

Investor Presentation February 2019

Safe Harbor



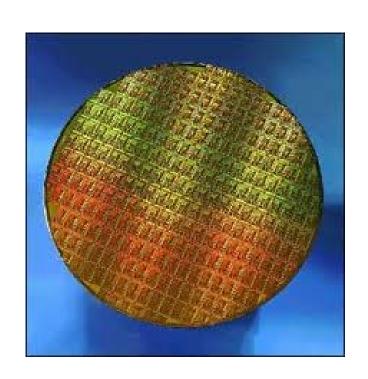
This presentation contains forward-looking statements concerning Atomera Incorporated (""Atomera," the "Company," "we," "us," and "our"). The words "believe," "may," "will," "potentially," "estimate," "continue," "anticipate," "intend," "could," "would," "project," "plan," "expect" and similar expressions that convey uncertainty of future events or outcomes are intended to identify forward-looking statements. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in the "Risk Factors" section of our Prospectus Supplement filed pursuant to Rule 424(b)(5) with the SEC on October 11, 2018 (the "Prospectus Supplement"). In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this presentation may not occur and actual results could differ materially and adversely from those anticipated or implied in our forward-looking statements. You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances described in the forward-looking statements will be achieved or occur.

This presentation contains only basic information concerning Atomera. The Company's filings with the Securities Exchange Commission, including the Prospectus Supplement, include more information about factors that could affect the Company's operating and financial results. We assume no obligation to update information contained in this presentation. Although this presentation may remain available on the Company's website or elsewhere, its continued availability does not indicate that we are reaffirming or confirming any of the information contained herein.

Investment Overview



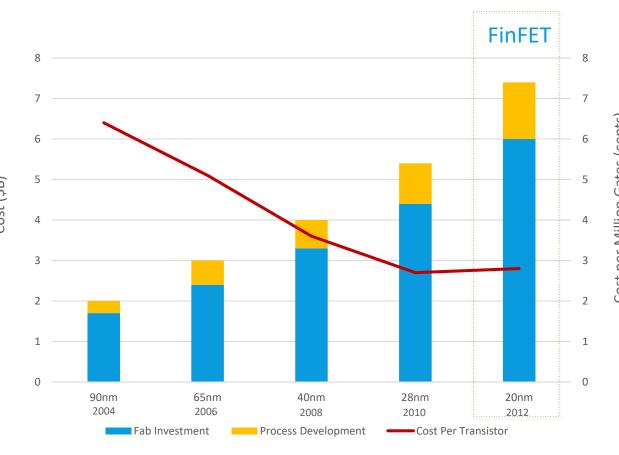
- Mears Silicon Technology (MST®) is a thin film used to enhance semiconductors
 - Results in higher performance, lower power, and lower costs for ICs
- Capital-light IP licensing business
 - Robust and growing patent portfolio
- Engaged with 50% of world's top semiconductor makers
- Licenses with Asahi Kasei Microdevices (AKM) and STMicroelectronics
- Strong team to commercialize technology
 - CEO ran \$1B+ divisions at Broadcom and Altera
 - Founder/CTO co-invented the EDFA for long-haul optical applications
 - Deeply experienced materials science and semiconductor engineering team



Extending Moore's Law at every node



The skyrocketing cost of new nodes



Source: McKinsey & Co, "On Semiconductors"

MST: A cost effective solution to semiconductor's biggest problem

- MST can deliver a half to a full node of improvements
 - Performance strengthened at any process node
 - Continues driving down the cost per transistor
 - Also solves problems in FinFET transistors
- MST cost is tiny in comparison to developing a new node
 - IDM Process development/licensing is ~\$10M
 - Foundry equipment upgrades cost is ~\$30-50M
 - A foundry for a new node costs billions

"From an economic standpoint, Moore's law is over."

Silicon Valley analyst Linley Gwynnap, quoted in "After Moore's Law," *The Economist*, 12 March 2016

MST Technology



STANDARD MST SILICON TRANSISTOR **SILICON TRANSISTOR Gate Dialectric** MST™ Superlattice Gate Gate Drain Source Source Drain Substrate Standard Silicon MSTTM Silicon Atomic Structure Atomic Structure 00000000 000000000 LIMITED Horizontal Current Flow + INCREASED Horizontal Current Flow + **EXCESSIVE** Vertical Leakage **REDUCED Vertical Leakage**

Potential Benefits

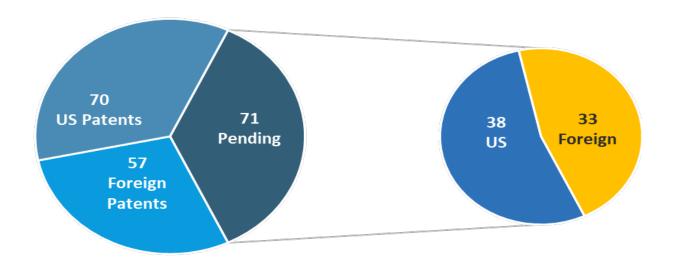
- Improved Efficiency
 - Higher transistor performance
 - Lower power consumption
 - Better reliability
- Lower cost
 - Reduced die size
 - Improved yield
 - Higher throughput
- Same benefits as a node shrink

Patent Portfolio



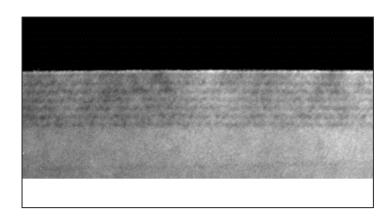
Comprehensive

198 Patents Granted and Pending



Core MST Method and Device MST Enabled Devices/Architecture Next-Gen Architectures using MST

Discoverable



These distinctive layers are visible on products using MST

Extensive know-how

Extends life and value of patents

Semiconductor Ecosystem



Integrated Device Manufacturers















RENESAS











































Tool Suppliers









Revenue Sources



Royalties

License Fees

- Integration licenses
- Manufacturing licenses
- Distribution licenses

Engineering Service Fees

- MST deposition on customer wafers
- Integration consulting

Customer Engagement & Revenue Model

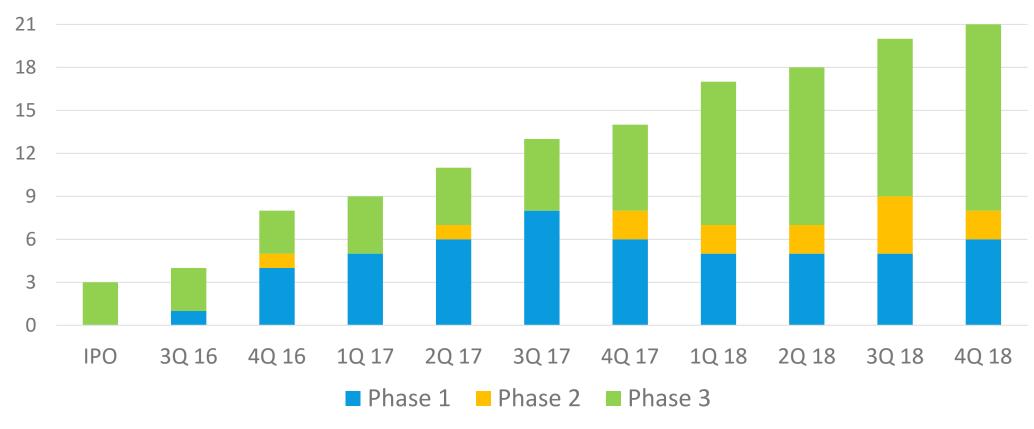


		Customer Wafer Manufacturing						
		Atomera MST® Deposition			Customer MST® Deposition			
Phase	1. Planning	2. Setup	3. Integration		4. Installation	5. Qualification	6. Production	
Revenue Type			Engineering Services	Integration License	Manufacturing License	Distribution License	Royalties	

Growing Customer Pipeline



Number of Customer Engagements



• 17 customers, 21 engagements

Working with 50% of the world's top semiconductor makers*

* 10 of the top 20 (IC Insights, McClean Report 2017)

ST Micro & AKM Commercial Licenses



- Atomera Licenses MST to Asahi Kasei Microdevices (AKM) Sept 25, 2018
 - Japanese manufacturer of high end ICs for consumer, automotive and industrial
 - Division of Asahi Kasei Chemical Group
 - Long time partner of Atomera
 - First commercial licensee of Atomera's MST technology
 - Integration License



- Atomera Licenses MST to STMicroelectronics October 2, 2018
 - One of the world's largest semiconductor companies
 - 2017 revenue: \$8.3B
 - Leading IDM making solutions for Smart Driving, Internet of Things
 - Working with MST for less than two years
 - Integration License



Market Segment Strategy



Leading Analog	Mainstream	Leading Planar	3D	
Analog, PMIC, RF	IoT, RF, Automotive	DRAM; Digital Processors	FinFET, Nanowire	
Key Players: TSMC, TI, NXP, ST Micro	Key Players: TSMC, UMC, SMIC, Global Foundries	Key Players: TSMC, GF, Samsung, Hynix, Micron	Key Players: Intel, TSMC, Samsung, GF	
Atomera solutions MST can lower die cost while improving other parameters	Atomera solutions MST allows fab life extension by upping performance within node	Atomera solutions MST provides a low cost alternative to extend planar life	Atomera solutions MST is a low risk, silicon based technology with multiple benefits	
180nm 130nm	90nm 65nm 40nm	28nm 16nm 14nm	10nm 7nm 5nm	

Engaged with customers in all four segments

Significant TAM



- \$7.0 billion total addressable market
 - at 2% royalty per wafer selling price²
- Top 20 wafer capacity leaders represent 84% of total industry capacity

1. Represents wafers per year (200mm equ).

2. 2016 Industry wafer ASP: \$1,637; target royalty 1-3% Source: IC Insights Global Wafer Capacity 2017-2021 report

Company	Туре	Segment	Capacity ¹	% of Total
Samsung Semiconductor	IDM	Memory	31,185,000	14.6%
TSMC	Foundry	Logic	24,147,804	11.3%
Micron Technology	IDM	Memory	18,486,000	8.7%
SK Hynix	Foundry	Memory	18,360,000	8.6%
Toshiba Semiconductor	IDM	Memory	13,905,000	6.5%
GlobalFoundries	Foundry	Logic	9,720,000	4.6%
Intel	IDM	MCU	8,181,000	3.8%
Texas Instruments (TI)	IDM	Analog	7,450,548	3.5%
UMC (United Microelectronics)	Foundry	Logic	7,378,356	3.5%
STMicroelectronics	IDM	Analog	5,532,072	2.6%
SMIC	Foundry	Logic	5,193,000	2.4%
Infineon Technologies	IDM	Analog	4,509,708	2.1%
ON Semiconductor	IDM	Analog	4,493,904	2.1%
Powerchip Technology	Foundry	Logic	3,756,000	1.8%
TowerJazz	Foundry	Analog	3,572,820	1.7%
NXP Semiconductors	IDM	Analog	3,000,000	1.4%
Renesas Electronics	IDM	Other	2,833,488	1.3%
Japan Semiconductor Corp. (Toshiba)	Foundry	Analog	2,759,328	1.3%
Huahong Grace Semiconductor (HHGrace)	Foundry	Analog	2,556,000	1.2%
IM Flash	IDM	Memory	2,160,000	1.0%
Top 20 Total			179,180,028	83.9%
Other			34,419,972	16.1%
Total Industry			213,600,000	100.0%

Financial Overview



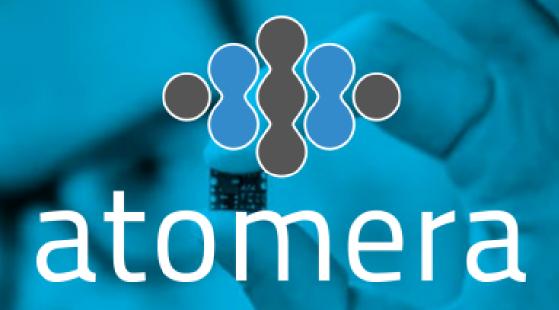
		2018					
	Q4 2017	Q1	Q2	Q3	Q4	FY 2017	FY 2018
GAAP Results							
Revenue	\$0.1M	-	\$0.1M	-	\$0.15M	\$0.1M	\$0.25M
Gross Profit	\$0.1M	-	(\$0.02M)	-	\$0.12M	\$0.1M	\$0.10M
Operating Expense	(\$2.7M)	(\$3.1M)	(\$3.2M)	(\$3.5M)	(\$3.4M)	(\$13.3M)	(\$13.2M)
Net Loss	(\$2.6M)	(\$3.1M)	(\$3.2M)	(\$3.4M)	(\$3.2M)	(\$13.1M)	(\$12.9M)
Loss Per Share	(\$0.21)	(\$0.26)	(\$0.26)	(\$0.28)	(\$0.22)	(\$1.11)	(\$1.02)
Reconciliation between GAAP & Non-GAAF							
Net Loss (GAAP)	(\$2.6M)	(\$3.1M)	(\$3.2M)	(\$3.4M)	(\$3.2M)	(\$13.1M)	(\$12.9M)
Stock-Based Compensation	\$0.5M	\$0.5M	\$0.6M	\$0.6M	\$0.6M	(\$4.0M)	\$2.4M
Adjusted EBITDA (Non-GAAP)*	(\$2.1M)	(\$2.6M)	(\$2.6M)	(\$2.8M)	(\$2.6M)	(\$9.1M)	(\$10.7M)
Cash at December 31, 2018	\$18.9M						
Shares Outstanding at December 31, 2018	15.0M						

^{*} Adjusted EBITDA is a non-GAAP financial measure. A full reconciliation of GAAP and non-GAAP results is contained on slide 16

Summary



- Signed first two customer licenses with AKM and STMicroelectronics
- High margin, recurring revenue financial model
- Solid cash position
- Strong technology and patent position
- Ramping commercial license revenues



Thank You