

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 December 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)

9805 Northcross Center Court, Suite A
Huntersville, NC

(Address of principal executive offices)

33-1229046

(IRS Employer
Identification No.)

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 February 3, 2023, there were 71,554,411 shares of the registrant's common stock, \$0.001 par value per share, issued and outstanding.

AKOUSTIS TECHNOLOGIES, INC.
FORM 10-Q
FOR THE QUARTERLY PERIOD ENDED DECEMBER 31, 2022

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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)

	<u>December 31,</u> <u>2022</u>	<u>June 30,</u> <u>2022</u>
Assets		
Assets:		
Cash and cash equivalents	\$ 46,569	\$ 80,485
Accounts receivable	3,171	3,793
Inventory	5,807	4,094
Other current assets	4,767	3,359
Total current assets	<u>60,314</u>	<u>91,731</u>
Property and equipment, net	54,469	51,157
Goodwill	8,051	8,051
Intangibles, net	8,267	8,994
Operating lease right-of-use asset, net	1,088	1,126
Other assets	71	279
Total Assets	<u>\$ 132,260</u>	<u>\$ 161,338</u>
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable and accrued expenses	\$ 8,444	\$ 11,204
Contingent consideration	—	855
Deferred revenue	60	286
Operating lease liability	271	313
Total current liabilities	<u>8,775</u>	<u>12,658</u>
Long-term Liabilities:		
Convertible notes payable, net	43,181	43,731
Contingent consideration	276	591
Operating lease liability	833	811
Other long-term liabilities	117	117
Total long-term liabilities	<u>44,407</u>	<u>45,250</u>
Total Liabilities	<u>53,182</u>	<u>57,908</u>
Stockholders' Equity		
Preferred stock, par value \$0.001: 5,000,000 shares authorized; none issued and outstanding	—	—
Common stock, \$0.001 par value; 125,000,000 shares authorized; 58,161,133, and 57,079,347 shares issued and outstanding at December 31, 2022 and June 30, 2022, respectively	58	57
Additional paid in capital	316,065	310,171
Accumulated deficit	(237,045)	(206,798)
Total Stockholders' Equity	<u>79,078</u>	<u>103,430</u>
Total Liabilities and Stockholders' Equity	<u>\$ 132,260</u>	<u>\$ 161,338</u>

See accompanying notes to the condensed consolidated financial statements

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

	For the Three Months Ended December 31, 2022	For the Three Months Ended December 31, 2021	For the Six Months Ended December 31, 2022	For the Six Months Ended December 31, 2021
Revenue	\$ 5,865	\$ 3,672	\$ 11,432	\$ 5,540
Cost of revenue	5,274	4,549	11,727	7,451
Gross profit (loss)	<u>591</u>	<u>(877)</u>	<u>(295)</u>	<u>(1,911)</u>
Operating expenses				
Research and development	7,645	9,192	17,730	17,166
General and administrative expenses	5,838	5,146	12,833	9,022
Total operating expenses	<u>13,483</u>	<u>14,338</u>	<u>30,563</u>	<u>26,188</u>
Loss from operations	<u>(12,892)</u>	<u>(15,215)</u>	<u>(30,858)</u>	<u>(28,099)</u>
Other (expense) income				
Interest (expense) income	(702)	28	(1,445)	62
Other (expense) income	5	—	(9)	—
Change in fair value of contingent consideration	1,616	—	1,170	—
Change in fair value of derivative liabilities	818	—	839	—
Total other (expense) income	<u>1,737</u>	<u>28</u>	<u>555</u>	<u>62</u>
Net loss before income taxes	<u>\$ (11,155)</u>	<u>\$ (15,187)</u>	<u>\$ (30,303)</u>	<u>\$ (28,037)</u>
Income Tax (expense) benefit	(1)	(58)	56	(58)
Net Loss	<u>\$ (11,156)</u>	<u>\$ (15,245)</u>	<u>\$ (30,247)</u>	<u>\$ (28,095)</u>
Net loss (income) attributable to noncontrolling interest	—	(19)	—	(19)
Net loss attributable to common stockholders	<u>\$ (11,156)</u>	<u>\$ (15,264)</u>	<u>\$ (30,247)</u>	<u>\$ (28,114)</u>
Net loss per common share - basic and diluted	<u>\$ (0.19)</u>	<u>\$ (0.29)</u>	<u>\$ (0.53)</u>	<u>\$ (0.54)</u>
Weighted average common shares outstanding - basic and diluted	<u>57,583,844</u>	<u>52,924,078</u>	<u>57,369,118</u>	<u>52,180,077</u>

See accompanying notes to the condensed consolidated financial statements.

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

	For the Three Months Ended December 31, 2022				
	Common Stock		Additional Paid In Capital	Accumulated Deficit	Total Equity
	Shares	Par Value			
Balance, September 30, 2022	57,341	\$ 57	\$ 312,519	\$ (225,889)	\$ 86,687
Stock-based compensation	329	1	1,894	—	1,895
ESPP purchases	89	—	288	—	288
Common stock issued in payment of note interest	402	—	1,364	—	1,364
Net loss	—	—	—	(11,156)	(11,156)
Balance, December 31, 2022	58,161	\$ 58	\$ 316,065	\$ (237,045)	\$ 79,078

	For the Three Months Ended December 31, 2021					
	Common Stock		Additional Paid In Capital	Accumulated Deficit	Noncontrolling Interest	Equity
	Shares	Par Value				
Balance, September 30, 2021	52,038	\$ 52	\$ 272,966	\$ (160,620)	\$ —	\$ 112,398
Common stock issued for cash, net of issuance costs	1,931	2	13,355	—	—	13,357
Stock-based compensation	356	—	2,900	—	—	2,900
Common stock issued for exercise of warrants	4	—	33	—	—	33
Common stock issued for exercise of options	15	—	107	—	—	107
ESPP purchases	53	1	311	—	—	312
Common stock issued in acquisition	263	—	2,297	—	—	2,297
Noncontrolling interest acquired	—	—	—	—	7,510	7,510
Net loss	—	—	—	(15,264)	18	(15,246)
Balance, December 31, 2021	54,660	\$ 55	\$ 291,969	\$ (175,884)	\$ 7,528	\$ 123,668

	For the Six Months Ended December 31, 2022					
	Common Stock		Additional Paid In Capital	Accumulated Deficit	Noncontrolling Interest	Equity
	Shares	Par Value				
Balance, June 30, 2022	57,079	\$ 57	\$ 310,170	\$ (206,798)	\$ —	\$ 103,429
Stock-based compensation	591	1	4,243	—	—	4,244
ESPP purchases	89	—	288	—	—	288
Common stock issued in payment of note interest	402	—	1,364	—	—	1,364
Net loss	—	—	—	(30,247)	—	(30,247)
Balance, December 31, 2022	58,161	\$ 58	\$ 316,065	\$ (237,045)	\$ —	\$ 79,078

	For the Six Months Ended December 31, 2021					
	Common Stock		Additional Paid In Capital	Accumulated Deficit	Noncontrolling Interest	Equity
	Shares	Par Value				
Balance, June 30, 2021	51,236	\$ 51	\$ 265,130	\$ (147,771)	\$ —	\$ 117,410

Common stock issued for cash, net of issuance costs	2,487	3	18,786	—	—	18,789
Stock-based compensation	593	—	5,248	—	—	5,248
Common stock issued for exercise of warrants	8	—	57	—	—	57
Common stock issued for exercise of options	20	—	140	—	—	140
ESPP purchases	53	1	311	—	—	312
Common stock issued in acquisition	263	—	2,297	—	—	2,297
Noncontrolling interest acquired	—	—	—	—	7,510	7,510
Net loss	—	—	—	(28,113)	18	(28,095)
Balance, December 31, 2021	<u>54,660</u>	<u>\$ 55</u>	<u>\$ 291,969</u>	<u>\$ (175,884)</u>	<u>\$ 7,528</u>	<u>\$ 123,668</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)

	Six Months Ended December 31, 2022	Six Months Ended December 31, 2021
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (30,247)	\$ (28,095)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	5,092	3,174
Stock-based compensation	4,244	5,248
Amortization of debt discount	290	—
Amortization of operating lease right of use asset	171	130
Non cash interest payments	1,364	—
Change in fair value of derivative liabilities	(839)	—
Change in fair value of contingent consideration	(1,170)	—
(Gain) Loss on disposal of fixed assets & intangibles	16	(194)
Changes in operating assets and liabilities:		
Accounts receivable	622	(349)
Inventory	(1,713)	(698)
Other current assets	(1,200)	(832)
Accounts payable and accrued expenses	(2,469)	(1,611)
Lease liabilities	(155)	(135)
Deferred revenue	(226)	(176)
Net Cash Used in Operating Activities	(26,220)	(23,538)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Cash paid for property, plant and equipment	(7,985)	(12,823)
Acquisition of business, net of cash acquired	—	(4,079)
Cash received from the sale of fixed assets	—	287
Net Cash Used in Investing Activities	(7,985)	(16,615)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from issuance of common stock, net of issuance costs	—	18,789
Proceeds from exercise of employee stock options	—	140
Proceeds from employee stock purchase plan	289	312
Proceeds from exercise of warrants	—	57
Net Cash Provided by Financing Activities	289	19,298
Net Increase (Decrease) in Cash, Cash Equivalents and Restricted Cash	(33,916)	(20,855)
Cash, Cash Equivalents and Restricted Cash - Beginning of Period	80,485	88,322
Cash, Cash Equivalents and Restricted Cash - End of Period	\$ 46,569	\$ 67,467
SUPPLEMENTARY CASH FLOW INFORMATION:		
Cash Paid During the Period for:		
Income taxes	40	—
SUPPLEMENTARY DISCLOSURE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:		
Fixed assets included in accounts payable and accrued expenses	100	(223)
Operating lease right-of-use asset, net	133	—
Operating lease liability	(133)	—
Common stock issued in payment of interest	1,364	—
Acquisition of Business		
Tangible assets, excluding cash and cash equivalents	—	1,346
Intangibles	—	9,711
Goodwill	—	7,835
Deferred tax liability	—	(2,039)
Contingent consideration	—	(1,082)
Liabilities assumed	—	(1,885)
Issuance of common stock for acquisition	—	(2,297)
Noncontrolling interest	—	(7,510)

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 semiconductor 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. Additionally, through RFM Integrated Device, Inc. (“RFMi”), a wholly-owned subsidiary of Akoustis, Inc., the Company makes sales of complementary surface acoustic wave (“SAW”) resonators, RF filters, crystal (Xtal) resonators and oscillators, and ceramic products branded as “RFMi” products.

Note 2. Liquidity

As of December 31, 2022, the Company had cash and cash equivalents of \$46.6 million and working capital of \$51.5 million. The Company has historically incurred recurring operating losses and experienced net cash used in operating activities.

On January 19, 2023, the Company closed an underwritten public offering of 12,545,454 shares of its common stock at a price to the public of \$2.75 per share, which included the underwriters’ exercise of their over-allotment option in full, for net proceeds of approximately \$32.0 million. See Note 18-Subsequent Events.

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 its technology, development of its patent strategy and expansion of its patent portfolio, servicing outstanding debt, potential strategic transactions, as well as to provide working capital and funds for other general corporate purposes. Except for the \$48.0 million of common stock remaining available to be sold under its ATM Sales Agreement with Oppenheimer & Co. Inc., Craig-Hallum Capital Group LLC, and Roth Capital Partners, LLC, 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 December 31, 2022 are not necessarily indicative of the results that may be expected for the year ending June 30, 2023 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 September 12, 2022 (the “2022 Annual Report”).

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries as of December 31, 2022, Akoustis, Inc. and RFM Integrated Device, Inc. All significant intercompany accounts and transactions have been eliminated in consolidation.

Significant Accounting Policies and Estimates

The Company's significant accounting policies are disclosed in Note 3. Summary of Significant Accounting Policies in the 2022 Annual Report. Since the date of the 2022 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, derivative liabilities, deferred taxes and related valuation allowances, contingent consideration, goodwill, intangible assets, revenue recognition, and the fair values of long-lived assets. Actual results could differ from the estimates.

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 across multiple geographic regions, primarily the Americas, Asia and Europe.

Foundry Fabrication Services

Foundry fabrication services revenue includes MEMS foundry services, which the Company exited in fiscal year 2021, and Non-Recurring Engineering ("NRE"). 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 by geographic region for the three months ended December 31, 2022, (in thousands):

	Foundry Fabrication Services Revenue	Product Sales Revenue	Total Revenue with Customers
Americas	\$ 1,143	\$ 1,223	\$ 2,366
Asia	748	1,759	2,507
Europe	—	992	992
Total	<u>\$ 1,891</u>	<u>\$ 3,974</u>	<u>\$ 5,865</u>

The following table summarizes the revenues of the Company's reportable segments by geographic region for the six months ended December 31, 2022, (in thousands):

	Foundry Fabrication Services Revenue	Product Sales Revenue	Total Revenue with Customers
Americas	\$ 1,849	\$ 2,136	\$ 3,985
Asia	975	4,834	5,809
Europe	—	1,628	1,628
Other	—	10	10
Total	<u>\$ 2,824</u>	<u>\$ 8,608</u>	<u>\$ 11,432</u>

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

	Foundry Fabrication Services Revenue	Product Sales Revenue	Total Revenue with Customers
Americas	\$ 249	\$ 779	\$ 1,028
Asia	135	1,817	1,952
Europe	—	692	692
Total	<u>\$ 384</u>	<u>\$ 3,288</u>	<u>\$ 3,672</u>

The following table summarizes the revenues of the Company's reportable segments by geographic region for the six months ended December 31, 2021, (in thousands):

	Foundry Fabrication Services Revenue	Product Sales Revenue	Total Revenue with Customers
Americas	\$ 583	\$ 876	\$ 1,459
Asia	213	3,006	3,219
Europe	—	862	862
Total	<u>\$ 796</u>	<u>\$ 4,744</u>	<u>\$ 5,540</u>

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 (included in Other current assets on the Consolidated Balance Sheet) and contract liability (included as Deferred revenue on the Consolidated Balance Sheet) for the first six months of fiscal years 2023 and 2022 (in thousands):

	Contract Assets	Contract Liability
Balance, June 30, 2022	\$ 908	\$ 286
Closing, December 31, 2022	2,334	60
Increase/(Decrease)	\$ 1,426	\$ (226)
Balance, June 30, 2021	\$ 411	\$ 41
Closing, December 31, 2021	823	101
Increase/(Decrease)	\$ 412	\$ 60

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 six months ended December 31, 2022, that was included in the opening contract liability balance was \$286 thousand which related to timing of shipments.

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 six months ended December 31, 2022, that was included in the opening contract asset balance was \$245 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 the remainder of this fiscal year from the backlog of performance obligations that are unsatisfied (or partially unsatisfied) at December 31, 2022 was \$7.4 million. The Company's backlog may vary significantly each reporting period based on the timing of major new contract commitments. In addition, our customers have the right, under some infrequent circumstances, to terminate contracts or defer the timing of the Company's services and their payments to us.

Note 5: Inventory

Inventory, net of reserves, consisted of the following as of December 31, 2022 and June 30, 2022 (in thousands):

	December 31, 2022	June 30, 2022
Raw Materials	\$ 1,461	\$ 1,077
Work in Process	3,132	1,061
Finished Goods	1,214	1,956
Total Inventory	\$ 5,807	\$ 4,094

Note 6. Property and Equipment, net

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

	Estimated Useful Life	December 31, 2022	June 30, 2022
Land	n/a	\$ 1,000	\$ 1,000
Building and leasehold improvements	*	8,782	7,715
Equipment	2-10 years	63,918	57,750
Computer Equipment & Software	3-5 years	2,417	1,966
Total		76,117	68,431
Less: Accumulated Depreciation		(21,648)	(17,274)
Total		\$ 54,469	\$ 51,157

(*) Leasehold improvements are amortized on a straight-line basis over the term of the lease or the estimated useful lives, whichever is shorter. Buildings are amortized on a straight-line basis between 11 and 39 years.

The Company recorded depreciation expense of \$2.3 million and \$1.6 million for the three months ended December 31, 2022 and 2021, respectively. The Company recorded depreciation expense of \$4.4 million and \$3.1 million for the six months ended December 31, 2022 and 2021, respectively.

As of December 31, 2022, equipment with a net book value totaling \$7.0 million had not been placed in service and therefore was not depreciated during the period. As of June 30, 2022, fixed assets with a net book value totaling \$14.5 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 RFMi, a fables 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 \$2.3 million payable in common stock of the Company. On April 29, 2022, the Company exercised its option to acquire the remaining 49% ownership interest in RFMi from TST for an additional \$3.5 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 initial \$1.1 million 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 Company has determined that the sales targets for calendar year 2022 were not met and the related earnout payment is not owed. The fair value of the contingent consideration decreased \$1,170 thousand during the six months ended December 31, 2022.

Pro Forma Results

The following unaudited pro forma financial information summarizes the results of operations for the three and six months ended December 31, 2021 as if the acquisition had been completed as of July 1, 2021 (in thousands). The pro forma results were calculated applying the Company’s accounting policies and include the effects of adjustments related to the amortization charges from the acquired intangibles. 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.

	Three Months Ended December 31, 2021	Six Months Ended December 31, 2021
	Unaudited Proforma	Unaudited Proforma
Revenues	\$ 3,914	\$ 7,596
Net Loss	\$ (15,370)	\$ (28,370)
Net Loss per share	\$ (0.29)	\$ (0.54)

Note 8. Goodwill

The Company performs an annual test for goodwill impairment during our last fiscal quarter. The Company will also test for impairment between annual test dates if an event occurs or circumstances change that would indicate the carrying amount may be impaired.

During the six months ended December 31, 2022, the Company did not identify any events or circumstances that would require an interim goodwill impairment test. The Company does not amortize goodwill as it has been determined to have an indefinite useful life. The carrying amount of goodwill as of December 31, 2022 was \$8.1 million.

Note 9. Accounts Payable and Accrued Expenses

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

	December 31, 2022	June 30, 2022
Accounts payable	\$ 2,602	\$ 3,630
Accrued salaries and benefits	3,207	4,641
Accrued goods received not invoiced	1,041	1,472
Other accrued expenses	1,594	1,461
Totals	\$ 8,444	\$ 11,204

Note 10. Notes Payable

Convertible Senior Notes due 2027

The following table summarizes convertible debt as of December 31, 2022 (in thousands):

	<u>Maturity Date</u>	<u>Stated Interest Rate</u>	<u>Conversion Price</u>	<u>Face Value</u>	<u>Remaining Debt (Discount)</u>	<u>Fair Value of Embedded Derivatives</u>	<u>Carrying Value</u>
Long Term convertible notes payable							
6.0% convertible senior notes	06/15/2027	6.00%	\$ 4.71	\$ 44,000	\$ (3,008)	\$ 2,189	\$ 43,181
Ending Balance as of December 31, 2022				<u>\$ 44,000</u>	<u>\$ (3,008)</u>	<u>\$ 2,189</u>	<u>\$ 43,181</u>

The following table summarizes convertible debt as of June 30, 2022 (in thousands):

	<u>Maturity Date</u>	<u>Stated Interest Rate</u>	<u>Conversion Price</u>	<u>Face Value</u>	<u>Remaining Debt (Discount)</u>	<u>Fair Value of Embedded Derivatives</u>	<u>Carrying Value</u>
Long Term convertible notes payable							
6.0% convertible senior notes	06/15/2027	6.00%	\$ 4.71	\$ 44,000	\$ (3,297)	\$ 3,028	\$ 43,731
Ending Balance as of June 30, 2022				<u>\$ 44,000</u>	<u>\$ (3,297)</u>	<u>\$ 3,028</u>	<u>\$ 43,731</u>

Interest expense on the Notes during the three months ended December 31, 2022 included contractual interest of \$660 thousand and debt discount amortization of \$146 thousand. Interest expense on the Notes during the six months ended December 31, 2022 included contractual interest of \$1,320 thousand and debt discount amortization of \$290 thousand.

Note 11. Concentrations**Customers**

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

	Three Months 12/31/2022	Three Months 12/31/2021
Customer 1	15%	22%
Customer 2	12%	—
Customer 3	12%	—

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

	Six Months 12/31/2022	Six Months 12/31/2021
Customer 1	21%	27%
Customer 2	10%	—
Customer 3	10%	—
Customer 4	—	14%

Customer concentration as a percentage of accounts receivable at December 31, 2022 and June 30, 2022 are as follows:

	December 31, 2022	June 30, 2022
Customer 1	22%	26%
Customer 2	15%	—
Customer 3	12%	—
Customer 4	—	13%

Vendors

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

	Six Months 12/31/2022	Six Months 12/31/2021
Vendor 1	10%	—
Vendor 2	—	17%

Note 12. Equity

Equity Offering Program

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 (the "2022 Equity Offering Program"). On May 25, 2022, the Company announced that it was suspending sales under the 2022 Equity Offering Program. If, in the future, the Company determines to resume sales pursuant to the 2022 Equity Offering Program, it intends to notify investors by the filing of a Current Report on Form 8-K or other public announcement.

Equity Incentive Plans

During the six months ended December 31, 2022, the Company granted employees options to purchase an aggregate of approximately 235 thousand 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:

	Six Months Ended December 31, 2022
Exercise price	\$ 2.83 – 3.57
Expected term (years)	4.00 - 4.75
Volatility	67 – 68%
Risk-free interest rate	3.77 – 4.59%
Dividend yield	0%
Weighted Average Grant Date Fair Value of Options granted during the period	\$ 1.87

During the six months ended December 31, 2022 the Company awarded certain employees and directors grants of an aggregate of approximately 1.0 million restricted stock units ("RSUs") with a weighted average grant date fair value of \$3.51. 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.

During the six months ended December 31, 2022 the Company awarded certain employees grants of an aggregate of approximately 0.39 million restricted stock units with market value appreciation conditions ("MVSUs") with a weighted average grant date fair value of \$7.86. The MVSUs will be expensed over the requisite service period. The terms of the MVSUs include vesting provisions based on continued service. The number of shares of the Company's common stock earned at vesting is based on the Company's stock price performance with amounts earned subject to a vesting multiplier ranging from 0% to 200%. If the service criteria are satisfied, the MVSUs will vest over 3 years.

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

	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
Research and Development	\$ 883	\$ 1,716	\$ 2,051	\$ 2,948
General and Administrative	1,012	1,184	2,193	2,300
Total	\$ 1,895	\$ 2,900	\$ 4,244	\$ 5,248

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

	As of December 31, 2022	
	Unrecognized stock-based compensation	Weighted-average years to be recognized
Options	\$ 2,597	2.07
Restricted stock units	\$ 11,607	2.32

Note 13. Commitments and Contingencies

Leases

The Company leases office space in Huntersville, NC, Carrollton, Texas and Taiwan and leases equipment in Canandaigua, NY. Its 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. During the three months ended December 31, 2022, the lease pertaining to the office space in Carrollton, Texas was extended for an additional five years. This resulted in the remeasurement of the respective right of use asset and corresponding right of use liability.

The components of lease expense were as follows:

	Three Months Ended December 31, 2022	Three Months Ended December 31, 2021	Six Months Ended December 31, 2022	Six Months Ended December 31, 2021
Operating Lease Expense	\$ 106	\$ 82	\$ 201	\$ 157

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

	Classification on the Condensed Consolidated Balance Sheet	December 31, 2022	June 30, 2022
Assets			
Operating lease assets	Other non-current assets	\$ 1,088	\$ 1,126
Liabilities			
Operating lease liabilities	Current liabilities	271	313
Operating lease liabilities	Long term liabilities	833	811
Weighted Average Remaining Lease Term:			
Operating leases		3.54 Years	3.42 Years
Weighted Average Discount Rate:			
Operating leases		11.30%	10.03%

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

For the year ending June 30,	
2023	\$ 189
2024	378
2025	389
2026	242
Thereafter	167
Total lease payments (undiscounted cash flows)	<u>1,365</u>
Less imputed interest	(261)
Total	<u>\$ 1,104</u>

Note 14. Commitments and Contingencies

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 will lease 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 will lease 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. Benefits totaling approximately \$0.3 million provided to the Company through December 31, 2022 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 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 complaint alleges that the defendants misappropriated proprietary information, made misleading statements about the characteristics of certain of its products, and sold products infringing on certain of the plaintiff’s patents. The plaintiff seeks an injunction enjoining the Company from the alleged infringement and damages, including punitive and statutory enhanced damages, in an unspecified amount. The Company filed a motion to dismiss all of the claims other than the direct patent infringement claims, but the court permitted the plaintiff to file an amended complaint which the court subsequently determined was sufficient for pleading purposes. The Court dismissed the Company’s motion in May 2022. The Court held a claims construction hearing in November 2022. At present the Company believes this lawsuit is without merit and intends to defend against it vigorously. However, the Company 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. or restrictions on certain of the Company’s 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 the Company’s favor, this and other possible future actions may result in significant expenses, diversion of management and technical personnel attention and disruptions and delays in the Company’s business and product development, and other collateral consequences, all of which could have a material adverse effect on its business, financial condition and results of operations. Any out-of-court settlement of this or other actions may also have an adverse effect on the Company’s 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 its ability to develop, manufacture and sell its products.

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 the amount of liability, if any, with respect to such actions, would not materially affect its financial position, results of operations or cash flows.

Tax Credit Contingency

The Company accrues a liability for indirect tax contingencies when it believes that it is both probable that a liability has been incurred and that it can reasonably estimate the amount of the loss. The Company reviews these accruals and adjusts them to reflect ongoing negotiations, settlements, rulings, advice of legal counsel and other relevant information. To the extent new information is obtained and the Company's views on the probable outcomes of claims, suits, assessments, investigations or legal proceedings change, changes in the Company's accrued liabilities would be recorded in the period in which such determination is made.

The Company's gross unrecognized indirect tax credits totaled \$0.1 million as of December 31, 2022 and \$0.1 million as of June 30, 2022 and are recorded on the Consolidated Balance Sheet as a long-term liability.

Note 15. 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 Filters, which consists of amplifier and filter product sales, and grant revenue. The Company records all general and administrative costs in the RF Filters segment.

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

	Foundry Fabrication Services	RF Filters	Total
Three months ended December 31, 2022			
Revenue	\$ 1,891	\$ 3,974	\$ 5,865
Cost of revenue	1,126	4,148	5,274
Gross margin	765	(174)	591
Research and development	—	7,645	7,645
General and administrative	—	5,838	5,838
Income (Loss) from Operations	\$ 765	(13,657)	(12,892)
Three months ended December 31, 2021			
Revenue	\$ 384	\$ 3,288	\$ 3,672
Cost of revenue	377	4,172	4,549
Gross margin	7	(884)	(877)
Research and development	—	9,192	9,192
General and administrative	—	5,146	5,146
Income (Loss) from Operations	\$ 7	(15,222)	(15,215)
Six months ended December 31, 2022			
Revenue	\$ 2,823	\$ 8,609	\$ 11,432
Cost of revenue	2,018	9,709	11,727
Gross margin	805	(1,100)	(295)
Research and development	—	17,730	17,730
General and administrative	—	12,833	12,833
Income (Loss) from Operations	\$ 805	(31,663)	(30,858)
Six months ended December 31, 2021			
Revenue	\$ 796	\$ 4,744	\$ 5,540
Cost of revenue	947	6,504	7,451
Gross margin	(151)	(1,760)	(1,911)
Research and development	—	17,166	17,166
General and administrative	—	9,022	9,022
Income (Loss) from Operations	\$ (151)	(27,948)	(28,099)
As of December 31, 2022			
Accounts receivable	\$ 89	\$ 3,072	\$ 3,171
Property and equipment, net	—	54,469	54,469
As of June 30, 2022			
Accounts receivable	\$ 572	\$ 3,221	\$ 3,793
Property and equipment, net	—	51,157	51,157

Note 16. 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 six months ended December 31, 2022 and December 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 December 31, 2022 and 2021:

	December 31, 2022	December 31, 2021
Convertible Notes	9,341,825	—
Options	3,217,400	2,981,627
Warrants	41,103	158,759
Total	<u>12,600,328</u>	<u>3,140,386</u>

Note 17. 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 classifies the liabilities measured at fair value on a recurring basis into the fair value hierarchy as of December 31, 2022:

	Fair value at December 31, 2022	Level 1	Level 2	Level 3
Contingent consideration	\$ 276	\$ —	\$ —	\$ 276
Derivative liabilities	2,189	—	—	2,189
Total fair value	<u>\$ 2,465</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 2,465</u>

The following table classifies the liabilities measured at fair value on a recurring basis into the fair value hierarchy as of June 30, 2022:

	Fair value at June 30, 2022	Level 1	Level 2	Level 3
Contingent consideration	\$ 1,446	\$ —	\$ —	\$ 1,446
Derivative liabilities	3,028	—	—	3,028
Total fair value	<u>\$ 4,474</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 4,474</u>

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:

	December 31, 2022
Contingent consideration	
Beginning balance	\$ 1,446
Initial fair value of contingent consideration	—
Change in fair value of contingent consideration	(1,170)
Ending balance	<u>\$ 276</u>

There were no transfers between Level 1, 2, or 3 valuation classifications during the three or six months ended December 31, 2022.

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 calendar year 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.

The fair value of the contingent consideration liabilities on December 31, 2022 and June 30, 2022 were valued with the following assumptions:

	December 31, 2022	June 30, 2022
Discount Rate	12.5%	14.3% – 14.5%
Revenue volatility	30%	30%
Risk free interest rate	4.65%	1.71% – 3.04%
Remaining term (years)	1.08	0.59 – 1.58

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

	December 31, 2022
Fair Value of Embedded Derivatives	
Beginning balance	\$ 3,028
Initial fair value of make-whole provision in convertible notes	—
Initial fair value of change in control provision in convertible notes	—
Change in fair value of convertible note derivatives	(839)
Ending balance	\$ 2,189

The fair value of the embedded derivatives in our convertible notes that were classified as Level 3 in the table above were estimated using a with and without approach on a lattice model framework with significant inputs that are not observable in the market and thus represent 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 and timing assessments of expected future change of control events, the volatility of our share price and the discount rate used to present value future cash payments under the convertible debt obligation. 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.

The fair value of the embedded derivatives in our convertible notes as of December 31, 2022 and June 30, 2022 were valued with the following assumptions:

	December 31, 2022	June 30, 2022
Stock Price	\$ 2.82	\$ 3.70
Volatility of stock price	70%	70%
Risk free interest rate	4.05%	3.01%
Debt yield	39.4%	41.5%
Remaining term (years)	4.5	5.0

Note 18. Subsequent Events

Acquisition of Grinding & Dicing Services, Inc.

On January 1, 2023 (the "Closing Date"), Akoustis Technologies, Inc. (the "Company") and its wholly-owned subsidiary, Akoustis, Inc. (the "Purchaser"), entered into a Stock Purchase Agreement (the "Purchase Agreement") with Grinding & Dicing Services, Inc. ("GDSI") and the stockholders of GDSI (the "Sellers"). Pursuant to the Purchase Agreement, the Purchaser acquired all of the outstanding capital stock of GDSI (such acquisition, the "Transaction").

The total consideration paid to the Sellers at closing of the Transaction consisted of \$14.0 million in cash, approximately \$1.7 million of shares of the Company's common stock and a secured promissory note in the original principal amount of \$4.0 million issued by the Purchaser to the Sellers' representative (the "Note"). The Note does not bear interest, is subject to partial prepayment (reduction of the outstanding principal amount down to \$1.3 million) on the second anniversary of the Closing Date, and is payable in full on the third anniversary of the Closing Date. The Purchaser can reduce the principal amount of the Note (i) to satisfy certain post-closing adjustments to the Transaction purchase price, (ii) to satisfy the Sellers' indemnification obligations under the Purchase Agreement, and (iii) if GDSI's President is terminated for cause or due to disability or resigns without good reason prior to maturity. The Note is secured by certain of the Purchaser's and GDSI's assets. In the event of certain events of default, including failure to pay amounts due under the Note and certain bankruptcy events, the outstanding principal amount of the Note will become immediately due.

Underwritten Offering of Common Stock

On January 19, 2023, the Company closed an underwritten public offering of 12,545,454 shares of its common stock at a price to the public of \$2.75 per share pursuant to an underwriting agreement with B. Riley Securities, Inc., as representative of the several underwriters named therein. The shares of common stock issued at closing included 1,636,363 shares issued pursuant to the underwriters' over-allotment option, which was exercised in full. Net proceeds from the offering were approximately \$32.0 million. Certain of the Company's directors and officers participated in the offering by purchasing shares on the same terms and conditions as other investors.

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; increases in prices for raw materials, labor, and fuel caused by rising inflation; 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, including the lawsuit filed by Qorvo, Inc. in October 2021, 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") and Grinding & Dicing Services, Inc. ("GDSI")) 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 and GDSI'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; our failure to maintain effective internal control over financial reporting; our failure to obtain or maintain a Trusted Foundry accreditation or our New York fabrication facility; and shortages in supplies needed to manufacture our products, or needed by our customers to manufacture devices incorporating our products.

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 September 12, 2022 (the “2022 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 wholly owned subsidiary, RFMi, which we acquired majority ownership in October 2021 and full ownership in April 2022, we operate a fabless business whereby we make sales of complementary SAW resonators, RF filters, crystal (“Xtal”) resonators and oscillators, and ceramic products—addressing opportunities in multiple end markets, such as automotive and industrial applications. We also offer back-end semiconductor supply chain services through our wholly owned subsidiary, Grinding & Dicing Services, Inc., which we acquired in January 2023.

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 125,000-square foot wafer-manufacturing facility located in Canandaigua, New York (the “NY Facility”), which we acquired in June 2017. Our SAW-based RF filter products are manufactured by a third party and sold either directly or through a sales distributor.

Intellectual Property. As of January 27, 2023, our IP portfolio included 80 patents, including a blocking patent that we have licensed from Cornell University. Additionally, as of January 27, 2023, we have 127 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 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 across our combined portfolio of Akoustis, XBAW, and RFMi products, we must convince customers in a wide range of industries including mobile phone OEMs, RFFE module manufacturers, network infrastructure OEMs, WiFi CPE OEMs, medical device makers, automotive and defense customers to use our products in their systems and modules. For example, 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 company for XBAW filters.

To help drive our XBAW filter business, we plan to continue 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 XBAW technology, intellectual property, designs, and related improvements. Across our combined portfolio of Akoustis, XBAW, and RFMi products, we expect to continue development of catalog designs for multiple customers and to offer such catalog products in multiple sales channels.

Business Environment and Current Trends

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 2023 or beyond.

Semiconductor Shortages and Supply Chain Issues

The global silicon semiconductor industry is experiencing a shortage in supply and difficulties in ability to meet customer demand. This shortage has led to an increase in lead-times of production of semiconductor chips and components. As our business depends in significant part upon manufacturers of products requiring semiconductors, as well as the current and anticipated production of these products, we have sought to manage the impact of supply shortages through carefully maintaining and increasing key inventory levels. In some cases, we have 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. We believe the global supply chain challenges and their adverse impact on our business and financial results will persist through calendar year 2023. We expect these constrained supply conditions to increase our costs of goods sold and increase uncertainty with respect to the timing of delivery of specific customer orders.

Effects of Inflation and Recession Fears

Inflation and other macroeconomic pressures in the U.S. and the global economy such as rising interest rates, energy prices and recession fears are creating a complex and challenging business environment. Inflationary pressures, including increased costs of labor and goods included in our supply chain, have negatively impacted our revenue, operating margins and net income and may continue to do so through the remainder of the fiscal year. Additionally, we have observed certain customers reduce or defer orders, citing negative economic forecasts.

Recent Legislation

On August 9, 2022, President Biden signed into law the CHIPS and Science Act of 2022, which appropriates funds to support the construction of semiconductor plants in the United States and advancement of United States semiconductor research and development. The Company is evaluating the provisions of the new law and its potential impact to the Company.

Recent Developments

On October 4, 2022, we announced that we had started sampling two new Wi-Fi 6E and Wi-Fi 7 filter solutions.

On October 6, 2022, we announced that we had become a charter member of the Semiconductor Industry Association.

On October 26, 2022, we announced that we had received three new Wi-Fi 6E design wins for carrier-class applications.

On November 21, 2022, we announced that we had joined the Wi-Fi NOW industry association as an official filter partner.

On December 21, 2022, we announced the completion of qualification of our internally developed wafer-level-packaging (WLP) technology for the 5G mobile, Wi-Fi, timing control, and other markets.

On December 28, 2022, we announced our first design win in 5G mobile from Tier-1 RF component company customer.

On January 4, 2023, we announced the acquisition of GDSI, a U.S.-based, trusted supplier of semiconductor back-end supply chain services.

On January 18, 2023, we announced that we had received our first high-volume 5G mobile XBAW filter order from a Tier-1 RF component company.

On January 25, 2023, we announced the closing of a public offering of common stock and full exercise of the underwriters' option to purchase additional shares.

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 2022 Annual Report.

Results of Operations

Three Months Ended December 31, 2022 and 2021

Revenue

The Company recorded revenue of \$5.9 million for the three months ended December 31, 2022 as compared to \$3.7 million for the three months ended December 31, 2021. The increase of \$2.2 million, or 60%, was primarily due to an increase in foundry fabrication service revenue by \$1.5 million or 420% as well as an increase in filter product revenue by \$0.7 million or 20%.

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 \$5.3 million for the three months ended December 31, 2022 as compared to \$4.5 million for the three months ended December 31, 2021. The \$0.8 million increase is primarily due to costs associated with foundry fabrication services, which increased by \$0.7 million.

Research and Development Expenses

R&D expenses were \$7.6 million for the three months ended December 31, 2022, as compared to \$9.2 million for the three months ended December 31, 2021, a decrease of \$1.6 million or 17.4%. The decrease was driven by lower personnel costs, including stock-based compensation, which were \$3.8 million compared to \$5.3 million in the prior year period, a decrease of \$1.5 million or 28.3%.

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 December 31, 2022 were \$5.8 million, which is an increase of \$0.7 million compared to the \$5.1 million for the three months ended December 31, 2021. Year-over-year changes within G&A expenses include a decrease in employee compensation (including stock-based compensation) of \$0.5 million. This decrease was offset by an increase in general expenses of \$1.2 million, primarily professional fees and intangible amortization.

Other (Expense)/Income

Other income for the three months ended December 31, 2022 was \$1.7 million, compared to other income of \$28 thousand for the three months ended December 31, 2021. The income increase of \$1.7 million was comprised of interest expense of \$0.7 million offset by a gain on the value of contingent consideration of \$1.6 million and a gain on the value of derivative liabilities of \$0.8 million.

Net Loss

The Company recorded a net loss of \$11.2 million for the three months ended December 31, 2022, compared to a net loss of \$15.2 million for the three months ended December 31, 2021. The period-over-period change of \$4.0 million, or 26.3%, was primarily driven by an increase in revenue of \$2.2 million as well as a decrease in R&D expenses of \$1.5 million and an increase in other income of \$1.7 million. These expense decreases were partially offset by an increase in G&A expenses of \$0.5 million and an increase in cost of revenue of \$0.7 million.

Six Months Ended December 31, 2022 and 2021

Revenue

The Company recorded revenue of \$11.4 million for the six months ended December 31, 2022 as compared to \$5.5 million for the six months ended December 31, 2021. The increase of \$5.9 million was primarily due to an increase in RF filter product revenue of \$3.9 million or 81%, which includes revenue from sales of RFMi products. In addition, revenue from foundry fabrication services increased by \$2.0 million or 264%.

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 \$11.7 million for the six months ended December 31, 2022 as compared to \$7.5 million for the six months ended December 31, 2021. The \$4.2 million increase is primarily due to costs associated with RF product revenue which increased by \$3.2 million, which includes cost of revenue from sales of RFMi products. In addition, costs related to foundry fabrication services increased by \$1.1 million or 113%.

Research and Development Expenses

R&D expenses were \$17.7 million for the six months ended December 31, 2022, as compared to \$17.2 million for the six months ended December 31, 2021, an increase of \$0.5 million or 2.9%. Personnel costs, including stock-based compensation, were \$9.1 million compared to \$9.5 million in the prior year period, a decrease of \$0.4 million or 4.2%. R&D material costs were \$4.7 million, 26.6% higher than the prior period.

General and Administrative Expense

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 six months ended December 31, 2022 were \$12.8 million, which is an increase of \$3.8 million compared to the \$9.0 million for the six months ended December 31, 2021. Year-over-year changes within G&A expenses include an increase in general expenses of \$3.8 million, primarily professional fees and intangible amortization.

Other (Expense)/Income

Other income for the six months ended December 31, 2022 was \$0.6 million, compared to other income of \$62 thousand for the six months ended December 31, 2021. The income increase of \$0.5 million was comprised of an increase in interest expense of \$1.5 million offset by a gain on the value of contingent consideration of \$1.2 million and a gain on the value of derivative liabilities of \$0.8 million.

Net Loss

The Company recorded a net loss of \$30.2 million for the six months ended December 31, 2022, compared to a net loss of \$28.1 million for the six months ended December 31, 2021. The period-over-period increase of \$2.1 million, or 14%, was primarily driven by an increase in cost of revenue of \$4.3 million, an increase in G&A expenses and R&D expenses of \$4.2 million. These expense increases were partially offset by an increase in other income of \$0.5 million and an increase in revenue of \$5.9 million.

Liquidity and Capital Resources

Overview

The Company's short-term and long-term liquidity requirements primarily arise from funding (i) research and development expenses, (ii) G&A expenses including salaries, bonuses, commissions and stock-based compensation, (iii) working capital requirements, (iv) business acquisitions and investments we may make from time to time, including potential performance based payments related to our acquisition of RFMi, and a note payable issued in connection with our acquisition of GDSI, and (v) interest and principal payments related to our \$44.0 million aggregate principal amount of outstanding convertible notes. Additionally, in the near-term, the Company makes capital expenditures in connection with the expansion of the capacity of its manufacturing facility in Canandaigua, New York.

The Company has incurred losses and negative cash flow from operations since inception. Our operations thus far have been funded primarily with sales of equity and debt securities, as well as contract research and government grants, foundry services and engineering services. We expect our operating expenditures to continue to increase to support future growth of our manufacturing capabilities and expansion of our product offerings, as well as an increase in research and development and headcount costs to support this growth. We believe we currently have sufficient resources to fund operations and planned investments for at least the next twelve months. However, until we are able to generate sufficient cash flow from operations to achieve and maintain profitability and meet our obligations as they come due, we may need to raise additional capital to support our business. In June 2022, we completed an offering of convertible notes resulting in net proceeds to the Company of \$43.7 million. In January 2023, we completed a public offering of our common stock raising \$32.0 million in net proceeds. Also in January 2023, approximately \$14 million in cash was paid to the sellers in the GDSI acquisition as mentioned in Footnote 18. Additionally, the Company estimates that approximately \$5.0 million of additional cash is needed to complete construction in progress assets that are currently not in service. We also have access to an at-the-market offering program pursuant to which we may sell up to \$50 million of Common Stock. As of the date of this Quarterly Report, the Company had sold \$2.0 million of Common Stock under such at-the-market offering program and previously announced that it was suspending sales under the at-the-market offering program. If, in the future, the Company determines to resume sales under the at-the-market offering program, it intends to notify investors by the filing of a Current Report on Form 8-K or other public announcement.

Balance Sheet and Working Capital

The Company had \$46.6 million of cash and cash equivalents on hand as of December 31, 2022, which reflects a decrease of \$33.9 million compared to \$80.5 million as of June 30, 2022. The decrease is primarily due to cash used in operations of \$26.1 million and cash used for investing activities of \$8.1 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 its cash outflows to mitigate liquidity risks.

December 31, 2022 compared to June 30, 2022

As of December 31, 2022, the Company had current assets of \$60.3 million, made up primarily of cash on hand of \$46.6 million. As of June 30, 2022, current assets were \$91.7 million comprised primarily of cash on hand of \$80.5 million.

Property, Plant and Equipment was \$54.4 million as of December 31, 2022 as compared to a balance of \$51.2 million as of June 30, 2022.

Total assets as of December 31, 2022 and June 30, 2022 were \$132.3 million and \$161.3 million, respectively.

Current liabilities as of December 31, 2022 and June 30, 2022 were \$8.8 million and \$12.7 million, respectively.

Long-term liabilities totaled \$44.4 million as of December 31, 2022, compared to \$45.3 million as of June 30, 2022.

Equity was \$79.1 million as of December 31, 2022, compared to \$103.4 million as of June 30, 2022, a decrease of \$24.3 million, or 23.5%. This decrease was primarily due to the net loss for the six months ended December 31, 2022 of \$30.2 million which was partially offset by the increase in additional paid-in-capital ("APIC") of \$5.9 million. The increase in APIC was primarily due to common stock issued for services.

Cash Flow Analysis

Operating activities used cash of \$26.1 million during the six months ended December 31, 2022 and \$23.5 million during the comparative period ended December 31, 2021. The \$2.6 million period-over-period increase in cash used was attributable to higher general and administrative expenses associated legal and professional fees.

Investing activities used cash of \$8.1 million for the six months ended December 31, 2022 compared to \$16.6 million for the comparative period ended December 31, 2021. The decrease of \$8.5 million was primarily due to a \$4.8 million decrease in purchases of capital equipment as well as a \$4.1 million decrease in cash paid for investment in subsidiary related to the purchase of RFMi during the second quarter of fiscal year 2022.

Financing activities decreased by \$19 million compared to the six months ended December 31, 2021 primarily due to the decrease in proceeds from issuance of common stock.

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 December 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 December 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 December 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 14. – 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 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, 2022. 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. There have been no material changes to the risk factors described in Part I, Item 1A, “*Risk Factors*,” included in our 2022 Annual Report.

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.

None

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
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	Certificate of Amendment to the Certificate of Incorporation, as filed with the Delaware Secretary of State on November 4, 2019 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on November 6, 2019)
3.5	Certificate of Amendment to the Certificate of Incorporation, as filed with the Delaware Secretary of State on November 10, 2022 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on November 14, 2022)
3.6	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)
4.1*	Description of Common Stock of the Registrant Registered Pursuant to Section 12 of the Securities Exchange Act of 1934
10.1*	Amendment to 2018 Stock Incentive Plan of Akoustis Technologies, Inc., adopted August 26, 2022
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

** Furnished herewith

† Management contract or compensatory plan or arrangement

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: February 7, 2023

Akoustis Technologies, Inc.

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

**DESCRIPTION OF COMMON STOCK OF AKOUSTIS TECHNOLOGIES, INC.
REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934**

The following information is a summary of information concerning the common stock, par value \$0.001 per share (the “Common Stock”), of Akoustis Technologies, Inc. (“we,” “our,” or “us”) and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Certificate of Incorporation, as amended (the “Certificate of Incorporation”), our Amended and Restated Bylaws (the “Bylaws”), and the applicable provisions of the General Corporation Law of the State of Delaware (the “DGCL”), each of which are incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.8 is a part.

Authorized Common Stock

The Certificate of Incorporation authorizes the issuance of 100,000,000 shares of Common Stock. Our authorized but unissued shares of Common Stock are available for issuance without further action by our stockholders, unless such action is required by applicable law or the rules of any stock exchange or automated quotation system on which our securities may be listed or traded.

Voting Powers

At every annual or special meeting of stockholders, every holder of Common Stock is entitled to one vote per share. There is no cumulative voting in the election of directors.

Dividend, Liquidation and Other Rights

The holders of outstanding shares of Common Stock are entitled to receive dividends out of assets or funds legally available for the payment of dividends at such times and in such amounts as the Company’s board of directors (the “Board of Directors”) from time to time may determine. Any future determination to pay dividends will be at the discretion of the Board of Directors and will be dependent upon financial condition, results of operations, capital requirements and such other factors as the Board of Directors deems relevant.

The Common Stock is not entitled to pre-emptive rights and is not subject to conversion or redemption. Upon liquidation, dissolution or winding up of our company, the assets legally available for distribution to stockholders are distributable ratably among the holders of the Common Stock after payment of liquidation preferences, if any, on any outstanding payment of other claims of creditors.

Anti-Takeover Provisions

The following paragraphs regarding certain provisions of the DGCL, the Certificate of Incorporation, and the Bylaws are summaries of the material terms thereof and do not purport to be complete. We urge you to read the applicable provisions of the DGCL and the Certificate of Incorporation and Bylaws.

General

Provisions of the DGCL, and the Certificate of Incorporation and Bylaws could have the effect of discouraging others from attempting an unsolicited offer to acquire our company. Such provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Authorized but Unissued Shares

The authorized but unissued shares of our Common Stock and our preferred stock are available for future issuance without any further vote or action by our stockholders. These additional shares may be utilized for a variety of corporate purposes, including future public or private offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of our Common Stock and our preferred stock could render more difficult or discourage an attempt to obtain control over us by means of a proxy contest, tender offer, merger or otherwise.

Director Vacancies

The Bylaws provide that all vacancies on the Board of Directors may be filled only by the affirmative vote of a majority of directors then in office, even if less than a quorum.

Special Meeting of Stockholders and Advance Notice Requirements for Stockholder Proposals and Director Nominations

The Bylaws require that special meetings of stockholders be called only by a majority of our entire Board of Directors, by the chairman of the board, if any, the Chief Executive Officer, if any, the President or the Secretary. In addition, the Bylaws provide that candidates for director may be nominated and other business brought before an annual meeting only by the Board of Directors or by a stockholder who gives written notice to us not less than 90 days, nor more than 120 days, prior to the first anniversary of the preceding year's annual meeting, subject to certain exceptions. Such stockholder's notice must set forth certain information required by the Bylaws. These provisions may have the effect of deterring unsolicited offers to acquire our company or delaying stockholder actions, even if they are favored by the holders of a majority of our outstanding voting securities.

Supermajority Voting for Amendments to our Bylaws

The Bylaws provide that the Board of Directors is expressly authorized to adopt, amend or repeal the Bylaws and that our stockholders may amend the Bylaws only with the approval of at least 66 2/3% of the voting power of all shares of our capital stock then outstanding.

Choice of Forum

The Bylaws provide that, subject to certain exceptions, the Court of Chancery of the State of Delaware will be the exclusive forum for any claim, including any derivative claim, (i) that is based upon a violation of a duty by a current or former director or officer or stockholder in such capacity or (ii) as to which the DGCL confers jurisdiction upon the Court of Chancery.

Business Combinations

Section 203 of the DGCL generally prohibits a public corporation which has not opted out of the restrictions contained in such section from engaging in any business combination with any interested stockholder for a three-year period following the time that the stockholder becomes an interested stockholder, unless:

- prior to such time, the Board of Directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of our voting stock outstanding at the time the transaction commenced, excluding certain shares; or
- at or subsequent to that time, the business combination is approved by our board of directors and by the affirmative vote of holders of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

Generally, a “business combination” includes a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. Subject to certain exceptions, an “interested stockholder” is a person who, together with that person’s affiliates and associates, owns, or within the previous three years owned, 15% or more of our voting stock.

Under certain circumstances, this provision could make it more difficult for a person who would be an “interested stockholder” to effect various business combinations with a corporation for a three-year period. This provision generally does not apply to a corporation that does not have a class of voting stock that is listed on a national securities exchange or held of record by more than 2,000 stockholders. Because the Company’s voting stock trades on the Nasdaq Capital Market and the Company has not otherwise opted out of Section 203, the restrictions on business combinations with interested stockholders applies to the Company.

Listing on the Nasdaq Capital Market

Shares of Common Stock are listed on the Nasdaq Capital Market under the symbol “AKTS.”

Transfer Agent

The name, address and telephone number of the transfer agent of Common Stock is Broadridge Financial Solutions, Inc. at 51 Mercedes Way, Edgewood, New York 11717.

AMENDMENT
TO
2018 STOCK INCENTIVE PLAN
OF
AKOUSTIS TECHNOLOGIES, INC.

This Amendment (“Amendment”) to the 2018 Stock Incentive Plan (as amended, the “Existing Plan”; as amended hereby, the “Plan”) of Akoustis Technologies, Inc., a Delaware corporation (the “Company”), is adopted by the Company’s Board of Directors (the “Board”) as of August 26, 2022, subject to approval by the Company’s stockholders (the “Stockholders”).

Statement of Purpose

The Existing Plan was originally approved by the Board on August 24, 2018, and by the Stockholders on November 1, 2018, upon which date it became effective. Under Section 16(a) of the Existing Plan, the Board may amend the Existing Plan at any time, contingent on the approval of the Stockholders if Stockholder approval is required by applicable law. The Board has determined that it is in the best interests of the Company to amend the Existing Plan to: (1) increase the number of shares authorized for issuance and (2) increase the number of shares that may be issued as Incentive Stock Options.

NOW, THEREFORE, the Existing Plan is hereby amended as follows, subject to the approval of the Stockholders:

1. Capitalized Terms. All capitalized terms used and not defined in this Amendment shall have the meanings given thereto in the Existing Plan.
2. Amendment to Existing Plan.

Section 5(a) “*Shares of Stock Subject to the Plan*.” is hereby deleted in its entirety and replaced with the following:

“(a) *Shares of Stock Subject to the Plan*: Subject to adjustments as provided in this Section 5, the maximum aggregate number of shares of Common Stock that may be issued pursuant to Awards granted under the Plan shall not exceed 12,000,000 shares, plus any shares subject to an award granted under any of the Prior Plans, which Prior Plan award is at any time forfeited, cancelled, terminated, expires or lapses for any reason without the issuance of shares or pursuant to which such shares are forfeited or reacquired by the Company. Shares delivered under the Plan shall be authorized but unissued shares, treasury shares or shares purchased on the open market or by private purchase. The Company hereby reserves sufficient authorized shares of Common Stock to meet the grant of Awards hereunder.”

Section 5(b)(i) is hereby deleted in its entirety and replaced with the following:

“The maximum aggregate number of shares of Common Stock that may be issued under the Plan pursuant to the grant of Incentive Options shall not exceed 12,000,000 shares of Common Stock.”

3. Reference to and Effect on the Plan. The Plan, as amended hereby, and all other documents, instruments and agreements executed or delivered in connection therewith, shall remain in full force and effect, and are hereby ratified and confirmed.

4. Governing Law. This Amendment shall be governed by and construed in accordance with the laws of the State of Delaware.

* * *

Effective this 26th day of August 2022, subject to Stockholder approval.

**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: February 07, 2023

/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: February 07, 2023

/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 December 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: February 07, 2023

/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 December 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: February 07, 2023

/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.