



# Semiconductor Industry

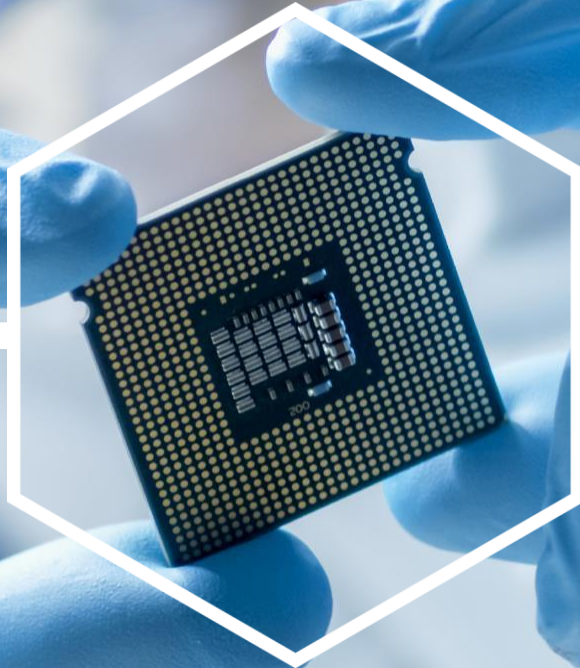
**Melinda Gomez**

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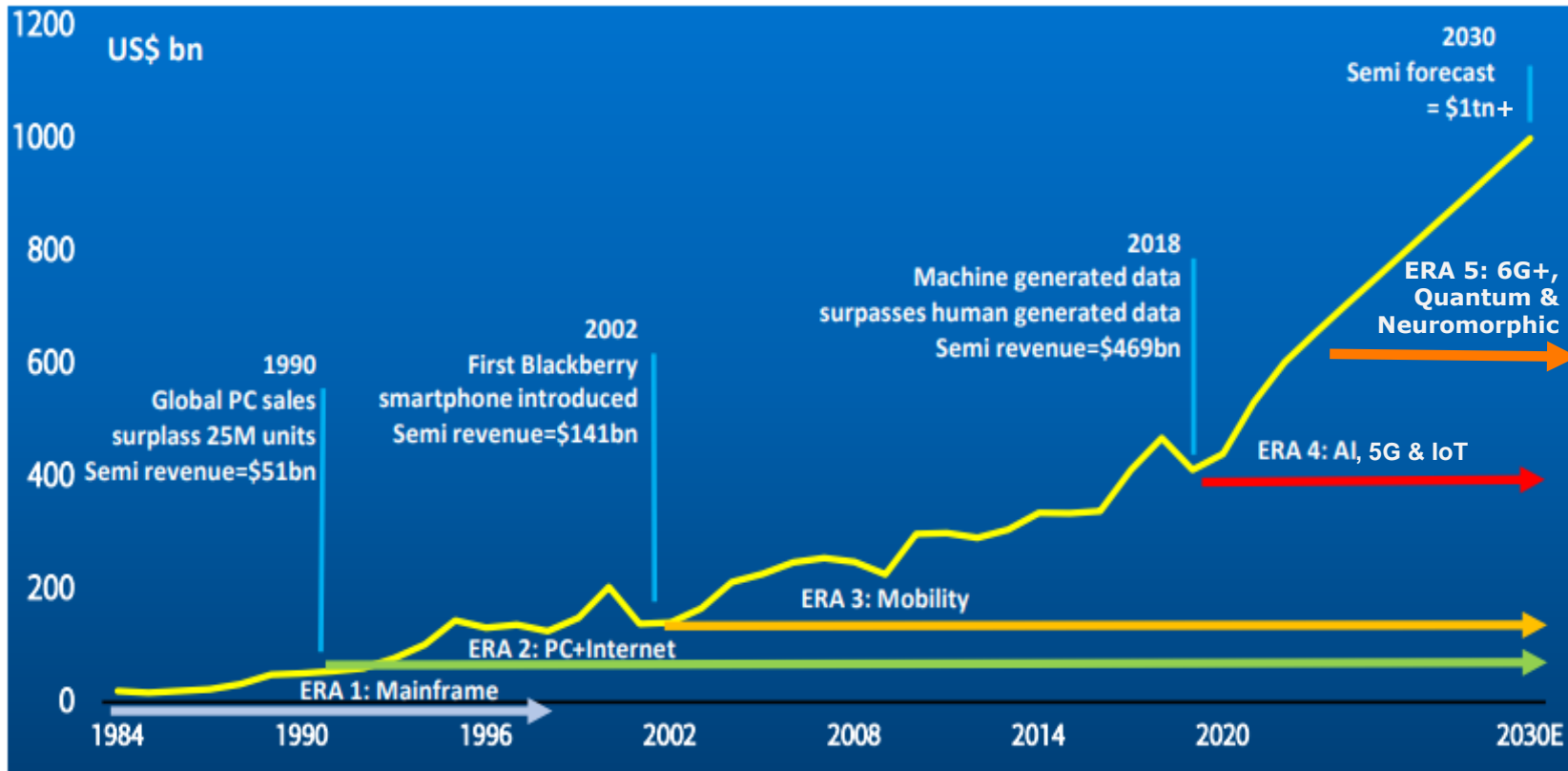


Without this...



None of these.

# New Disruptions are Driving Exponential Growth



Sources: Bank of America, SEMI

	2022	2030	Top Drivers
Non-Memory	\$324B	<b>\$579B</b>	<b>MPUs, High-end Logic</b>
Memory	\$145B	<b>\$298B</b>	<b>DRAM, NAND, Other Memory</b>
Other ICs	\$94B	<b>\$182B</b>	<b>Discretes, Opto, MEMS</b>
<b>Total Semis</b>	\$563B	<b>\$1,059B</b>	<b>NA</b>

Source: International Business Strategies, January 2023

**\$500B+ sales in ~50 years → >\$1T in the next ~10 years**

Note: 6-10% CAGR over the next 10 years

# ~\$2.8T electronics supply chain

(Expected to grow to \$4.5T+ by 2030)

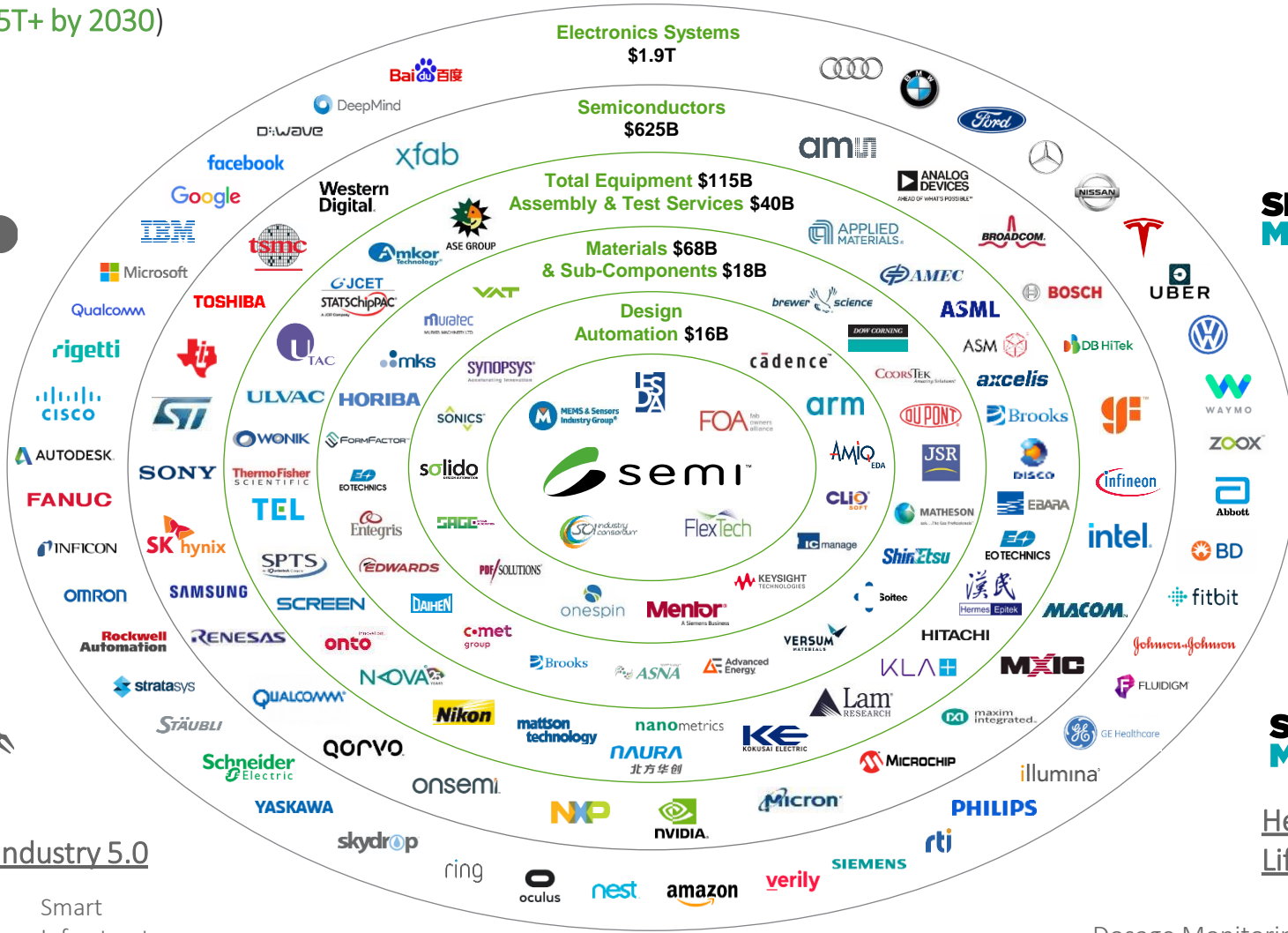
**SMART DATA-AI**

AI  
Quantum Computing  
Machine Learning  
5G to 6G  
Bitcoin Mining  
Blockchain  
Digital Economy

**SMART MANUFACTURING**

4th Industrial Revolution → Industry 5.0

Realtime Configuration  
3D Printing  
Robotics  
Adaptive Manufacturing  
Smart Infrastructure  
AR/VR



**SMART MOBILITY**

Near-zero fatalities  
Zero Emissions

Autonomous Vehicles  
Electric Vehicles  
Driver Assistance  
Fleet  
Smart City  
Trucking

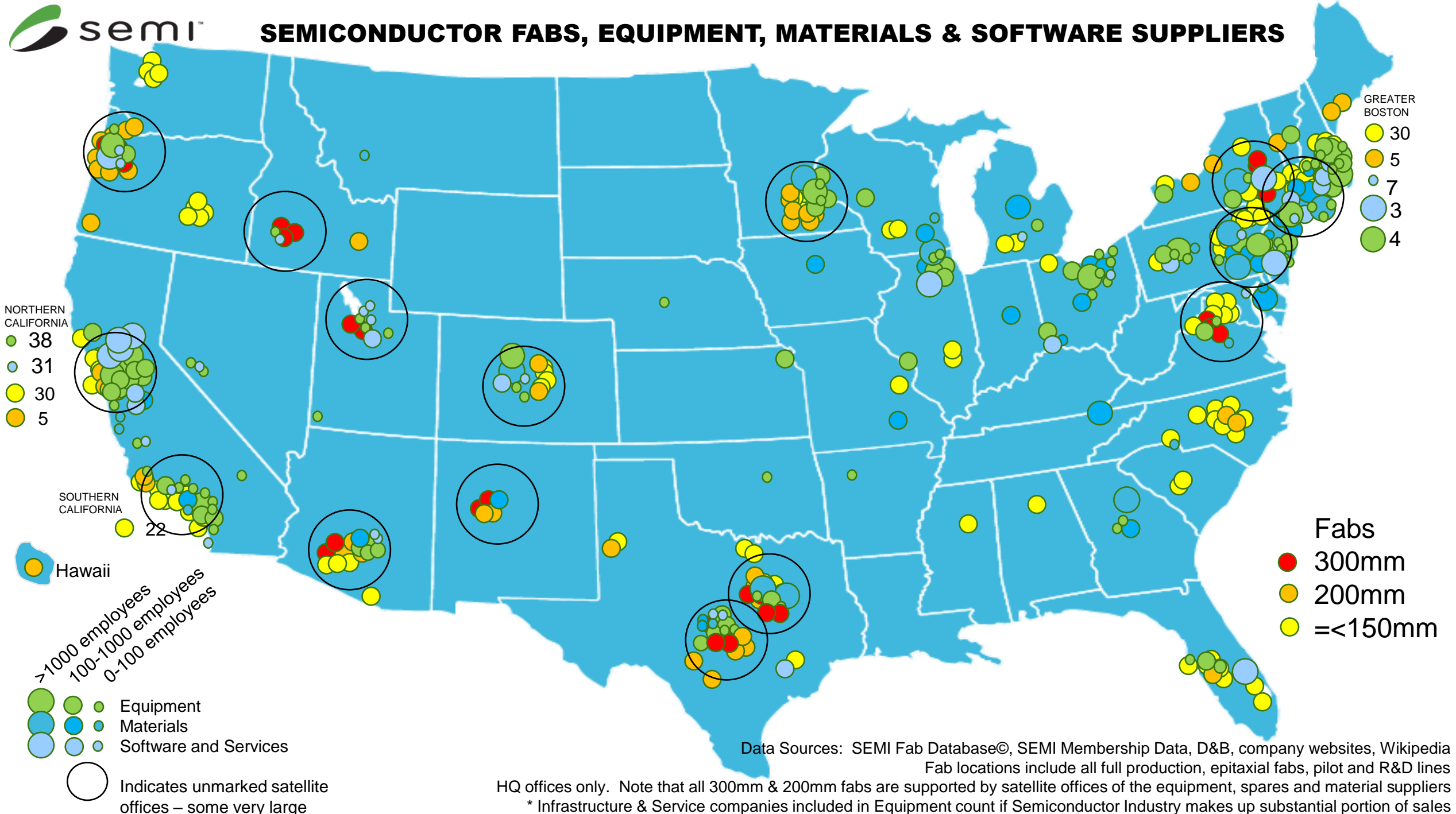
**SMART MEDTECH**

Health Span to Life Span  
Fitness Tracking  
Human Performance Monitoring

Biometrics  
Wearables

Dosage Monitoring  
CRISPR

# SEMICONDUCTOR FABS, EQUIPMENT, MATERIALS & SOFTWARE SUPPLIERS



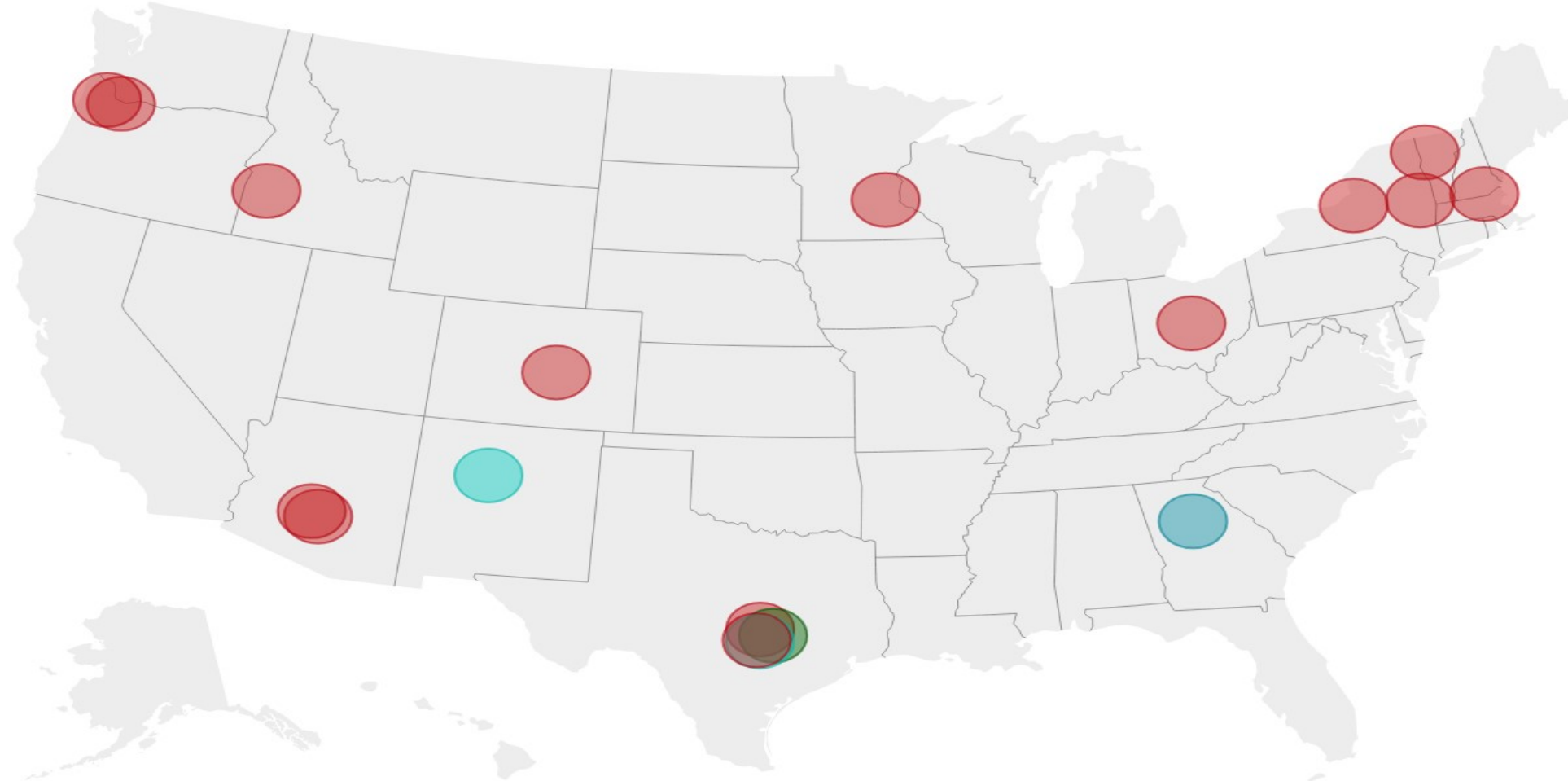
# CHIPS and Science Act

- CHIPS Program Office (CPO) has announced \$29.532 billion in grant awards and up to \$25.1 billion in loans to 9 companies across 18 projects in 12 states.
- These projects include total investment of at least \$348 billion over two decades, with the vast majority invested by 2030.
- The projects are also expected to create over **100,000 new jobs – over 33,000 manufacturing jobs and over 75,000 construction jobs.**

# CHIPS Incentives Announcements

Preliminary memoranda of terms (PMTs) announced since December 2023

Equipment Materials Packaging R&D Semiconductors



# Global Talent Shortage: nearing 1 mil by 2030

Worldwide, an estimated almost 1,000,000 positions will need to be filled by 2030

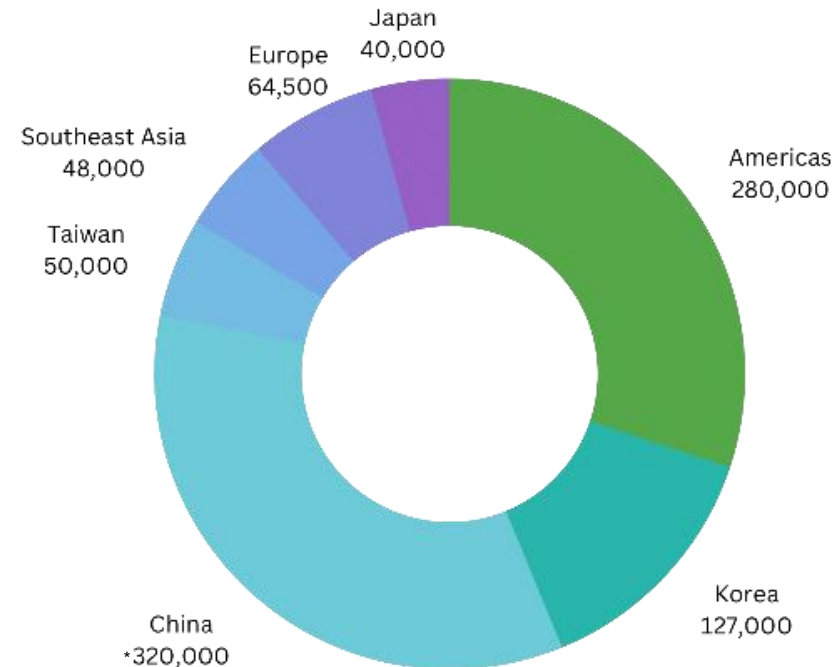
Significant talent shortages already exist in each of the regions, with public investment adding increased urgency and demand

Globally, production and engineering occupations are identified as high-need

Systemic challenges seen globally include falling enrollment in STEM education

Talent shortages in the Americas, Europe, and Japan led by re-shoring efforts and lack of educational investment

Other regions (China, SEA, Korea) talent shortages driven by strong worldwide semiconductor demand



\*Estimate through 2025

# Career Portal

- Tool for job seekers to learn, explore and find employment in the industry
- Military to Semi job matching tool
- Interest and Skills assessment tools
- Videos from industry leaders
- Member company spotlights
- Links to Dept of Labor Job board listings

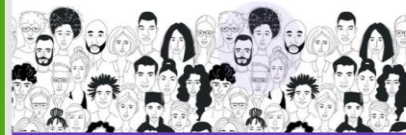


EXPLORE THE **SEMICONDUCTOR** CAREERS THAT MAKE A DIFFERENCE

## Be a part of an industry propelling the world forward

**NOT ALL BUNNY SUITS**


Jobs are varied and diverse. From production and engineering to marketing and human resources, you'll find opportunities.



**EXPLORE THE CAREER TYPES**

**JOB MATCH**


Click "Start My Match" to see what occupations fit you.



**Interest Survey**

**I WAS IN THE MILITARY**

A lot of veterans of the military choose to join the semiconductor industry. Many of your skills and interests match perfectly.



**MILITARY TO SEMI JOBS**

# SEMICON WEST Military Explorer Pass



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## Calling All Students, Military Members, and Jobseekers

### Heard of the CHIPS Act?

Wondering how chip fab expansion across the U.S. will impact your job prospects and the demand for your skills?

Learn about career opportunities in the microelectronics industry at **SEMICON West on July 9-11, 2024 in San Francisco, CA**. See the entire interconnected microelectronics supply chain in one place.

#### FREE for Students, U.S. Military Members, and Jobseekers—

- **NETWORK** with hundreds of employers
- **DISCOVER** job opportunities
- **LEARN** about innovations within the industry
- **NAVIGATE** your career

For more information on SEMICON West, visit the SEMICON West **WFD Pavilion**.

Students—please **provide a valid student identification** when arriving at Moscone Convention Center.



**A Complimentary Explorer Pass Awaits You**

FREE REGISTRATION FOR STUDENTS AND U.S. VETERANS

Have Questions? Chat with Yotta!



Questions?



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