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Investor Presentation

October 2018

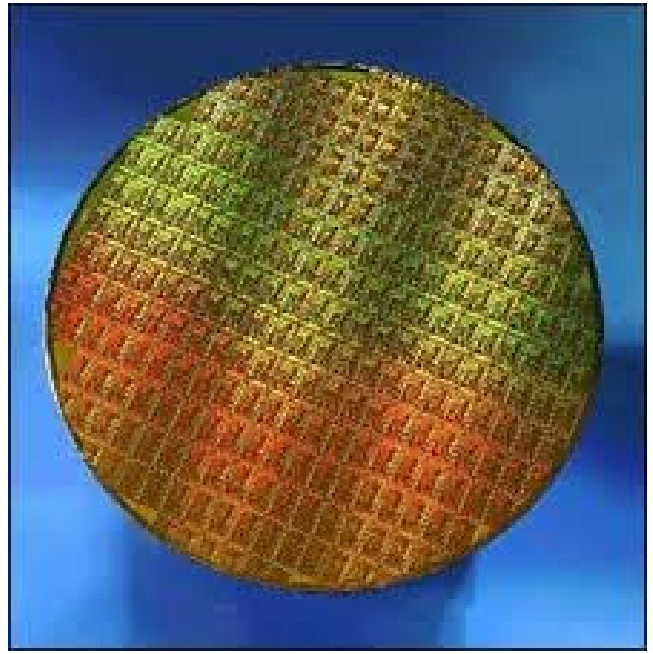
Safe Harbor

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 Annual Report on Form 10-K for the year ended December 31, 2017 filed with the SEC on March 6, 2018 (the “2017 Annual Report”). 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 2017 Annual Report, 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*
- **Well funded after completion of October 2018 financing**
  - *Raised net proceeds of $11.5 million*



Extending Moore's Law at every node

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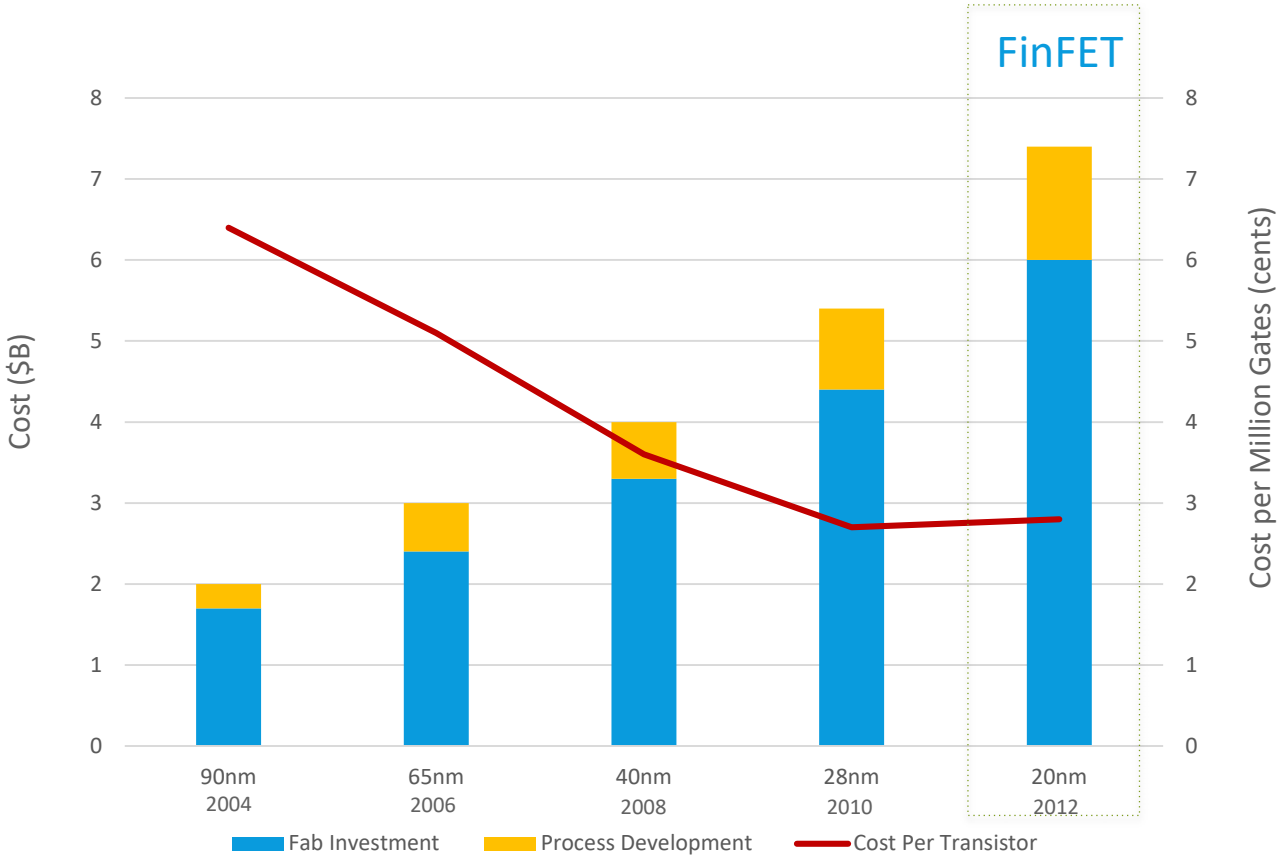
The skyrocketing cost of new nodes



Source: McKinsey & Co, "On Semiconductors"

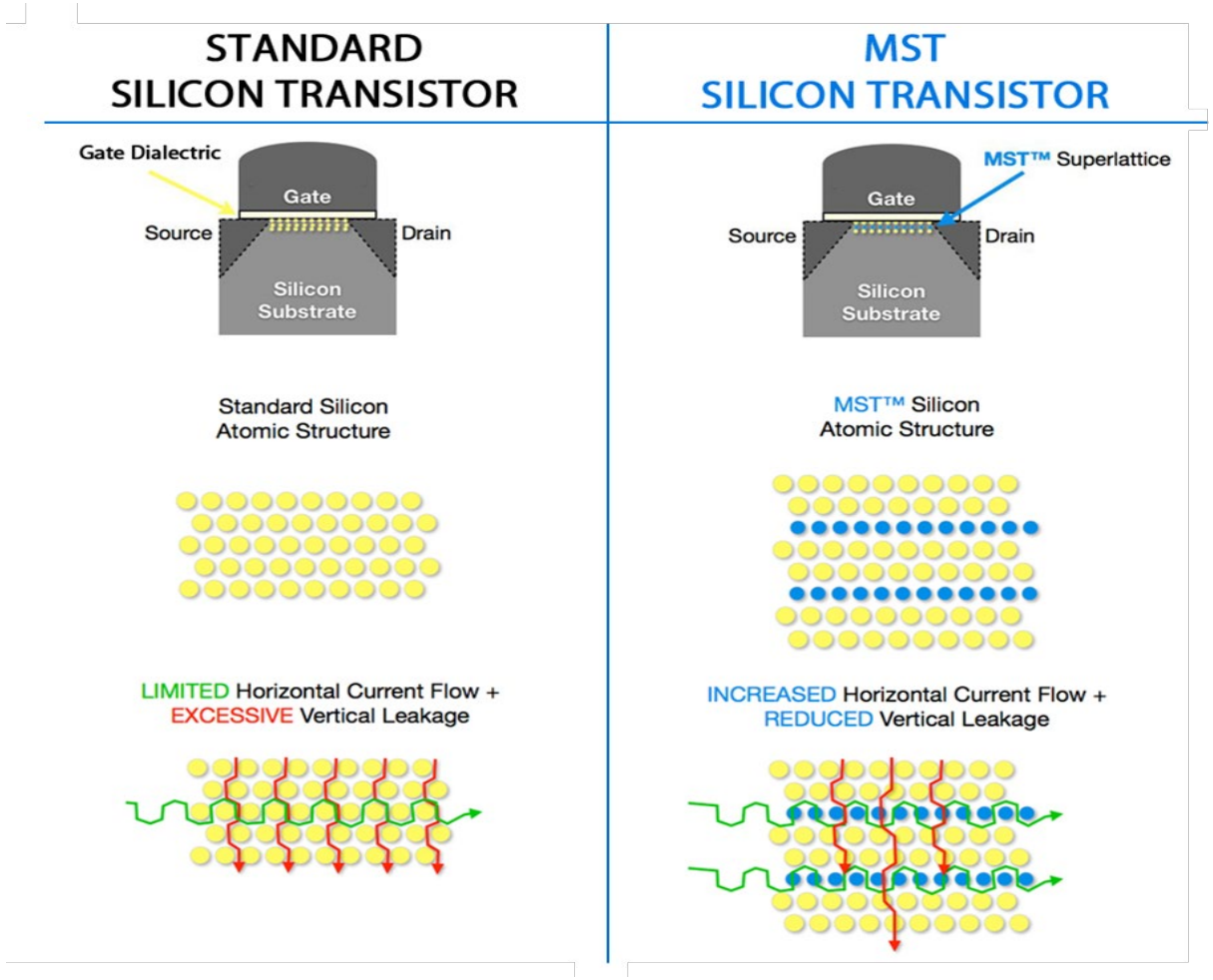
MST: A cost effective solution to semiconductor's biggest problem

- **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



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

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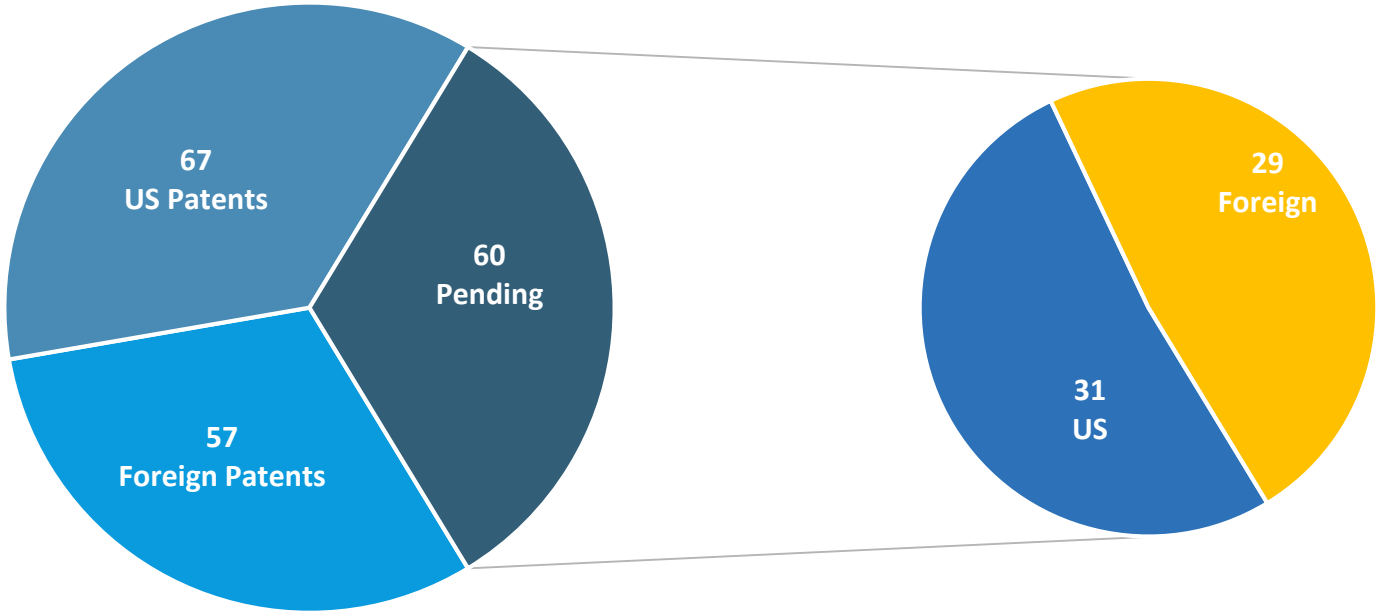
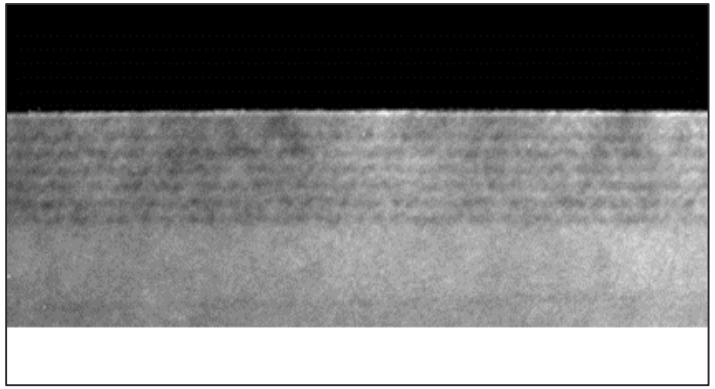
Comprehensive

184 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

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Integrated Device Manufacturers

SAMSUNG · Micron · TOSHIBA · intel

Texas Instruments · ST · Infineon · ON

NXP · RENESAS · FUJITSU · SK hynix

Foundry

tsmc · GLOBAL FOUNDRIES · UMC · SMIC

HHGrace · DB HiTek · TOWERJAZZ · MagnaChip

Fabless

BROADCOM · MARVELL · maxim integrated · MICROCHIP

SKYWORKS · QUALCOMM · Micron · qorvo

Tool Suppliers

ASM · APPLIED MATERIALS · KOKUSAI SEMICONDUCTOR EQUIPMENT CORPORATION · SYNOPSYS

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 price[2]
- Top 20 wafer capacity leaders represent 84% of total industry capacity

Company	Type	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%

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

ST Micro & AKM Commercial Licenses

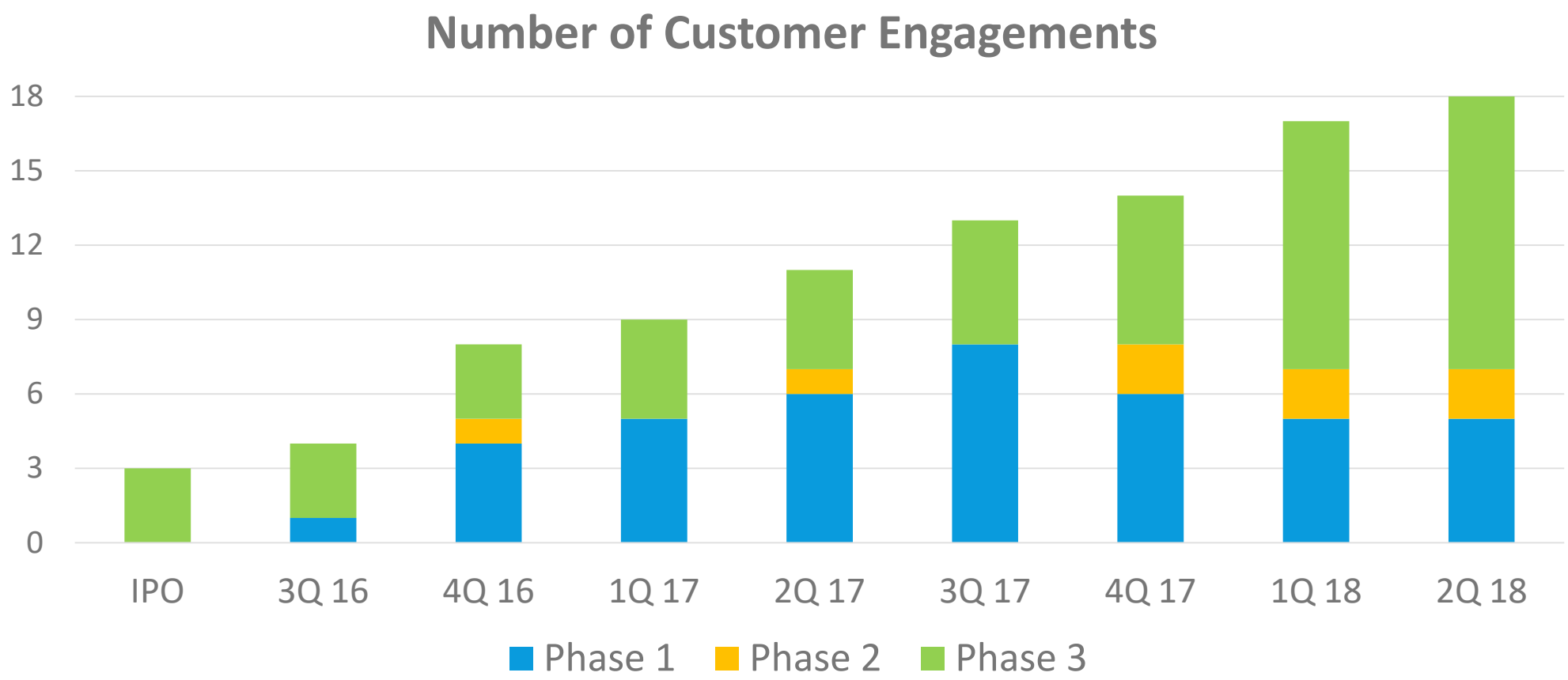
- **Atomera Licenses MST to Asahi Kasei Microdevices (AKM) – Sept 25, 2018**
  - *Japanese manufacturer of high end ICs for consumer, automotive and industrial*
  - *Division of Asahi Kasei Chemical Group*
  - *Long time partner of Atomera*
  - *First commercial licensee of Atomera's MST technology*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

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



- 14 customers, 18 engagements
- Working with 50% of the world's top semiconductor makers*

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

Financial Overview and Capitalization

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Non-GAAP P&L*		
	Q2 2018	Q1 2018
Revenue	**96**	**–**
Cost of goods sold	113	–
Gross profit	**(17)**	**–**
Operating expenses		
Research and development	1,590	1,578
General and administrative	803	796
Selling and marketing	182	212
Total operating expenses	**2,575**	**2,586**
Adjusted EBITDA (Non-GAAP)	**(2,592)**	**(2,586)**

Summary Capitalization Table		
	Common Shares	WAEP
Shares Outstanding	12,408,525	
Warrants	764,665	$5.75
Stock Options	1,359,562	$7.02
FD SO	14,532,752	

Balance Sheet		
(in thousands)	Q2 2018	Q1 2018
Current assets		
Cash and cash equivalents	12,254	14,547
Accounts receivable	96	–
Prepaids and other current assets	296	401
Total current assets	**12,646**	**14,948**
Property and equipment, net	65	68
Security deposit	13	13
Total assets	**12,724**	**15,029**
Liabilities		
Accounts payable	339	283
Accrued expenses	285	208
Accrued payroll and related	338	226
Total liabilities	**962**	**717**
Shareholders' equity		
Common stock	12	12
Additional paid-in capital	127,078	126,457
Accumulated deficit	(115,328)	(112,157)
Total shareholders' equity	**11,762**	**14,312**
Total liabilities and shareholders' equity	**12,724**	**15,029**

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

Summary

- **High margin, recurring revenue financial model**
- **Solid progress with initial customers in pipeline**
- **Strong technology and patent position**
- **Experienced management team to execute business plan**
- **Ramping commercial license revenues**

Thank You

Financial Overview and Capitalization

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Reconciliation of Non-GAAP to GAAP P&L*		
	Q2 2018	Q1 2018
Adjusted EBITDA (Non-GAAP)	**(2,592)**	**(2,586)**
Add (subtract) the following items		
Interest income	50	47
Depreciation and amortization	(8)	(8)
Stock-based compensation	(621)	(545)
Net loss (GAAP)	**(3,171)**	**(3,092)**

Adjusted EBITDA is determined by taking net loss and eliminating the impacts of interest, taxes, depreciation, amortization, stockbased compensation, the change in fair value of derivative liabilities, and the gain on the extinguishment of debt. Our definition of adjusted EBITDA may not be comparable to the definitions of similarly titled measures used by other companies. We believe that this non-GAAP financial measure, viewed in addition to and not in lieu of its reported GAAP results, provides useful information to investors by providing a more focused measure of operating results. Here are providing a reconciliation to our publicly reported GAAP income statement.