

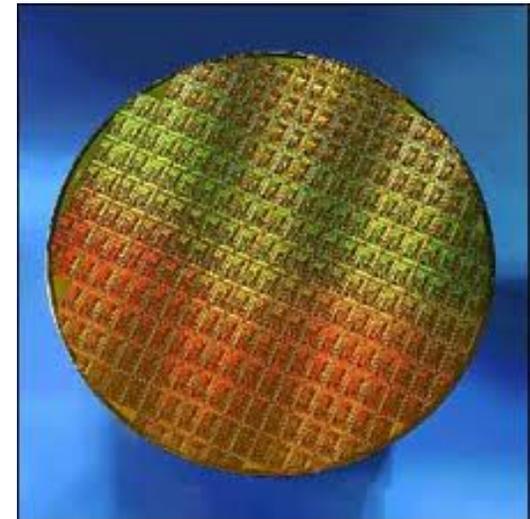


IEDM Seminar
December 2019

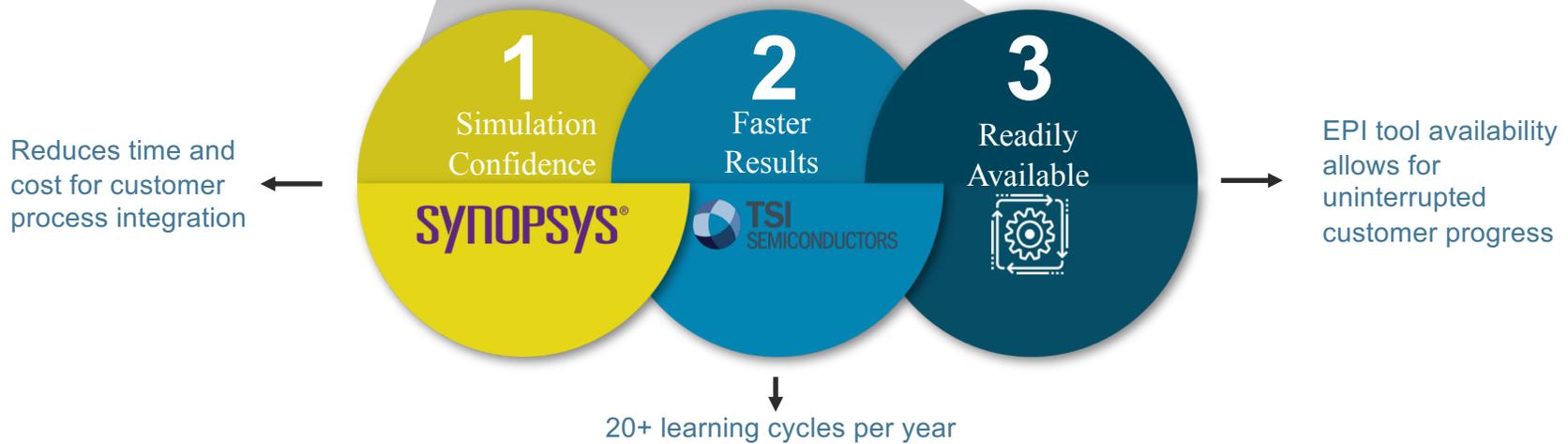
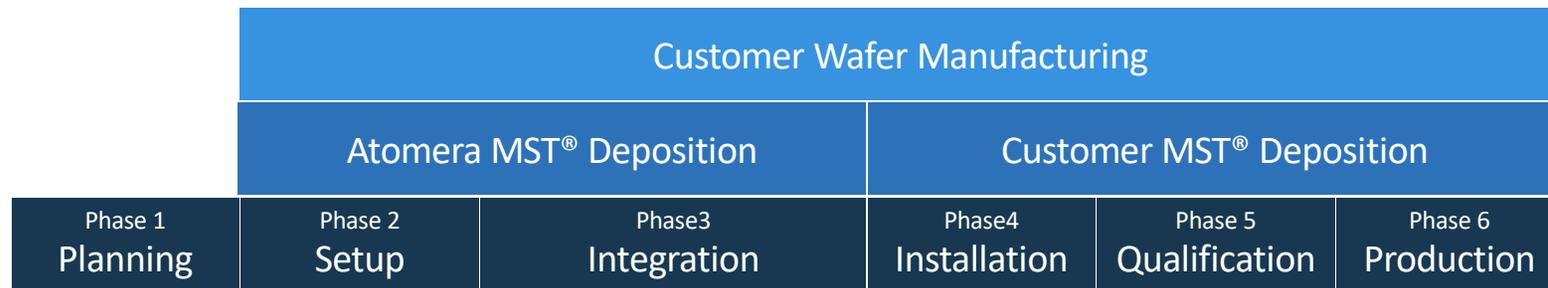
Company Overview



- **Atomera is a materials and integration technology company using Mears Silicon Technology (MST®) to enhance semiconductors**
- **Assist customers through a licensing business model**
 - *Robust and growing patent portfolio*
- **Engaged with 50% of world's top semiconductor makers**
- **Strong team to commercialize technology**
 - *Industry veteran management team*
 - *Deeply experienced materials science and semiconductor engineering team*
- **Well funded with strong customer momentum**



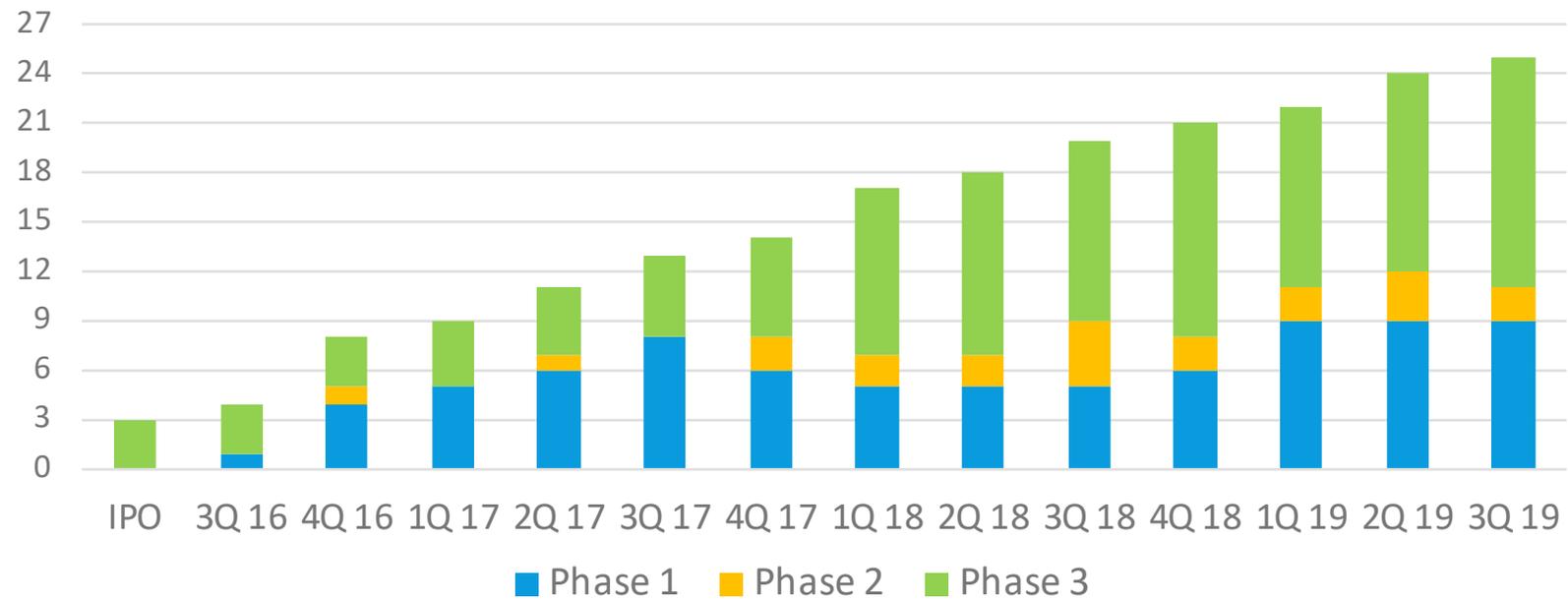
Collaborating for customer success



Growing Customer Pipeline



Number of Customer Engagements



- 19 customers, 25 engagements
- Working with 50% of the world's top semiconductor makers*

* At least 10 of the top 20 (IC Insights, McClean Report 2019)

Technology and Market Segment



IEEE TRANSACTIONS ON ELECTRON DEVICES, VOL. 64, NO. 1, JANUARY 2017 329

AIP | Journal of Applied Physics

Effects of Oxygen-Inserted Layers on Diffusion of Boron, Phosphorus, and Arsenic in Silicon for Ultra-Shallow Junction Formation

IEEE Electron Devices Society 2017

The Impact of Oxygen Insertion Technology on SRAM Yield Performance

edtm 2017
Electron Devices Technology and Manufacturing Conference

Punch-Through Stop Doping Profile Control via Interstitial Trapping by Oxygen-Insertion Silicon Channel

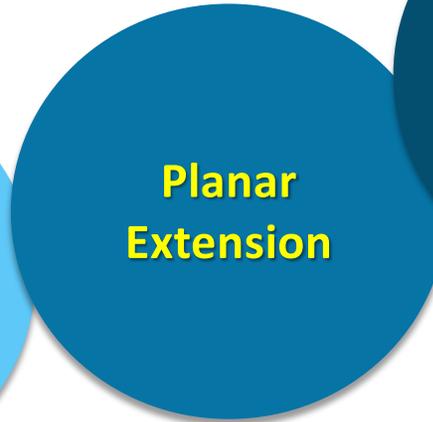
Comparison of SOI Versus Bulk FinFET Technologies for 6T-SRAM Voltage Scaling at the 7-/8-nm Node



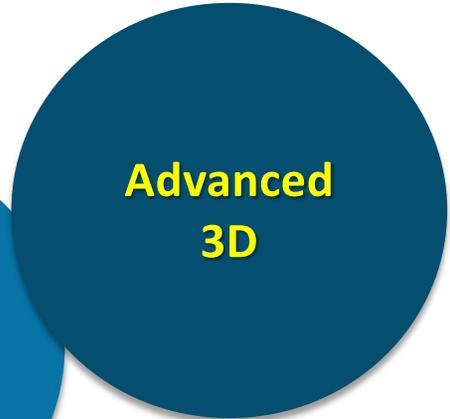
Leading Analog



Mainstream



Planar Extension



Advanced 3D



Atomera's Mission



We collaborate with our customers to improve their products,
through integration of MST,
so that both companies benefit financially

Tonight's program



- **MST Dopant Engineering and TCAD**
 - *Dan Connelly - Atomera head of TCAD development*
- **MST Smart Profile (SP) devices for R_{on} -BV improvement**
 - *Hideki Takeuchi – Atomera director of MST integration*
- **MST breakthrough improves for RF-SOI products**
 - *Robert Mears – Atomera founder and CTO*