THE CHALLENGES FACING U.S. SEMICONDUCTOR LEADERSHIP

SEMICONDUCTORS ARE CRITICAL FOR U.S. NATIONAL SECURITY & THE ECONOMY

1. U.S. SHARE OF CHIP MANUFACTURING IS ERODING WHILE CHINA’S IS GROWING DUE TO GOVERNMENT INVESTMENT

- Share of Global Semiconductor Manufacturing 1990 - 2030E
- 37% to 24% for U.S.
- 10% to 24% for China

2. FEDERAL SEMICONDUCTOR RESEARCH FUNDING NOT KEEPING PACE WITH NEEDS

- % of GDP
- Private R&D Spending
- Federal R&D Investments

- 2018: .19% of GDP
- 1978: .03% of GDP

GDP = Gross Domestic Product
R&D = Research and Development
BENEFITS OF SEMICONDUCTOR MANUFACTURING INCENTIVES AND RESEARCH INVESTMENTS

1. INCENTIVES WILL STRENGTHEN U.S. RESILIENCY BY ATTRACTING MORE MANUFACTURING

- $20B program (over 10 years)
  - Share of "white space" captured by US (excl. China): 21% ↑
  - US ranking among 6 global competitors (excl. China): #2 ↑
  - # of new fabs to be built in the US: 14 ↑
  - Expected Private Sector Investment: $174 B

- $50B program (over 10 years)
  - Share of "white space" captured by US (excl. China): 41% ↑
  - US ranking among 6 global competitors (excl. China): #1 ↑
  - # of new fabs to be built in the US: 19 ↑
  - Expected Private Sector Investment: $279 B

2. INVESTMENTS IN SEMICONDUCTOR RESEARCH BENEFIT THE ECONOMY & U.S. TECH LEADERSHIP

- ADD $161 BILLION TO U.S. GDP
- CREATE HALF A MILLION MORE JOBS
- MAINTAIN U.S. TECHNOLOGY LEADERSHIP

3. CONGRESSIONAL ACTION IS NEEDED TO ENSURE CONTINUED U.S. SEMICONDUCTOR LEADERSHIP

- STRONG SUPPORT FOR CONGRESSIONAL ACTION
  - CHIPS for America Act (S. 3933, H.R. 7178)
  - American Foundries Act (S. 4130)

- LEGISLATION INCLUDES
  - Manufacturing incentives
    - Grants
    - Refundable investment tax credit
  - Research investments
    - Creation of a National Semiconductor Technology Center