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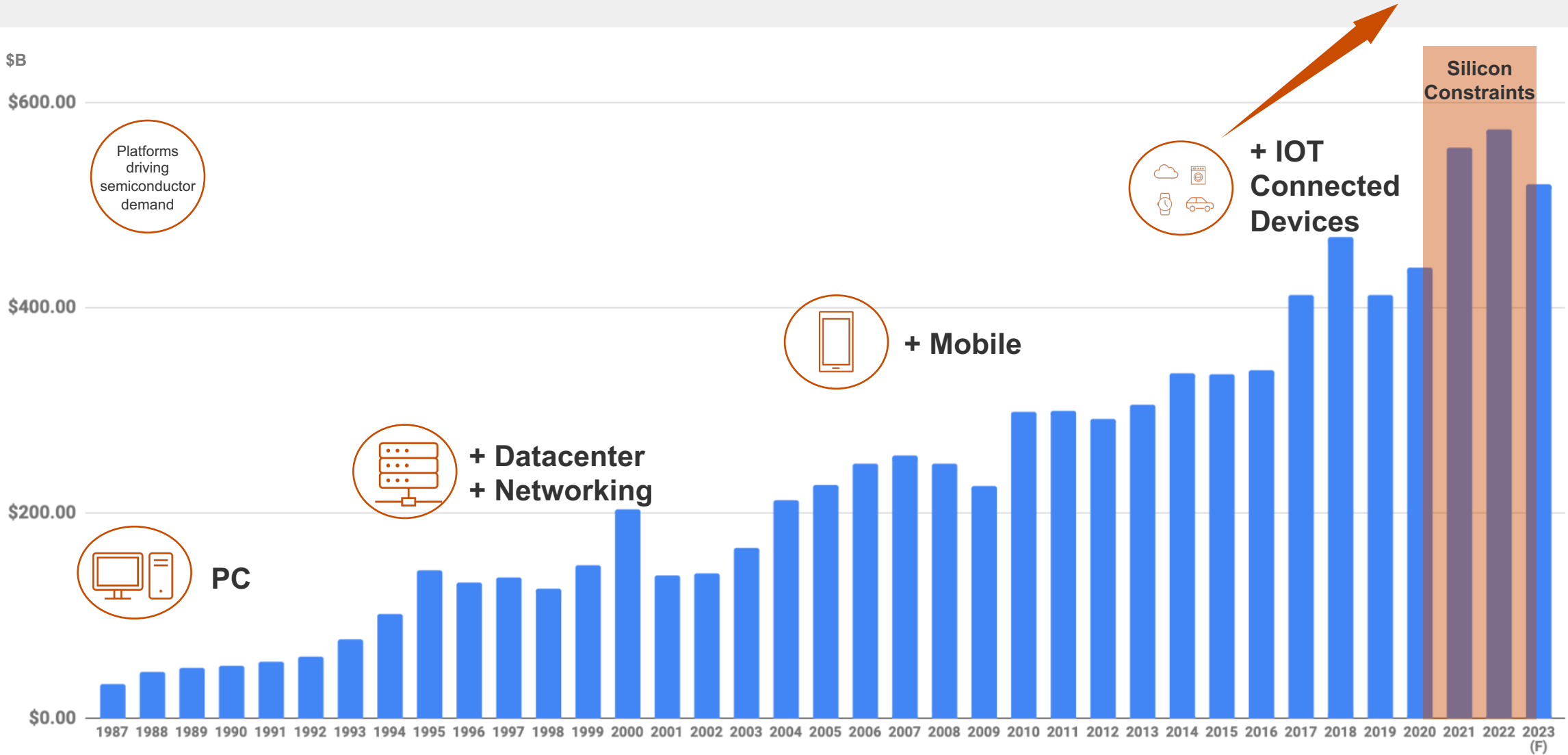
IOT-106

# Overcoming Supply Chain Challenges

John Dixon  
VP Americas Sales & Global Marketing

 IOT

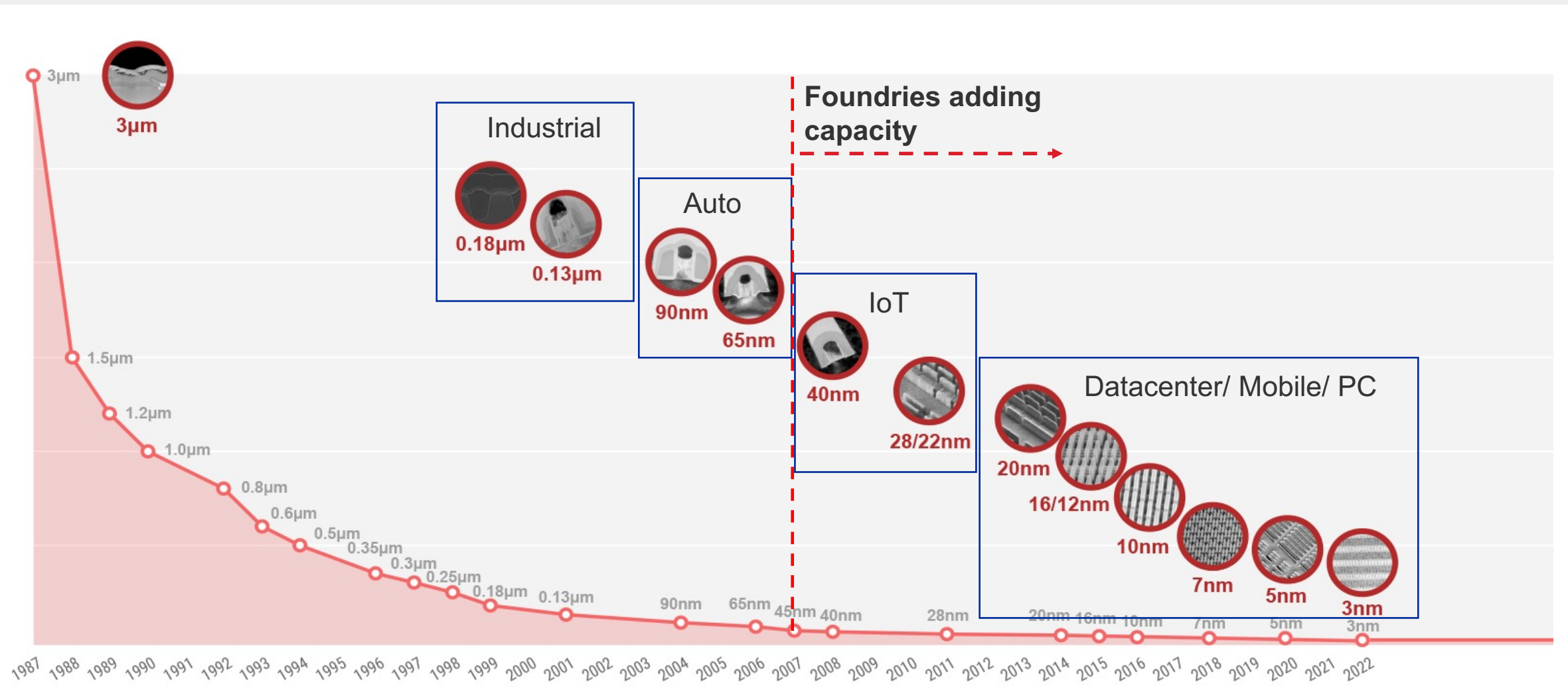
# Semiconductor Global Revenues & Driving Markets







# What Is The Right Process Geometry To Use



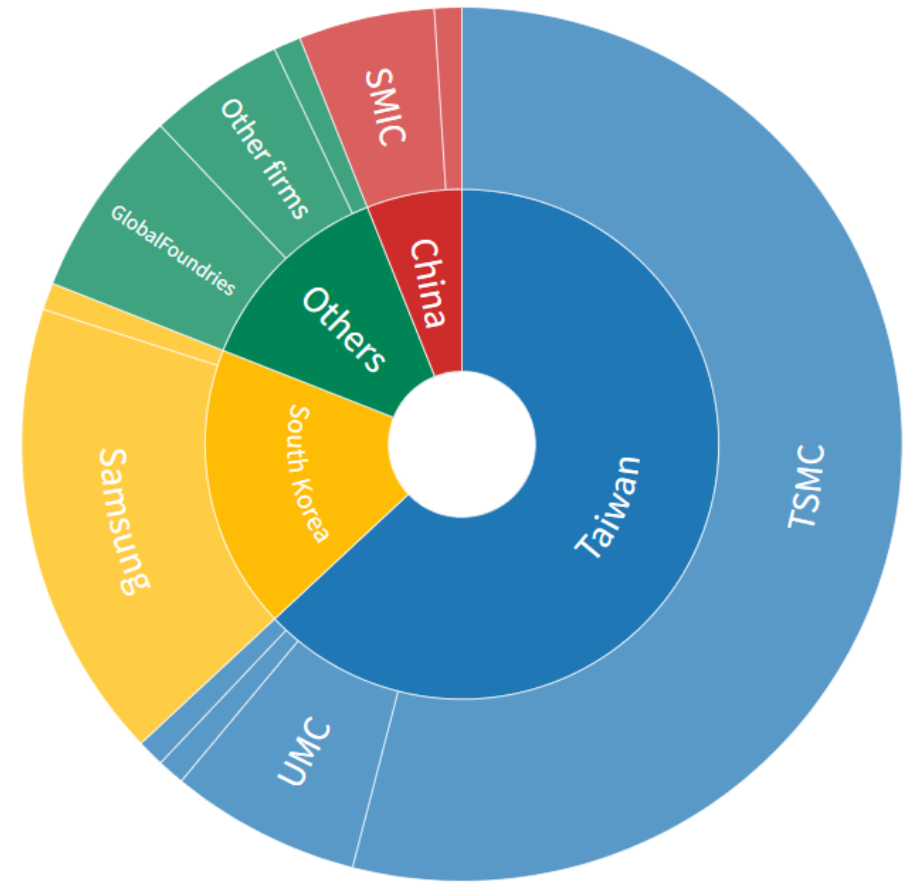
# Owned Fab Versus Fabless Model



## Economies of Scale Work for Foundries

- 75% World's Semiconductors from Foundries
- 50% World's Semiconductors from TSMC
- \$3-30B each Fab
- Fabless suppliers has the most success during constraints

Semiconductor Foundries by market share



# High Quality, Agile Supply Chain

Partnering with world-class suppliers to manage products from development to customer delivery

- Reliable, responsive, high volume supply
- Support unexpected surges in demand
- Quality-centered assembly and test, dual sourced
- ISO9001/14001 certified and ISO/TS16949 compliant



**UTAC**



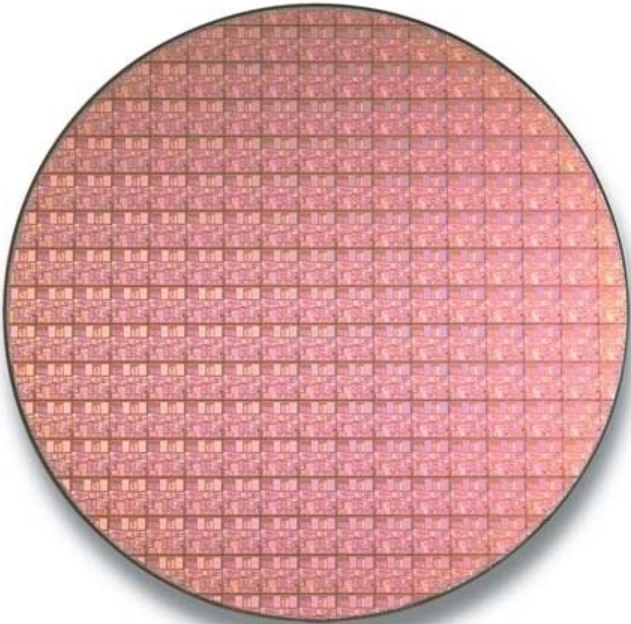
**20+ YEARS**

OF PROVIDING  
SILICON,  
SOFTWARE,  
AND SOLUTIONS

**15 YEAR**

TIER 1  
FOUNDRY/ASSEMBLY  
PARTNERSHIP

# Foundry Supply



Taiwan



China



Singapore



USA



UTAC



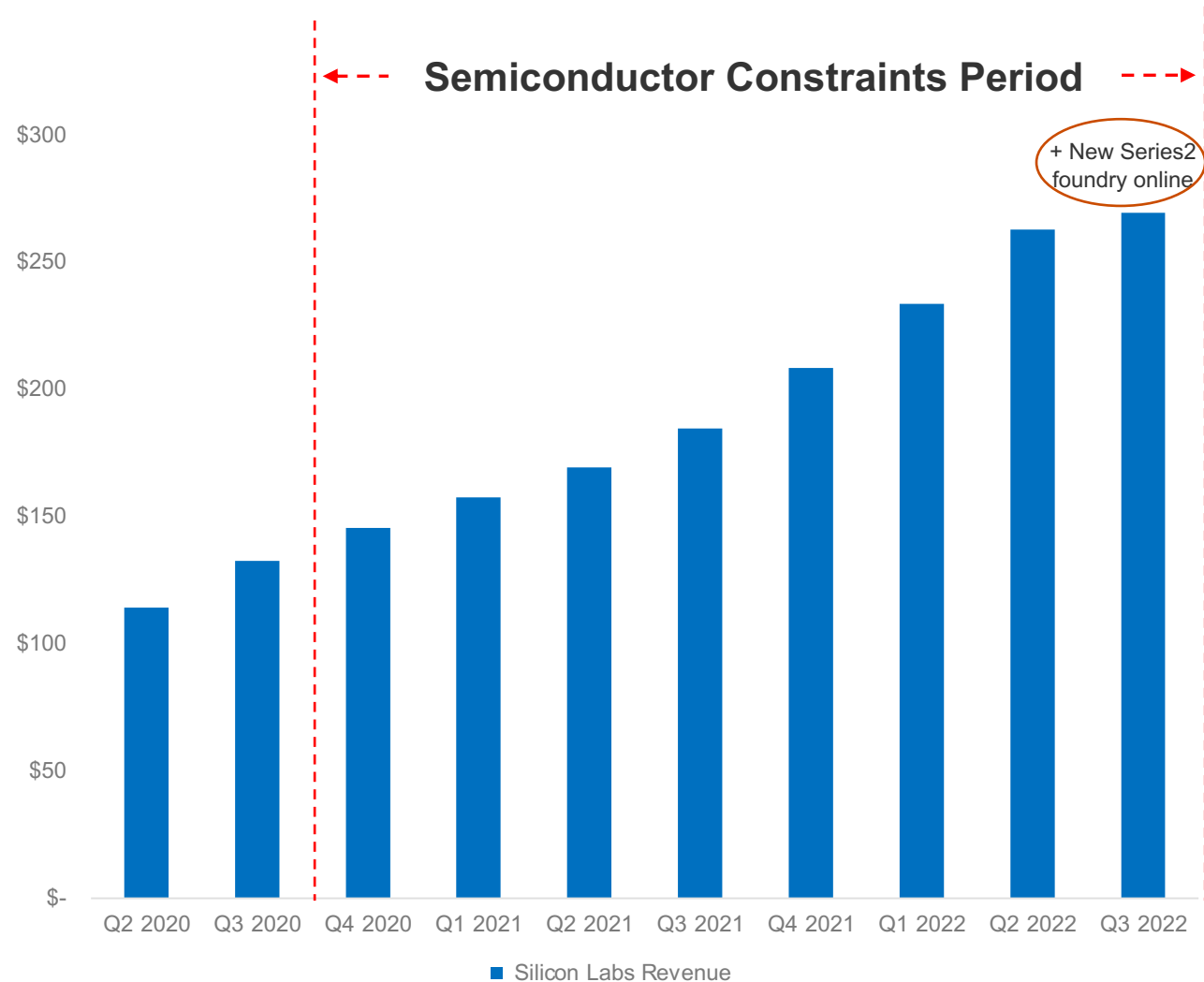
**20+ YEARS**

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AND SOLUTIONS

**15 YEAR**

TIER 1 FOUNDRY  
PARTNERSHIP  
TSMC. SMIC & Global  
Foundries

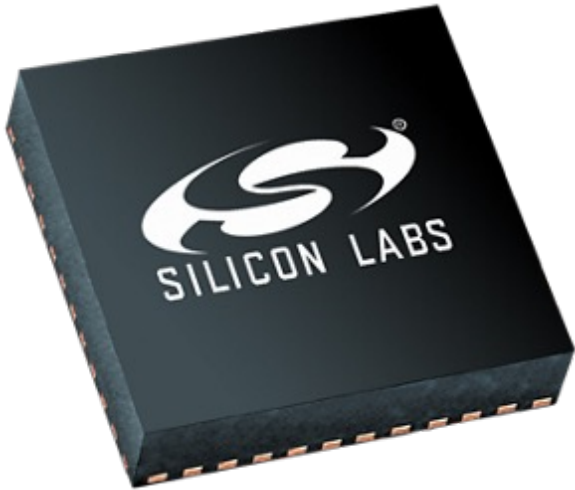
# Silicon Labs Through & After The Constraints



- Dual and Alternative sites strategy
  - Added additional Series 2 foundry to further increase capacity
- Silicon Labs doubled our revenue over the period of the biggest constraints our industry has seen
- 1<sup>st</sup> Semiconductor company coming out of constraints 4Q22
- Highest volume platform was 40nm (Series 2)
- Significantly increasing die bank inventory



# Assembly & Test



Taiwan



China



Singapore



Thailand



Malaysia



Philippines



Korea



India



## 20+ YEARS

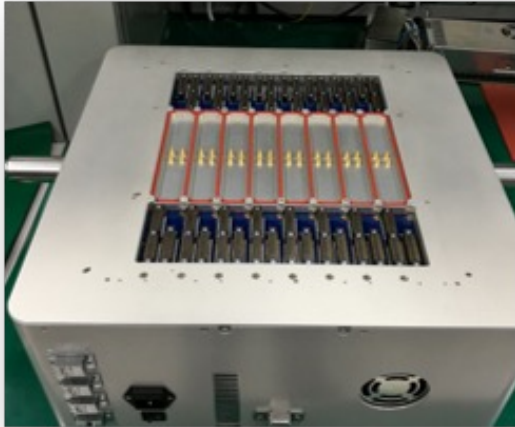
OF PROVIDING  
SILICON,  
SOFTWARE,  
AND SOLUTIONS

## 15 YEAR

TIER 1 ASSEMBLY  
PARTNERSHIP

Dual & Alternative site  
strategy

# Silicon Labs Develops Our Own Silicon Testers



- Internally developed Automated Tester (ATE)
- Majority Silicon Labs products use these ATEs across >15 worldwide locations
- Upside tester capacity can be rapidly deployed due to flexible mechanical design
  - Traditional ATEs are size of a car and ours is size of shoebox
- Majority other Silicon suppliers fight for allocation % of testers or buy new ones – long lead times
- Testers built by Silicon Labs for Silicon Labs products so best in class performance



# Series 3 Supply Chain Benefits

S E R I E S



 SILICON LABS



Taiwan



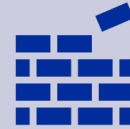
Germany



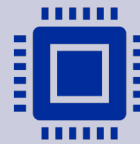
USA



Singapore



Use of off the shelf IP blocks for Silicon design which enable easy migratable platforms



Leveraging a combination of NVM technologies that will enable scaling up to 90% of total 22nm volume at Foundry



Using 22nm foundries that will have multiple geography options with Taiwan, EMEA, US & Singapore manufacturing alternatives



# Conclusion

## **Silicon Labs ideally set up to answer short or long-term 100Mu+ customer ramps**

- Extremely reliable & robust set of Foundry, Test and Assembly partners
- Ramped second Foundry providing incremental Series 2 supply that will increase over time
- Ability to easily ramp testing capacity removes any testing equipment bottlenecks
- Internal die banking strategy that will add high levels of die bank inventory preparing for the next wave of constraints
- Capabilities of ramping 100Mu+ customers on Series 2 today
- Series 3 will remove geographic & supply risk with manufacturing in multiple fabs and geographies

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Thank you!

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