

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

FORM 10-Q

Quarterly Report Pursuant to Section 13 or 15 (d) of the Securities Exchange Act of 1934
For the quarterly period ended June 30, 2017.

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: 001-37850

ATOMERA INCORPORATED
(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

30-0509586

(I.R.S. Employer
Identification No.)

750 University Avenue, Suite 280
Los Gatos, California 95032

(Address, including zip code, of registrant's principal executive offices)

(408) 442-5248

(Registrant's telephone number, including area code)

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

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

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

Large accelerated filer

Non-accelerated filer

Accelerated filer

Smaller reporting company

Emerging Growth Company

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

Indicate by checkmark whether the registrant is a shell company (as defined in rule 12b-2 of the Exchange Act): Yes No

The number of outstanding shares of the Registrant's Common Stock, par value \$.001 per share, as of August 1, 2017 was 12,160,637.

Atomera Incorporated
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PART I. Financial Information**Item 1. Financial Statements**

Atomera Incorporated
Condensed Balance Sheets
(in thousands, except per share data)

| | <u>June 30,</u> <u>2017</u> | <u>December 31,</u> <u>2016</u> |
|--|--------------------------------|------------------------------------|
| | (Unaudited) | |
| ASSETS | | |
| Current Assets: | | |
| Cash and cash equivalents | \$ 21,725 | \$ 26,718 |
| Prepaid expenses and other current assets | 191 | 96 |
| Total current assets | 21,916 | 26,814 |
| Property and equipment, net | 32 | 28 |
| Security deposit | 37 | 37 |
| Total assets | \$ 21,985 | \$ 26,879 |
| LIABILITIES AND STOCKHOLDERS' EQUITY | | |
| Current liabilities: | | |
| Accounts payable | \$ 277 | \$ 353 |
| Accrued expenses | 205 | 168 |
| Accrued payroll related expenses | 191 | 510 |
| Total liabilities | 673 | 1,031 |
| Commitments and contingencies (see Note 9) | | |
| Stockholders' equity: | | |
| Preferred stock, \$0.001 par value, authorized 2,500 shares; none issued and outstanding at June 30, 2017 and December 31, 2016 | - | - |
| Common stock, \$0.001 par value, authorized 47,500 shares; 12,161 shares issued and outstanding at June 30, 2017 and 12,025 issued and outstanding as of December 31, 2016 | 12 | 12 |
| Additional paid-in capital | 124,471 | 121,833 |
| Accumulated deficit | (103,171) | (95,997) |
| Total stockholders' equity | 21,312 | 25,848 |
| Total liabilities and stockholders' equity | \$ 21,985 | \$ 26,879 |

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

Atomera Incorporated
Condensed Statements of Operations
(Unaudited)
(in thousands, except per share data)

| | Three Months ended June 30, | | Six Months ended June 30, | |
|---|--------------------------------|-------------------|------------------------------|-------------------|
| | 2017 | 2016 | 2017 | 2016 |
| Operating Expenses: | | | | |
| Research and development | \$ 1,444 | \$ 867 | \$ 2,900 | \$ 1,816 |
| General and administrative | 1,712 | 895 | 3,315 | 1,756 |
| Selling and marketing | 508 | 91 | 1,017 | 210 |
| Total operating expenses | <u>3,664</u> | <u>1,853</u> | <u>7,232</u> | <u>3,782</u> |
| Loss from operations | (3,664) | (1,853) | (7,232) | (3,782) |
| Other income/(expense): | | | | |
| Interest income | 36 | 2 | 64 | 2 |
| Interest expense | - | (748) | - | (1,310) |
| Other expense | (2) | - | (6) | - |
| Total other income/(expense), net | <u>34</u> | <u>(746)</u> | <u>58</u> | <u>(1,308)</u> |
| Net loss | <u>\$ (3,630)</u> | <u>\$ (2,599)</u> | <u>\$ (7,174)</u> | <u>\$ (5,090)</u> |
| Net loss per common share, basic and diluted | <u>\$ (0.30)</u> | <u>\$ (1.61)</u> | <u>\$ (0.59)</u> | <u>\$ (3.15)</u> |
| Weighted average number of common shares outstanding, basic and diluted | <u>12,137</u> | <u>1,617</u> | <u>12,086</u> | <u>1,617</u> |

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

Atomera Incorporated
Condensed Statements of Cash Flows
(Unaudited)
(in thousands)

| | Six Months Ended June 30, | |
|---|------------------------------|------------|
| | 2017 | 2016 |
| CASH FLOWS FROM OPERATING ACTIVITIES | | |
| Net Loss | \$ (7,174) | \$ (5,090) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | |
| Depreciation and amortization | 9 | 6 |
| Debt issuance cost amortization | – | 429 |
| Stock-based compensation | 2,638 | 109 |
| Non-cash interest expense | – | 881 |
| Compensation in exchange for settlement of subscription receivable | – | 188 |
| Changes in operating assets and liabilities: | | |
| Prepaid expenses and other current assets | (95) | (63) |
| Security deposit | – | (37) |
| Accounts payable | (76) | 119 |
| Accrued expenses | 37 | (10) |
| Accrued payroll expenses | (319) | 174 |
| Net cash used in operating activities | (4,980) | (3,294) |
| CASH FLOWS FROM INVESTING ACTIVITIES | | |
| Acquisition of property and equipment | (13) | (14) |
| Net cash used in investing activities | (13) | (14) |
| CASH FLOWS FROM FINANCING ACTIVITIES | | |
| Net proceeds from senior secured convertible promissory notes payable | – | 5,467 |
| Payment of offering costs | – | (89) |
| Net cash provided by financing activities | – | 5,378 |
| Net (decrease)/increase in cash and cash equivalents | (4,993) | 2,070 |
| Cash and cash equivalents at beginning of period | 26,718 | 3,197 |
| Cash and cash equivalents at end of period | \$ 21,725 | \$ 5,267 |

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

ATOMERA INCORPORATED
NOTES TO THE UNAUDITED CONDENSED FINANCIAL STATEMENTS
Periods Ended June 30, 2017 and 2016

1. NATURE OF OPERATIONS

Atomera Incorporated (“Atomera” or the “Company”) was incorporated in the state of Delaware in March 2007 under the name MEARS Technologies, Inc. and is engaged in the development, commercialization and licensing of proprietary processes and technologies for the semiconductor industry. On January 12, 2016, the Company changed its name to Atomera Incorporated.

The Company has not yet generated revenue from planned principal operations, and is devoting substantially all of its efforts toward technology research and development and to securing customers for its technology. The Company has primarily financed operations through private placements of equity and debt securities and the Company’s Initial Public Offering (the “IPO”) which was consummated on August 10, 2016.

2. LIQUIDITY AND MANAGEMENT PLANS

At June 30, 2017, the Company had cash and cash equivalents of approximately \$21.7 million and working capital of approximately \$21.2 million. For the six months ended June 30, 2017, the Company had a net loss of approximately \$7.2 million with approximately \$5.0 million of cash used in operations. The Company has not generated revenues since inception and has incurred recurring operating losses. At June 30, 2017, the Company had an accumulated deficit of approximately \$103.2 million.

During the second half of 2017, the Company’s operating plans include increased headcount in research and development. Based on the funds it has available as of the date of the filing of this report, the Company believes that it has sufficient capital to fund its current business plans and obligations over, at least, 12 months from the date that these financial statements have been issued, and to enable one or more customers to license and qualify its technology and start full-scale industrial production of devices that incorporate the Company’s technology. However, as the Company has not yet generated revenue from planned principal operations, it is subject to all the risks inherent in the initial organization, financing, expenditures, complications and delays in a new business. Accordingly, the Company may require additional capital, the receipt of which cannot be assured. In the event the Company requires additional capital, there can be no guarantee that funds will be available on commercially reasonable terms, if at all.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Significant accounting policies

There have been no material changes in the Company’s significant accounting policies to those previously disclosed in the Company’s Annual Report on Form 10-K filed with the Securities and Exchange Commission (“SEC”) on March 31, 2017.

Basis of presentation of unaudited condensed financial information

The unaudited condensed financial statements of the Company for the three and six months ended June 30, 2017 and 2016 have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”) for interim financial information and pursuant to the requirements for reporting on Form 10-Q and Article 8 of Regulation S-X. Accordingly, they do not include all the information and footnotes required by GAAP for complete financial statements. However, such information reflects all adjustments (consisting solely of normal recurring adjustments), which are, in the opinion of management, necessary for the fair presentation of the financial position and the results of operations. Results shown for interim periods are not necessarily indicative of the results to be obtained for a full fiscal year. The balance sheet information as of December 31, 2016 was derived from the audited financial statements included in the Company’s financial statements as of and for the year ended December 31, 2016 included in the Company’s Annual Report on Form 10-K filed with the SEC on March 31, 2017. These financial statements should be read in conjunction with that report.

Adoption of recent accounting standards

In March 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2016-06, *Derivatives and Hedging (Topic 815): Contingent Put and Call Options in Debt Instruments*. This new standard simplifies the embedded derivative analysis for debt instruments containing contingent call or put options by removing the requirement to assess whether a contingent event is related to interest rates or credit risks. The Company has adopted ASU 2016-06 as of January 1, 2017. The ASU did not have an impact on the Company’s financial condition or results of operations.

Recent accounting standards

In May 2017, the FASB issued ASU No. 2017-09, *Compensation—Stock Compensation (Topic 718): Scope of Modification Accounting*, clarifying when a change to the terms or conditions of a share-based payment award must be accounted for as a modification. The new guidance requires modification accounting if the fair value, vesting condition or the classification of the award is not the same immediately before and after a change to the terms and conditions of the award. The new guidance is effective for the Company on a prospective basis beginning on January 1, 2018, with early adoption permitted. The Company has not yet adopted this update and does not expect this standard to have a material impact on its financial position, results of operations or financial statement disclosure.

4. BASIC AND DILUTED LOSS PER SHARE

Basic net loss per share is calculated by dividing the net loss by the weighted-average number of shares outstanding for the period. Diluted net loss per share is computed by dividing the net loss by the weighted-average number of shares and dilutive share equivalents outstanding for the period, determined using the treasury-stock and if-converted methods. Since the Company has had net losses for all periods presented, all potentially dilutive securities are anti-dilutive. Accordingly, basic and diluted net loss per share are equal.

The following potential common stock equivalents were not included in the calculation of diluted net loss per common share because the inclusion thereof would be anti-dilutive (in thousands):

| | June 30, | |
|-----------------------------|--------------|--------------|
| | 2017 | 2016 |
| Stock Options | 2,107 | 538 |
| Warrants | 765 | 301 |
| Conversion of Notes Payable | — | 6,203 |
| | <u>2,872</u> | <u>7,042</u> |

5. NOTES PAYABLE

On March 17, 2015, the Company issued Senior Secured Convertible Notes (the “Secured Notes”) to certain investors under which the Company borrowed approximately \$7.4 million and it exchanged all of its previously outstanding unsecured convertible promissory notes for Secured Notes with an aggregate principal balance of approximately \$7.35 million. The total closing represented \$14.75 million. The Secured Notes were due on May 31, 2016 and accrued interest at a rate of 10% per annum. During March 2016, the maturity date for the Secured Notes was extended to May 31, 2017.

During April 2016, the Company issued additional secured Notes in the aggregate principal amount of approximately \$5.96 million. These notes have the same terms as the previous Secured Notes and mature on May 31, 2017.

During the three and six months ended June 30, 2016, the interest expense on the Secured Notes was approximately \$748,000 and \$1.3 million, respectively. On August 31, 2016, all principal and accrued interest were converted into shares of common stock. There is no interest expense for the three and six months ended June 30, 2017.

6. RELATED PARTY TRANSACTIONS

On January 14, 2005, the Company executed a Secured Promissory Note (the “Promissory Note”) with an officer of the Company. Under the Promissory Note, the officer borrowed \$187,500 from the Company. The Promissory Note bore interest at a fixed rate of 3.76% per annum, with interest-only payments due annually through the maturity date of January 14, 2014. In December 2015, the Company agreed to extend the term of the note to January 14, 2019, subject to acceleration in the event of the sale or liquidation of the Company, bankruptcy or like event. Effective January 2016, the Company cancelled the outstanding principal of the note in the amount of \$187,500. The cancellation of this note was recognized as a bonus to the officer and included in general and administrative expenses in the accompanying statement of operations for the six months ended June 30, 2016. As of the date of the cancellation of the Promissory Note, there was accrued and unpaid interest under the note in the amount of approximately \$7,000, which amount has been repaid by the officer. In return for the cancellation of the note, the officer was required to reimburse the Company for withholding taxes payable by the Company, in the amount of approximately \$14,000.

During the three and six months ended June 30, 2016, a director, who is also a shareholder of the Company, was paid \$3,000 for his work as a consultant for the Company. The director is no longer paid for consulting work.

7. WARRANTS

A summary of warrant activity for the six months ended June 30, 2017 is as follows (shares in thousands except per share and contractual term):

| | Number of Shares | Weighted- Average Exercise Price | Weighted- Average Remaining Contractual Term (In Years) |
|--------------------------------|---------------------|---|--|
| Outstanding at January 1, 2017 | 765 | \$ 5.75 | |
| Outstanding at June 30, 2017 | 765 | \$ 5.75 | 3.4 |

The warrants outstanding at June 30, 2017 had an intrinsic value of approximately \$782,000 million based on a per-share stock price of \$4.26 as of June 30, 2017.

8. STOCK BASED COMPENSATION

In May 2017, the Company's shareholders approved its 2017 Stock Incentive Plan ("2017 Plan"). The 2017 Plan provides for the grant of non-qualified stock options and incentive stock options to purchase shares of the Company's common stock and for the grant of restricted and unrestricted share grants. The 2007 Stock Incentive Plan ("2007 Plan") expired in March 2017. The 2017 Plan provides for the issuance of 3,750,000 shares of common stock. All of the Company's employees and any subsidiary employees (including officers and directors who are also employees), as well as all of the Company's nonemployee directors and other consultants, advisors and other persons who provide services to the Company will be eligible to receive incentive awards under the 2017 Plan. Generally stock options and restricted stock vest over a one to four year period from the date of grant under the 2017 Plan.

The following table summarizes the stock-based compensation expense recorded in the Company's results of operations during the three and six months ended June 30, 2017 and 2016 for stock options and restricted stock from the 2017 Plan and 2007 Plan (in thousands):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|----------------------------|--------------------------------|--------------|------------------------------|---------------|
| | 2017 | 2016 | 2017 | 2016 |
| Research and development | \$ 135 | \$ 1 | \$ 223 | \$ 13 |
| General and administrative | 994 | 48 | 1,846 | 96 |
| Selling and Marketing | 299 | - | 569 | - |
| | <u>1,428</u> | <u>\$ 49</u> | <u>\$ 2,638</u> | <u>\$ 109</u> |

As of June 30, 2017, there was approximately \$5.6 million of total unrecognized compensation expense related to non-vested share-based compensation arrangements that are expected to vest. This cost is expected to be recognized over a weighted-average period of 2.4 years.

The Company records compensation expense for employee awards with graded vesting using the straight-line method. The Company records compensation expense for nonemployee awards with graded vesting using the accelerated expense attribution method. The Company recognizes compensation expense over the requisite service period applicable to each individual award, which generally equals the vesting term. The Company estimates the fair value of each option award using the Black-Scholes-Merton option pricing model. Forfeitures are recognized when realized. The fair value of employee stock options is being amortized on a straight-line basis over the requisite service periods of the respective awards. The fair value of employee stock options issued was estimated using the following weighted-average assumptions:

| | Six Months Ended June 30, | |
|---|------------------------------|---------|
| | 2017 | 2016 |
| Weighted average exercise price: | \$ 6.89 | \$ 5.70 |
| Weighted average grant date fair value: | \$ 3.01 | \$ 2.64 |
| Assumptions: | | |
| Expected volatility | 42.6% | 46.5% |
| Weighted average expected term (in years) | 6.0 | 6.1 |
| Risk-free interest rate | 2.2% | 1.6% |
| Expected dividend yield | 0.0% | 0.0% |

The risk-free interest rate was obtained from U.S. Treasury rates for the applicable periods. The Company's expected volatility was based upon the historical volatility for industry peers and used an average of those volatilities. The expected life of the Company's options was determined using the simplified method as a result of limited historical data regarding the Company's activity. The dividend yield considers that the Company has not historically paid dividends, and does not expect to pay dividends in the foreseeable future.

Prior to the Company's IPO in August 2016, the fair value of the common stock was determined by the board of directors based on a variety of factors, including valuations prepared by third parties, the Company's financial position, the status of development efforts within the Company, the current climate in the marketplace and the prospects of a liquidity event, among others.

The following table summarizes stock option activity during the six months ended June 30, 2017 (in thousands except exercise prices and contractual terms):

| | Number of Shares | Weighted- Average Exercise Prices | Weighted- Average Remaining Contractual Term (In Years) | Intrinsic Value |
|--------------------------------|---------------------|--|---|--------------------|
| Outstanding at January 1, 2017 | 1,515 | \$ 7.21 | | |
| Granted | 593 | \$ 6.89 | | |
| Exercised | — | \$ — | | |
| Expired | (1) | \$ 29.94 | | |
| Outstanding at June 30, 2017 | <u>2,107</u> | <u>\$ 7.11</u> | <u>8.7</u> | <u>\$ —</u> |
| Exercisable at June 30, 2017 | <u>688</u> | <u>\$ 7.33</u> | <u>8.1</u> | <u>\$ —</u> |

During the six months ended June 30, 2017, the Company granted options under its 2007 Stock Incentive Plan to purchase 593,292 shares of its common stock to its employees. The fair value of these options was approximately \$1.8 million.

The Company issues restricted stock to employees, directors and consultants and estimates the fair value based on the closing price on the day of grant. The following table summarizes all restricted stock activity during the six months ended June 30, 2017 (in thousands except per share data):

| | Number of Shares | Weighted- Average Grant Date Fair Value |
|--|---------------------|--|
| Outstanding at January 1, 2017 | 462 | \$ 8.07 |
| Granted | 136 | \$ 6.60 |
| Vested | (75) | \$ 7.85 |
| Cancelled | — | \$ — |
| Outstanding non-vested shares at June 30, 2017 | <u>523</u> | <u>\$ 7.72</u> |

9. COMMITMENTS AND CONTINGENCIES

Operating Leases

On January 19, 2016, the Company entered into a real estate lease agreement for a 3,396 square foot office facility in Los Gatos, California as its new corporate headquarters. The lease commenced on February 1, 2016 and expires on January 31, 2018. The lease rate is \$13,074 per month.

Approximate future minimum lease payments required under the operating leases are as follows (in thousands):

| Years ending December 31, | Amount | |
|----------------------------------|---------------|-----------|
| Remaining period in 2017 | \$ | 78 |
| 2018 | | 13 |
| Total | \$ | 91 |

Licensing agreement

In December 2006, the Company entered into a licensing agreement with ASM International N.V., a vendor of semiconductor manufacturing equipment located in Almere, The Netherlands, pursuant to which ASM has granted to the Company a non-exclusive, worldwide license to make, and sublicense others to make, semiconductor devices using certain ASM patents. The ASM license restricts the Company and its sublicensees from using the ASM licensed rights in the manufacture of epitaxial deposition machines or any other machines used to manufacture semiconductors. The ASM license is coterminous with patents licensed by ASM, which expires on January 8, 2019, and requires the Company to pay ASM a royalty of 5% of net royalty revenue, generally defined as gross royalty revenue less certain customer offsets and credits, from the sale of any product incorporating the ASM licensed patents not manufactured on ASM equipment and a royalty of 2.5% of net revenue from the sale of any product incorporating ASM licensed patents manufactured on ASM equipment. All semiconductor devices incorporating the Company's MST[®] technology manufactured prior to January 8, 2019 will be subject to the ASM license royalty. The Company has not incurred any royalty obligation under license agreement as of June 30, 2017.

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

The following discussion and analysis of the financial condition and results of operations of Atomera Incorporated should be read in conjunction with our unaudited condensed financial statements and the accompanying notes that appear elsewhere in this filing. Statements in this Quarterly Report on Form 10-Q include forward-looking statements based upon current expectations that involve risks and uncertainties, such as our plans, objectives, expectations and intentions. We use words such as "anticipate," "estimate," "plan," "project," "continuing," "ongoing," "expect," "believe," "intend," "may," "will," "should," "could," and similar expressions to identify forward-looking statements. Although forward-looking statements in this Quarterly Report reflect the good faith judgment of our management, such statements can only be based on facts and factors currently known by us. Consequently, forward-looking statements are inherently subject to risks, uncertainties, and changes in condition, significance, value and effect, including those risk factors set forth in our Annual Report on Form 10-K for the year ended December 31, 2016 filed with the SEC on March 31, 2017 and referenced under the heading "Risk Factors" within Part II, Item 1A of this Quarterly Report and other documents we subsequently file from time to time with the Securities and Exchange Commission (the "SEC"), such as our annual reports on Form 10-K, our quarterly reports on Form 10-Q and our current reports on Form 8-K. Such risks, uncertainties and changes in condition, significance, value and effect could cause our actual results to differ materially from those expressed herein and in ways not readily foreseeable. Readers are urged not to place undue reliance on these forward-looking statements, which speak only as of the date of this Quarterly Report and are based on information currently and reasonably known to us. We undertake no obligation to revise or update any forward-looking statements in order to reflect any event or circumstance that may arise after the date of this Quarterly Report. Readers are urged to carefully review and consider the various disclosures made in this Quarterly Report, which attempt to advise interested parties of the risks and factors that may affect our business, financial condition, results of operations and prospects.

Overview

We are engaged in the business of developing, commercializing and licensing proprietary processes and technologies for the \$350+ billion semiconductor industry. Our lead technology, named Mears Silicon Technology™, or MST®, is a thin film of reengineered silicon, typically 100 to 300 angstroms (or approximately 20 to 60 silicon atomic unit cells) thick. MST® can be applied as a transistor channel enhancement to CMOS-type transistors, the most widely used transistor type in the semiconductor industry. MST® is our proprietary and patent-protected performance enhancement technology that we believe addresses a number of key engineering challenges facing the semiconductor industry. We believe that by incorporating MST®, transistors can be smaller, with increased speed, reliability and energy efficiency. In addition, since MST® is an additive and low cost technology, it can be deployed on an industrial scale, with machines commonly used in semiconductor manufacturing. We believe that MST® can be widely incorporated into the most common types of semiconductor products, including analog, logic, optical and memory integrated circuits.

We do not intend to design or manufacture integrated circuits directly. Instead, we intend to develop and license technologies and processes that will offer the designers and manufacturers of integrated circuits a low-cost solution to the industry's need for greater performance and lower power consumption. Our customers and partners are expected to include:

- foundries, which manufacture integrated circuits on behalf of fabless manufacturers;
- integrated device manufacturers, or IDMs, which are the fully integrated designers and manufacturers of integrated circuits;
- fabless semiconductor manufacturers, which are designers of integrated circuits that outsource the manufacture of their chips to foundries;
- original equipment manufacturers, or OEMs, which manufacture the epitaxial, or EPI, deposition machines used to deposit semiconductor layers, such as the MST® film onto the base silicon wafer; and
- electronic design automation companies, which make tools used throughout the industry to simulate the effects of using different materials, design structures and process technologies on the performance of semiconductor products.

We intend to generate revenue through licensing arrangements whereby foundries and IDMs pay us a license fee for their use of MST® technology in the manufacture of silicon wafers as well as a royalty for each silicon wafer or device that incorporates our MST® technology. We also intend to enter into licensing arrangements with fabless semiconductor manufacturers pursuant to which we will charge them a royalty for each device they sell that incorporates our MST® technology.

We were organized as a Delaware limited liability company under the name Nanovis LLC on November 26, 2001. On March 13, 2007, we converted to a Delaware corporation under the name Mears Technologies, Inc. On January 12, 2016, we changed our name to Atomera Incorporated.

Results of Operations

Revenues

We have not commenced revenue-producing operations.

Research and development expense. To date, our operations have focused on the research, development, patent protection, and commercialization of our processes and technologies, including our proprietary and patent-protected MST® performance enhancement technology. Our research and development costs primarily consist of payroll and benefit costs for our engineering staff and costs of outsourced fabrication and metrology of semiconductor wafers incorporating our MST® technology.

The timing and amount of our outsourced fabrication and metrology is highly dependent on evaluations by our prospective customers and partners. As a result, the level of our research and development costs can vary significantly among accounting periods.

For the three months ended June 30, 2017 and 2016, we incurred approximately \$1.4 million and \$867,000, respectively, of research and development expense, an increase of approximately \$577,000 or 67%. The increase in research and development expense is primarily due to an increase of approximately \$287,000 in outsourced fabrication and metrology and approximately \$29,000 of additional professional fees for technical consulting and recruiting. The remaining increase in research and development expense is due to an increase of approximately \$103,000 in payroll related expenses due to increased engineering headcount and an approximate \$134,000 increase in stock-based compensation expense.

For the six months ended June 30, 2017 and 2016, we incurred research and development costs of approximately \$2.9 million and \$1.8 million, an increase of approximately \$1.1 million or 60%. The increase in research and development expense is primarily due to an increase of approximately \$485,000 in outsourced fabrication and metrology and approximately \$54,000 of additional professional fees for technical consulting and recruiting. The remaining increase in research and development expense is due to an increase of approximately \$269,000 in payroll related expenses due to increased engineering headcount, and an approximate \$210,000 increase in stock-based compensation expense.

General and administrative expenses. General and administrative expenses consist primarily of payroll and benefit costs for administrative personnel, office-related costs and professional fees. General and administrative costs for the three months ended June 30, 2017 and 2016 were approximately \$1.7 million and \$895,000, respectively, representing an increase of approximately \$817,000 or 91%. An increase of approximately \$946,000 in general and administrative costs was due to additional stock-based compensation expense related to restricted stock and options issued to certain officers and directors in connection with and after our IPO. The remaining increase can be attributed to board of directors' fees of approximately \$57,000 that were not incurred in the three months ended June 30, 2016. We commenced compensating our non-employee directors effective September 1, 2016 in connection with becoming a publicly-traded company. These costs were offset by savings of approximately \$257,000 in decreased payroll and payroll related expense, including a decrease in severance costs of \$195,000 compared to the three months ended June 30, 2016.

General and administrative costs for the six months ended June 30, 2017 and 2016 were approximately \$3.3 million and \$1.8 million, respectively, representing an increase of approximately \$1.5 million or 89%. The increase was primarily due to an increase of approximately \$1.8 million in stock-based compensation reflecting grants made in connection with and after our IPO and an approximate \$188,000 increase in professional fees primarily related to investor relations consulting and payments to our independent directors. We commenced compensating our non-employee directors in the third quarter of 2016. These costs were offset by a decrease in payroll and payroll related expenses by approximately \$252,000 due to a decrease in severance costs and lower audit, tax and legal fees as compared to the six months ended June 30, 2016 as that period included costs related to the convertible debt financing.

Selling and marketing expenses. Selling and marketing expenses consist primarily of salary and benefits for our sales and marketing personnel and business development consulting services. For the three months ended June 30, 2017 and 2016 selling and marketing expenses were approximately \$508,000 and \$91,000, respectively, representing an increase of approximately \$417,000 or 458%. Approximately \$299,000 of the increase is due to stock based compensation. The remaining increase is due to an increase in headcount and consulting expenses for engagement with prospective customers engagements.

Selling and marketing expenses for the six months ended June 30, 2017 and 2016 were approximately \$1.0 million and \$210,000, respectively, representing an increase of approximately \$807,000 or 384%. Approximately \$568,000 of the increase is due to stock based compensation expense. The remaining increase is due to an increase in head count and consulting expenses for engagement with prospective customers engagements.

Interest income and expense. Interest income and interest expense for the three and six months ended June 30, 2017 and 2016 consisted of the following (dollars in thousands):

| | Three Months ended June 30, | | Six Months ended June 30, | |
|------------------|--------------------------------|--------------|------------------------------|----------------|
| | 2017 | 2016 | 2017 | 2016 |
| Interest income | \$ 36 | \$ 2 | \$ 64 | \$ 2 |
| Interest expense | – | (748) | – | (1,310) |
| | <u>36</u> | <u>(746)</u> | <u>64</u> | <u>(1,308)</u> |

Interest income for the three and six months ended June 30, 2017 and 2016 related to interest earned on our cash and cash equivalents. Interest expense for the three and six months ended June 30, 2016 related to accrued interest on our Secured Notes. The principal amount and accrued interest on these notes converted into shares of common stock upon the completion of our IPO in August of 2016.

Other expense. Other expense for the three ended June 30, 2017 consisted of losses related to the write-off certain fixed assets. Other expense for the six months ended June 30, 2017 consisted primarily of a currency exchange loss of approximately \$4,000 related to our accounts payable. We did not have any currency exchange losses or fixed asset write-offs for the three and six months ended June 30, 2016.

Liquidity and Capital Resources

At June 30, 2017, we had cash and cash equivalents of approximately \$21.7 million and working capital of approximately \$21.2 million. For the six months ended June 30, 2017, we had a net loss of approximately \$7.2 million with approximately \$5.0 million of cash and cash equivalents used in operations. We have not generated revenues since inception and have incurred recurring operating losses. At June 30, 2017, we had an accumulated deficit of approximately \$103.2 million.

Cash Flows from Operating, Investing and Financing Activities

We believe that our available working capital is sufficient to fund our presently forecasted working capital requirements for, at least, the next 12 months following the date of the filing of this report. However, the semiconductor industry is generally slow to adopt new manufacturing process technologies and conducts long testing and qualification processes which we have limited ability to control. Accordingly, we may require additional capital in order to get to full-scale industrial production of a device that incorporates our MST[®]. In the event we require additional capital over and above the amount we have on hand, we will endeavor to acquire additional funds through various financing sources, including follow-on equity offerings, debt financing, licensing fees for our technology and joint ventures with industry partners. In addition, we will consider alternatives to our current business plan that may enable to us to achieve revenue producing operations and meaningful commercial success with a smaller amount of capital. However, there can be no guarantees that additional capital will be available on commercially reasonable terms, if at all. If such financing is not available on satisfactory terms, we may be unable to further pursue our business plan and we may be unable to continue operations.

Net cash used in operating activities of approximately \$5.0 million for the six months ended June 30, 2017 resulted primarily from our net loss of approximately \$7.2 million and a decrease of approximately \$319,000 in accrued payroll expenses, adjusted by approximately \$2.6 million for stock-based compensation expense.

Net cash used in operating activities of approximately \$3.3 million for the six months ended June 30, 2016 resulted primarily from our net loss of approximately \$5.1 million, adjusted by approximately \$881,000 in non-cash interest expense, approximately \$429,000 for non-cash amortization of debt issuance costs, and approximately \$188,000 for non-cash settlement of subscription receivable.

Net cash used in investing activities of approximately \$13,000 for the six months ended June 30, 2017 and approximately \$14,000 for the six months ended June 30, 2016 consisted of the purchase of property and equipment.

No cash was used in or provided by financing activities in the six months ended June 30, 2017. Net cash provided by financing activities of approximately \$5.4 million for the six months ended June 30, 2016 consisted primarily of the proceeds of our issuance of Secured Notes in April 2016.

Off-Balance Sheet Arrangements

We have not entered into any off-balance sheet arrangements or issued guarantees to third parties.

Recent Accounting Pronouncements

We are required to adopt certain new accounting pronouncements. See note 2 to the condensed financial statements included in Item 1 of this Form 10-Q.

Critical Accounting Policies

There have been no changes to our critical accounting policies from those included in our Annual Report on Form 10-K for the year ended December 31, 2016.

Item 3. Quantitative and Qualitative Disclosure about Market Risk.

Not applicable.

Item 4. Controls and Procedures.*Evaluation of Disclosure Controls and Procedures*

Our management, with the participation of our chief executive officer and principal financial and accounting officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rule 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934. Based on this evaluation, management concluded that our disclosure controls and procedures were effective as of June 30, 2017.

Changes in Internal Control over Financial Reporting

There have not been any changes in our internal control over financial reporting (as such term is defined in Rule 13a-15(f) and 15(d)-15(f) under the Exchange Act) during the three-month period ended June 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

PART II. Other Information

Item 1A. Risk Factors

The primary risk factors affecting our business have not changed materially from the risk factors set forth in our Annual Report on Form 10-K for the year ended December 31, 2016 filed with the SEC on March 31, 2017.

Item 6. Exhibits

The following is a list of exhibits files as part of this Report on Form 10-Q

| <u>Exhibit No.</u> | <u>Description</u> | <u>Method of Filing</u> |
|--------------------|---|-------------------------------|
| 31.1 | <u>Certifications Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u> | Filed electronically herewith |
| 31.2 | <u>Certifications Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u> | Filed electronically herewith |
| 32.1 | <u>Certification of Principal Executive Officer and Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350).</u> | Filed electronically herewith |
| 101.INS | XBRL Instance Document | Filed electronically herewith |
| 101.SCH | XBRL Taxonomy Extension Schema Document | Filed electronically herewith |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase Document | Filed electronically herewith |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase Document | Filed electronically herewith |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase Document | Filed electronically herewith |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase Document | Filed electronically herewith |

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and the on the date indicated.

ATOMERA INCORPORATED.

Date: August 8, 2017

By: /s/ Scott A. Bibaud
Scott A. Bibaud
Chief Executive Officer,
(Principal Executive Officer)
and Director

Date: August 8, 2017

By: /s/ Francis B. Laurencio
Francis B. Laurencio
Chief Financial Officer
(Principal Financial and
Accounting Officer)

CERTIFICATIONS

I, Scott A. Bibaud, certify that:

- (1) I have reviewed this Form 10-Q of Atomera Incorporated (the "Company");
- (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 Company as of, and for, the periods presented in this report;
- (4) The Company'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 company 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 Company, 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 Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the period covered by this report based on such evaluation; and
 - (d) disclosed in this report any change in the Company's internal control over financial reporting that occurred during the Company's most recent quarter that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; And
- (5) The Company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company'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 Company'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 Company's internal control over financial reporting.

ATOMERA INCORPORATED

Date: August 8, 2017

By: /s/ Scott A. Bibaud

Scott A. Bibaud, Chief Executive Officer

CERTIFICATIONS

I, Francis B. Laurencio, certify that:

- (1) I have reviewed this Form 10-Q of Atomera Incorporated (the "Company");
- (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 Company'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 company 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 Company, 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 Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as 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 Company's most recent quarter that has materially affected, or is reasonably likely to materially affect, the Company'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 Company's auditors and the audit committee of the Company'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 Company'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.

ATOMERA INCORPORATED

Date: August 8, 2017

By: /s/ Francis B. Laurencio

Francis B. Laurencio, Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

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

In connection with the Quarterly Report of Atomera Incorporated (the "Company") on Form 10-Q for the period ended June 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Scott A. Bibaud, the Chief Executive Officer, and Francis B. Laurencio, the Chief Financial Officer, of the Company, respectively, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

By: /s/ Scott A. Bibaud Dated: August 8, 2017
Scott A. Bibaud
Title: President and Chief Executive Officer

By: /s/ Francis B. Laurencio Dated: August 8, 2017
Francis B. Laurencio
Title: Chief Financial Officer

This certification is made solely for the purposes of 18 U.S.C. Section 1350, subject to the knowledge standard contained therein, and not for any other purpose.

