain in effect until such Shares are resold or so delivered, as the case may be, and (iii) the covenant set forth in Section 3(h) hereof, the provisions of Section 4 hereof, the indemnity and contribution agreements set forth in Sections 6 and 7 hereof, and the provisions of Sections 8, 13, 14, 15 and 16 hereof shall remain in effect.

Section 10. Notices. All notices and other communications hereunder shall be in writing and shall be deemed to have been duly given if mailed or transmitted by any standard form of telecommunication. Notices to the Agents shall be directed to them as applicable: Oppenheimer & Co. Inc., 85 Broad Street, New York, New York 10005, Attention: Thomas Villano, e-mail: thomas.villano@opco.com, with copies to DL-EquityATMOffering@opco.com and DL-ECMTECHCONSFID@opco.com, Craig-Hallum Capital Group, LLC, 222 South Ninth Street, Suite 350, Minneapolis, Minnesota 55402, Attention: prospectus@chlm.com, and Roth Capital Partners, LLC, 888 San Clemente Drive, Suite 400, Newport Beach, California 92660, Attention: atmdesk@roth.com; and notices to the Company shall be directed to it at 9805 Northcross Center Court, Suite A, Huntersville, North Carolina 28078, Attention: General Counsel, with a copy (which shall not constitute notice) to K&L Gates LLP, 300 South Tryon Street, Suite 1000, Charlotte, North Carolina 28202, Attention: Sean M. Jones.

Section 11. No Advisory or Fiduciary Relationship. The Company acknowledges and agrees that (a) each purchase and sale of Shares pursuant to this Agreement, including the determination of the respective initial public offering prices of Shares, if any, and any related discounts and commissions, is an arm’s-length commercial transaction between the Company, on the one hand, and the applicable Agent, on the other hand, (b) the Agents have not assumed and will not assume any advisory or fiduciary responsibility in favor of the Company or any of its subsidiaries or other affiliates with respect to any offering of Shares or the process leading thereto (irrespective of whether the Agents have advised or are currently advising the Company or any of its subsidiaries or other affiliates on other matters) or any other obligation to the Company except the obligations expressly set forth in this Agreement, (c) the Agents and their respective affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Company, and (d) the Agents have not provided any legal, accounting, financial, regulatory or tax advice to the Company or any other person or entity with respect to any offering of Shares and the Company has consulted its own respective legal, accounting, financial, regulatory and tax advisors to the extent it deemed appropriate.

Section 12. Recognition of the U.S. Special Resolution Regimes

(a) In the event that any Agent that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from such Agent of this Agreement, and any interest and obligation in or under this Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.

(b) In the event that any Agent that is a Covered Entity or a BHC Act Affiliate of such Agent becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against such Agent are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States

For purposes of this Section 12, a “BHC Act Affiliate” has the meaning assigned to the term “affiliate” in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k). “Covered Entity” means any of the following: (i) a “covered entity” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b); (ii) a “covered bank” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or (iii) a “covered FSI” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b). “Default Right” has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable. “U.S. Special Resolution Regime” means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

Section 13. Parties. This Agreement shall each inure to the benefit of and be binding upon the Agents and the Company and their respective successors. Nothing expressed or mentioned in this Agreement is intended or shall be construed to give any person, firm or corporation, other than the Agents, their respective Affiliates and selling agents, the Company and their respective successors and the controlling persons and officers and directors referred to in Sections 6 and 7 and their heirs and legal representatives, any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision herein contained. This Agreement and all conditions and provisions hereof are intended to be for the sole and exclusive benefit of the Agents, their respective Affiliates and selling agents, the Company and their respective successors, and said controlling persons and officers and directors and their heirs and legal representatives, and for the benefit of no other person, firm or corporation. No purchaser of Shares shall be deemed to be a successor by reason merely of such purchase.

Section 14. Trial by Jury. Each of the Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates), and the Agents hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

Section 15. GOVERNING LAW. THIS AGREEMENT AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF, THE STATE OF NEW YORK.

Section 16. Consent to Jurisdiction: Waiver of Immunity. Each of the Company and the Agents agrees that any legal suit, action or proceeding arising out of or based upon this Agreement or the transactions contemplated hereby ("Related Proceedings") shall be instituted in (i) the federal courts of the United States of America located in the City and County of New York, Borough of Manhattan or (ii) the courts of the State of New York located in the City and County of New York, Borough of Manhattan (collectively, the "Specified Courts"), and irrevocably submits to the exclusive jurisdiction (except for proceedings instituted in regard to the enforcement of a judgment of any Specified Court (a "Related Judgment"), as to which such jurisdiction is non-exclusive) of the Specified Courts in any such suit, action or proceeding. Service of any process, summons, notice or document by mail to a party's address set forth in Section 10 hereof shall be effective service of process upon such party for any suit, action or proceeding brought in any Specified Court. Each of the Company and the Agents irrevocably and unconditionally waives any objection to the laying of venue of any suit, action or proceeding in the Specified Courts and irrevocably and unconditionally waives and agrees not to plead or claim in any Specified Court that any such suit, action or proceeding brought in any Specified Court has been brought in an inconvenient forum.

Section 17. TIME. TIME SHALL BE OF THE ESSENCE OF THIS AGREEMENT. EXCEPT AS OTHERWISE SET FORTH HEREIN, SPECIFIED TIMES OF DAY REFER TO NEW YORK CITY TIME.

Section 18. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same Agreement. Counterparts may be delivered via facsimile, electronic mail (including any electronic signature covered by the U.S. Federal ESIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, 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.

Section 19. Effect of Headings. The Section headings herein are for convenience only and shall not affect the construction hereof.

[Signature Pages Follow]

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If the foregoing is in accordance with your understanding of our agreement, please sign and return to the Company a counterpart hereof, whereupon this instrument, along with all counterparts, will become a binding agreement between the Agents and the Company in accordance with its terms.

Very truly yours,

Akoustis Technologies, Inc.

By: /s/ Jeffrey B. Shealy
Name: Jeffrey B. Shealy
Title: CEO

Accepted as of the date hereof:

Oppenheimer & Co. Inc.

By: /s/ Peter Bennett
Name: Peter Bennett
Title: Managing Director

Craig-Hallum Capital Group LLC

By: /s/ Rick Hartfiel
Name: Rick Hartfiel
Title: Head of Investment Banking

Roth Capital Partners, LLC

By: /s/ Aaron M. Gurewitz
Name: Aaron M. Gurewitz
Title: Head of Equity Capital Markets

[Signature Page to ATM Sales Agreement]

Annex I

Akoustis Technologies, Inc.

Common Stock
(\$0.001 par value)

FORM OF TERMS AGREEMENT

New York, New York 10005]

[Craig-Hallum Capital Group, LLC
222 South Ninth Street, Suite 350
Minneapolis, Minnesota 55402]

[Roth Capital Partners, LLC
888 San Clemente Drive
Suite 400
Newport Beach, California 92660]

Ladies and Gentlemen:

Akoustis Technologies, Inc., a Delaware corporation (the "Company"), proposes, on the basis of the representations and warranties, and subject to the terms and conditions, stated herein and in the ATM Sales Agreement, dated May 2, 2022 (the "Sales Agreement"), among the Company and the agents party thereto (collectively, the "Agents"), to issue and sell to [[●],[●] and ●]] as principal for resale ([collectively,] the "Underwriter[s]"), and the Underwriter[s] severally and not jointly] agree[s] to purchase from the Company the shares of Common Stock specified in the Schedule A hereto (the "Initial Securities") [, and to grant to the Underwriter[s] the option to purchase the additional shares of Common Stock specified in the Schedule A hereto (the "Option Securities", and together with the Initial Securities, the "Securities")]*, [in each case] * on the terms specified in Schedule A hereto. Capitalized terms but and not defined herein have the respective meanings ascribed thereto in the Sales Agreement.

[The Company grants an option to the Underwriter[s], severally and not jointly,]to purchase up to an additional [●] Option Securities at the price per share set forth in Schedule A hereto, less an amount per share equal to any dividends or distributions declared by the Company and payable on the Initial Securities but not payable on the Option Securities. The option hereby granted may be exercised for 30 days after the date hereof and may be exercised in whole or in part at any time and from time to time upon notice by the Underwriter[s] to the Company setting forth the number of Option Securities as to which the [several] Underwriter[s] [is][are] then exercising the option and the time and date of payment and delivery for such Option Securities. Any such time and date of delivery (a "Date of Delivery") shall be determined by the Underwriter[s], but shall not be later than seven full business days after the exercise of said option, nor in any event prior to the Settlement Date (as defined below). [If the option is exercised as to all or any portion of the Option Securities, each of the Underwriters, acting severally and not jointly, will purchase that proportion of the total number of Option Securities then being purchased which the number of Initial Securities set forth in Schedule A hereto opposite the name of such Underwriter bears to the total number of Initial Securities, subject, in each case, to such adjustments as [●] in its sole discretion shall make to eliminate any sales or purchases of fractional shares. For purposes of clarity, the parties hereto agree that the officers' certificate, opinions and letter of counsel and accountants' letter referred to in Section 3(o), (p) and (q), respectively, of the Sales Agreement are required to be delivered by or on behalf of the Company on the Settlement Date.]*

A-1-1

Payment of the purchase price for, and delivery of certificates for, the [Initial] Securities shall be made at the offices of Lowenstein Sandler LLP, or at such other place as shall be agreed upon by the Underwriter[s] and the Company, at 9:00 A.M. (New York City time) on the second (or third, if the pricing occurs after 4:30 P.M. (New York City time) on any given day) business day after the date hereof (unless postponed in accordance with the provisions of Section 9(c) of the Sales Agreement), or such other time not later than ten business days after such date as shall be agreed upon by the Underwriter[s] and the Company (such time and date of payment and delivery being herein called "Settlement Date").

[In addition, in the event that any or all of the Option Securities are purchased by the Underwriter[s], payment of the purchase price for, and delivery of certificates for, such Option Securities shall be made at the above-mentioned offices, or at such other place as shall be agreed upon by the Underwriter[s] and the Company, on each Date of Delivery as specified in the notice from the Underwriter[s] to the Company.]

Payment shall be made to the Company by wire transfer of immediately available funds to a bank account designated by the Company against delivery to the Underwriter[s] for their respective accounts for the Securities to be purchased by them]. [It is understood that each Underwriter has authorized [●] as representative of the Underwriters, for its account, to accept delivery of, receipt for, and make payment of the purchase price for, the Initial Securities and the Option Securities, if any, which it has agreed to purchase. [●], individually and not as representative of the Underwriters, may (but shall not be obligated to) make payment of the purchase price for the Initial Securities or the Option Securities, if any, to be purchased by any Underwriter whose funds have not been received by the Settlement Date or the relevant Date of Delivery, as the case may be, but such payment shall not relieve such Underwriter from its obligations hereunder.]

Each of the provisions of the Sales Agreement not related solely to the Agents, as agents of the Company, is incorporated herein by reference in its entirety, and shall be deemed to be part of this Terms Agreement to the same extent as if each such provision had been set forth in full herein. Each of the representations and warranties set forth in the Sales Agreement shall be deemed to have been made at and as of the date of this Terms Agreement [and] [,] the Applicable Time [and any Date of Delivery].

If the foregoing is in accordance with your understanding of our agreement, please sign and return to the Company a counterpart hereof, whereupon this instrument, along with all counterparts, will become a binding agreement between the Underwriter[s] and the Company in accordance with its terms.

THIS TERMS AGREEMENT AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS TERMS AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

Very truly yours,

Akoustis Technologies, Inc.

By: _____

Name: _____

Title: _____

Accepted as of the date hereof:

[Underwriter[s]]

By: _____

Name: _____

Title: _____

* Include only if the Underwriter[s][has][have] an option to purchase additional shares of Common Stock from the Company.

Underwriter	Principal Amount of [Initial] Securities to Be Purchased	[Principal Amount of Option Securities to Be Purchased]
[]	\$ []	\$ []
[]	[]	[]
Total:	\$ []	\$ []

[Price to Public:
\$[_.] per share]

Purchase Price by the Underwriter[s]:
\$[_.] per share

Method of Delivery of the [Initial] Securities [and Option Securities]:
[To the account or accounts at The Depository Trust Company specified by the Underwriter[s] via DWAC in return for payment of the purchase price.]

[Lockup:
[]]



K&L GATES LLP
 10TH FLOOR
 300 SOUTH TRYON STREET
 CHARLOTTE, NC 28202
 T 704.331.7400 F 704.331.7598 klgates.com

May 2, 2022

Akoustis Technologies, Inc.
 9805 Northcross Center Court, Suite A
 Huntersville, NC 28078

Ladies and Gentlemen:

We have acted as counsel to Akoustis Technologies, Inc., a Delaware corporation (the “Company”), in connection with the issuance and sale (the “Offering”) by the Company from time to time of common stock, par value \$0.001 per share, of the Company (“Common Stock”), having an aggregate offering price of up to \$50,000,000 (the “Shares”) pursuant to the ATM Sales Agreement dated May 2, 2022 (the “Sales Agreement”) by and among the Company and Oppenheimer & Co, Craig-Hallum Capital Group LLC, and Roth Capital Partners, LLC, as sales agents (each, a “Sales Agent” and together, the “Sales Agents”). The Shares have been registered on a Registration Statement on Form S-3 (File No. 333-262540), (such registration statement, including documents incorporated by reference therein, the “Registration Statement”), filed by the Company with the Securities and Exchange Commission (the “Commission”) on February 4, 2022.

This opinion letter is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act of 1933, as amended (the “Securities Act”).

The Company has requested our opinion as to the matters set forth below in connection with the Registration Statement. For the purposes of rendering that opinion, we have examined: (i) the Registration Statement, including the exhibits filed therewith; (ii) the Sales Agreement; (iii) the Company’s prospectus supplement, dated May 2, 2022, filed with the Commission pursuant to Rule 424(b) under the Securities Act (including the documents incorporated or deemed incorporated by reference therein) (the “Prospectus Supplement”); (iv) the Company’s Certificate of Incorporation, as amended through the date hereof (the “Certificate of Incorporation”); (v) the Company’s Amended and Restated Bylaws; (vi) the Company’s stock ledger; and (vii) the corporate action or actions of the Company that provides for the issuance of the Shares (the “Authorizing Resolutions”). We have also made such other investigation as we have deemed appropriate. We have examined and relied upon certificates of public officials and such other documents and instruments, and, as to certain matters of fact that are material to our opinion, we have also relied upon a certificate of an officer of the Company. We have considered such matters of law as we have deemed necessary to render the opinion contained herein.

For the purposes of this opinion letter, we have made assumptions that are customary in opinion letters of this kind, including the assumptions that each document submitted to us is accurate and complete, that each such document that is an original is authentic, that each such document that is a copy conforms to an authentic original, the conformity to the original or final versions of the documents submitted to us as copies or drafts and that all signatures on each such document are genuine. We have further assumed the legal capacity of natural persons. We have not verified any of those assumptions.

Akoustis Technologies, Inc.
 May 2, 2022
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In rendering our opinion below, we also have assumed that: (i) the Company will have sufficient authorized and unissued shares of Common Stock at the time of each issuance of Shares pursuant to the Sales Agreement to provide for such issuance, (ii) the issuance of all Shares will be duly noted in the Company’s stock ledger upon issuance, (iii) the Sales Agreement constitutes the valid and binding agreement of the parties thereto, enforceable against the parties thereto in accordance with its terms, (iv) prior to the issuance of any of the Shares, a Pricer (as defined in the Authorizing Resolutions) will determine the price and certain other terms of issuance of such Shares in accordance with the Authorizing Resolutions, (v) the Agents will exercise any authority delegated to the Agents by a Pricer pursuant to the Authorizing Resolutions solely in accordance with such delegated authority, and (vi) the Offering will be conducted during the Authorized Term (as defined in the Authorizing Resolutions), the number of Shares sold in the Offering will not exceed the Maximum Share Amount (as defined in the Authorizing Resolutions), and the price of the Shares sold in the Offering will not be less than the Minimum Price Per Shares (as defined in the Authorizing Resolutions) unless the Strategic Development Committee (as defined in the Authorizing Resolutions) approves any proposed modifications to such terms of the Offering as set forth in the Authorizing Resolutions. We have not verified any of those assumptions.

Our opinion set forth below is limited to the DGCL and reported judicial decisions interpreting the DGCL.

Based upon and subject to the foregoing, it is our opinion that the Shares have been duly and validly authorized for issuance by the Company and, when issued and delivered by the Company and paid for pursuant to the Sales Agreement, will be validly issued, fully paid and nonassessable.

The opinion set forth above is subject to the following additional assumptions: (i) the effectiveness of the Registration Statement and any amendment thereto (including any post-effective amendment) under the Securities Act shall not have been terminated, suspended or rescinded, (ii) all Shares offered pursuant to the Registration Statement will be issued and sold (a) in compliance with all applicable federal and state securities laws, rules and regulations and solely in the manner provided in the Registration Statement and the Prospectus Supplement and (b) only upon payment of the consideration fixed therefor in accordance with the Sales Agreement, and (iii) there will not have occurred any change in law or fact affecting the validity of any of the opinions rendered herein with respect thereto. We assume no obligation to update or supplement our opinion to reflect any changes of law or fact that may occur.

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We hereby consent to the filing of this opinion with the Commission as Exhibit 5.1 to the Company’s Quarterly Report on Form 10-Q filed on May 2, 2022 and to the

incorporation by reference of this opinion in the Registration Statement, and to the reference to our firm under the caption "Legal Matters" in the Prospectus Supplement. In giving our consent we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules or regulations thereunder. This opinion is expressed as of the date hereof, and we disclaim any undertaking to advise of any subsequent changes in the facts stated or assumed herein or any subsequent changes in law.

Yours truly,

/s/ K&L Gates LLP

K&L Gates LLP

**CERTIFICATION PURSUANT TO RULE 13a-14(a) OR 15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934**

I, Jeffrey B. Shealy, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Akoustis Technologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) 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: May 2, 2022

/s/ Jeffrey B. Shealy

Jeffrey B. Shealy
President and Chief Executive Officer
(Principal Executive Officer)

**CERTIFICATION PURSUANT TO RULE 13a-14(a) OR 15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934**

I, Kenneth E. Boller, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Akoustis Technologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) 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: May 2, 2022

/s/ Kenneth E. Boller
Kenneth E. Boller
Chief Financial Officer
(Principal Financial and Accounting Officer)

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

In connection with the Quarterly Report of Akoustis Technologies, Inc. (the "Company") on Form 10-Q for the quarterly period ended March 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jeffrey B. Shealy, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 2, 2022

/s/ Jeffrey B. Shealy

Jeffrey B. Shealy
President and Chief Executive Officer
(Principal Executive Officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

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

In connection with the Quarterly Report of Akoustis Technologies, Inc. (the "Company") on Form 10-Q for the quarterly period ended March 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Kenneth E. Boller, Interim Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 2, 2022

/s/ Kenneth E. Boller

Kenneth E. Boller

Chief Financial Officer

(Principal Financial and Accounting Officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.