

# TURNING THE TIDE FOR SEMICONDUCTOR MANUFACTURING IN THE U.S.

The U.S. has a strategic opportunity to reverse the decades-long trajectory of declining chip manufacturing in America, strengthen national security and make our supply chains more resilient, and make our country one of the most attractive places in the world to produce semiconductors, which are the brains of modern technology.

To seize this opportunity the federal government must invest boldly in chip manufacturing incentives to make the U.S. more cost-competitive with countries that have offered robust government incentives for years. Doing so would expand chip manufacturing in the U.S., strengthen our country's economy and national security, and fortify America's semiconductor supply chains.

*"The leadership of the United States in semiconductor technology and innovation is critical to the economic growth and national security of the United States"*

NDAAs

H.R. 6395 § 1824(b) and S. 4049 § 1098 (b)



## WHY SEMICONDUCTOR MANUFACTURING MATTERS FOR THE U.S. ECONOMY AND NATIONAL SECURITY

### Sustain U.S. leadership in semiconductor innovation for the long run

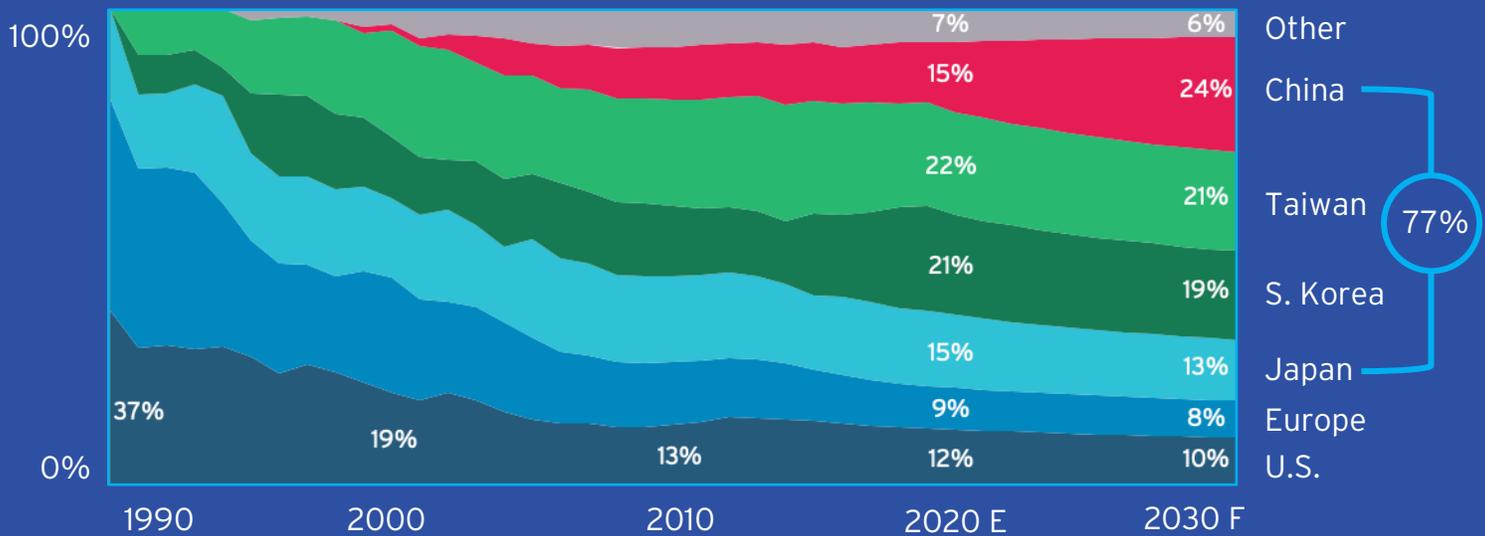
Strengthening U.S. chip manufacturing will help ensure America out-innovates the world in the strategic technologies of the future - AI, 5G, quantum computing, and more - that will determine global economic and military leadership for decades to come.

### Secure supply-chain resiliency

Producing more semiconductors domestically also would make America's semiconductor supply chains more resilient to future crises and ensure the U.S. can domestically produce the advanced chips needed for our military and critical infrastructure.

# THE U.S. SHARE OF GLOBAL CHIP MANUFACTURING HAS DECREASED DUE TO LACK OF GOVT. INCENTIVES

U.S. manufacturing share has declined, while Asia's share has risen



## This change is due to the incentives gap

The cost to build and operate a fab in the U.S. is **25-50 percent** more expensive than alternative locations abroad. Government incentives directly account for **40-70 percent** of the U.S. cost disadvantage.

## FEDERAL INCENTIVES ARE NEEDED TO TURN THE TIDE

Growth in global semiconductor demand is projected to require a 56 percent increase in manufacturing over the next 10 years. To attract the private investment for this growth to occur in the U.S., the cost differential attributable to government incentives abroad must be reduced. Without federal incentives, U.S. fab capacity will continue to decline; a robust program of incentives would stimulate private investment and enable the U.S. to capture a significant share of new fab construction.

### Potential impact of new govt. incentives on U.S. manufacturing position

	Status quo- no federal incentives	\$20B incentive program	\$50B incentive program
Share of new addressable capacity captured by the U.S. (excl.-China)	12%	24%	41%
Total number of new fabs built in the U.S.	9	14	19
Total industry capital spending generated	\$69B	\$174B	\$279B

### Incentives to promote semiconductor manufacturing in the U.S. are critical to U.S. national security and the economy

**National Security:** provide domestic capabilities in chip fabrication to satisfy America's national security needs and improve the resiliency of our supply chains by re-balancing the military's current reliance on offshore production

**Economic Security and Growth:** reverse the decline in U.S. semiconductor manufacturing and strengthen the U.S. industrial base

**Jobs:** create up to 70,000 high-paying jobs in the U.S., ranging from highly educated engineers to fab technicians and operators to material suppliers.