

#### 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 disclosed in the section "Risk Factors" included in our Annual Report on Form 10-K filed with the SEC on February 15, 2022 (the "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.

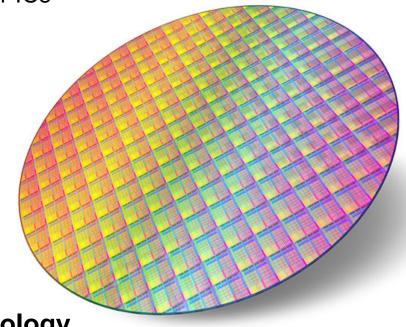
This presentation contains only basic information concerning Atomera. The Company's filings with the Securities Exchange Commission, including the Annual Report, include more information about factors that could affect the Company's operating and financial results. We assume no obligation to update information 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 and technology licensing business
- ► Engaged with 50% of world's top semiconductor makers
- ► Licenses with five companies including two JDAs

► Strong patent portfolio and team to commercialize technology



# MST: Mears Silicon Technology



#### **Quantum Engineered Silicon**

Partial Monolayers of Oxygen in Silicon



Supported by Major Semiconductor Tool Suppliers



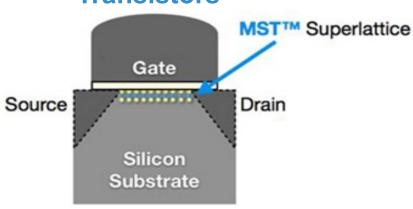
**ASM** 







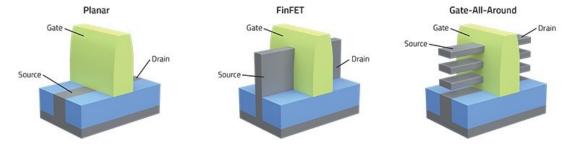
MST Enhanced Transistors



### MST Technology

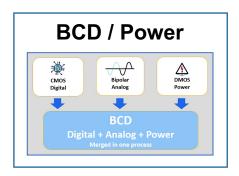


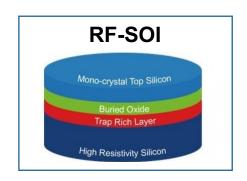
- ▶ MST is a material which, properly integrated, advances all types of transistors
- ▶ How does it work?
  - Improves carrier mobility
  - Enables dopant diffusion engineering
  - Minimizes gate leakage and variability
  - Enhances reliability allowing higher overdrive

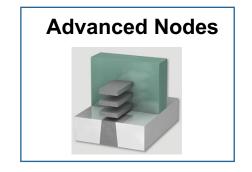


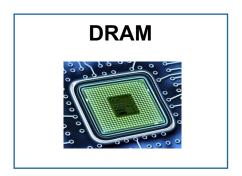
**Transistor Architectural Evolution** 

▶ MST provides benefits across many process nodes and product areas









### Target Customers & Partners



#### **Integrated Device Manufacturers**

























#### **Foundry**

















#### **Fabless**

















**Tool Suppliers (Partners)** 



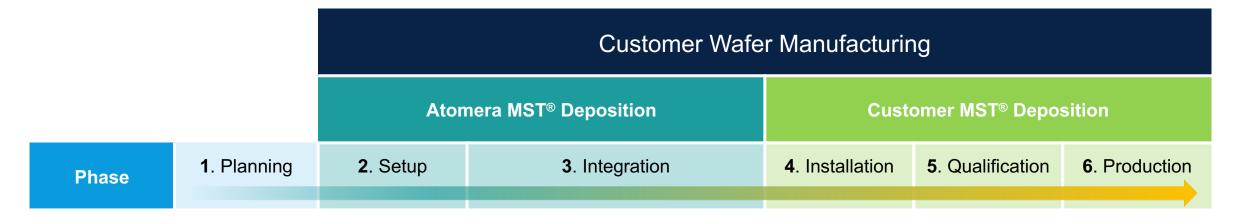




SYNOPSYS°

# Customer Engagement & Revenue Model





Engineering Service Fees

- MST deposition on customer wafers
- Integration consulting

**License Fees** 

- Integration licenses
- Manufacturing licenses
- Distribution licenses

**Joint Development Agreements** 

Royalties

### Customer Pipeline



		Customer Wafer Manufacturing						
		Atomera MST <sup>®</sup> Deposition		Customer MST <sup>®</sup> Deposition				
Phase	1. Planning	2. Setup	3. Integration	4. Installation	<b>5</b> . Qualification	6. Production		

#### **Number of Customer Engagements**



- 20 customers, 26 engagements
- Working with 50% of the world's top semiconductor makers\*

- 10 of the top 20 (IC Insights, McClean Report 2023)
- ^ End of year engagement count

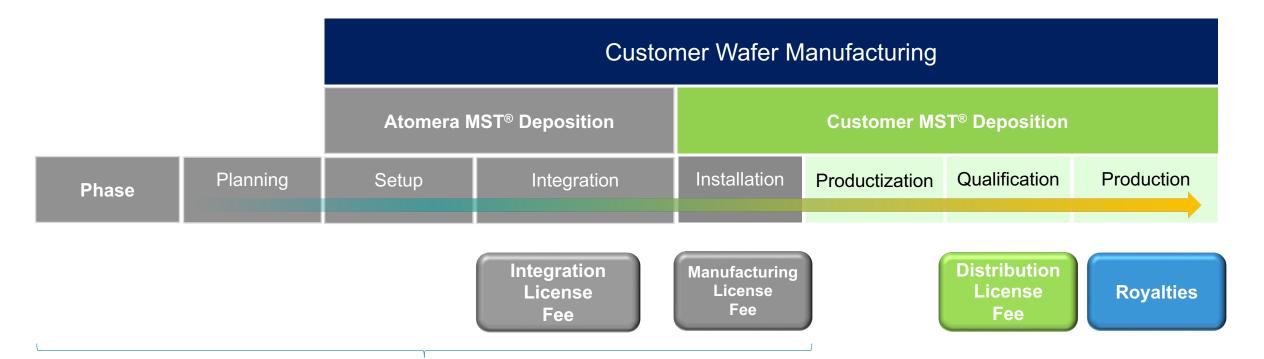




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#### ST Path to Production

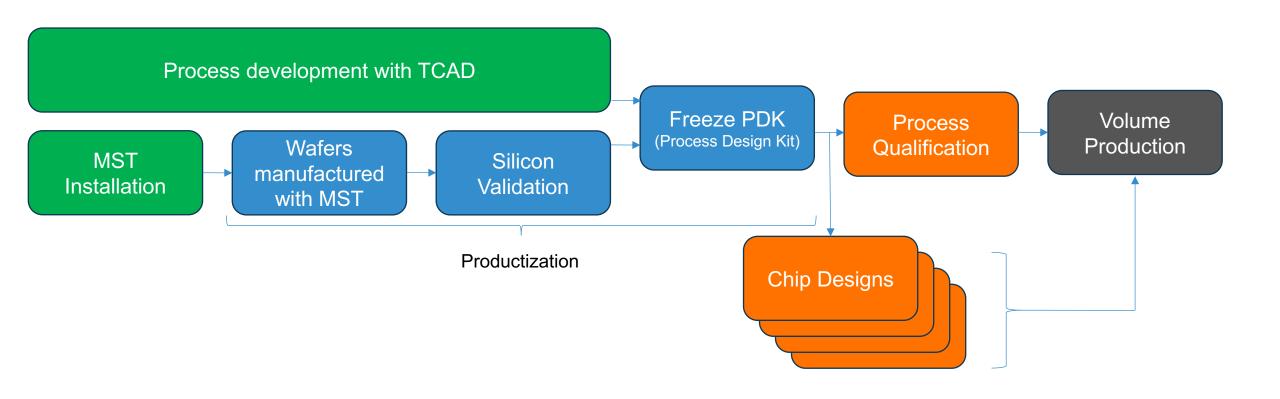




Complete

### Productization cycle





# MST technology focus areas

**MST** for Nodes

MST for DRAM

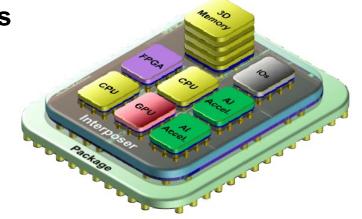




# MST optimizes AI performance



- ► Al algorithms are driving unprecedented compute workloads
  - Demands exceed ideal single chip silicon area, impacting yield
- ► Heterogenous chiplet architectures solve this problem
- ► Small chiplet designs can be optimized by process node
- ► MST's ability to enhance mature nodes brings great value

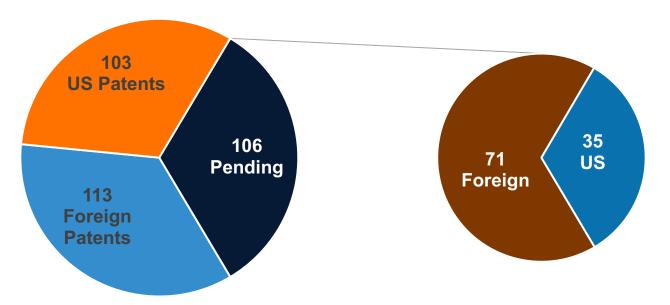




# Strong and Growing IP Portfolio



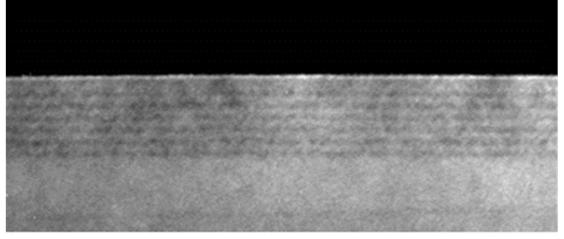
#### **322 Patents Granted and Pending**



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





Income Statement	Three Months Ended						
(\$ in thousands, except per-share data)	<b>September 30, 2023</b>		June 30, 2023		<b>September 30, 2022</b>		
REVENUE	\$	_	\$	-	\$	2	
Gross Profit		-		-		2	
OPERATING EXPENSES							
Research & Development		3,305		3,192		2,743	
General and Administration		1,683		1,775		1,567	
Selling and Marketing		365		393		347	
TOTAL OPERATING EXPENSES		5,353		5,360		4,657	
OPERATING LOSS		(5,353)		(5,360)		(4,655)	
Other Income (Expense)		314		208		53	
NET LOSS	\$	(5,039)	\$	(5,152)	\$	(4,602)	
Net Loss Per Share	\$	(0.20)	\$	(0.21)	\$	(0.20)	
Weighted average shares outstanding		25,255		24,677		23,294	
ADJUSTED EBITDA (NON-GAAP)	\$	(4,292)	\$	(4,310)	\$	(3,747)	
ADJUSTED EBITDA PER SHARE	\$	(0.17)	\$	(0.17)	\$	(0.16)	
Balance Sheet Information							
Cash, equivalents & ST investments	\$	20,389	\$	23,835	\$	23,287	
Debt		-		-		-	

### Summary



- ► High margin, recurring revenue financial model
- Strong technology, patent position, and balance sheet
- Traction with many top industry players and growing licensee base
- Ramping commercial license revenues

