China’s Semiconductor Industry Policies Update
NDIA – Trusted Microelectronics Workshop
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Preview

• Department of Commerce – International Trade Administration
• Global Semiconductor Trade Statistics
• China’ Semiconductor Industry Development Overview
• Global Reactions
• Addressing the China Challenge
What is the ITA?
• Three distinct but complementary business units
  – Global Markets
  – Enforcement & Compliance
  – Industry & Analysis

What is the ITA’s Mission?
• **Strengthen** the *competitiveness* of U.S. industry
• **Promote trade** and *investment*
• **Ensure fair trade** and compliance with trade laws and agreements

Share based on headquarters of seller, including fabless. Does not include foundry output.
Source: SIA-World Semiconductor Trade Statistics /IHS/PwC/IC Insights

2015 Sales in $ Billions, World $335.2 Billion

- Americas: $68.70 (21%)
- Taiwan (est.): $3.20 (3%)
- Korea (est.): $25.00 (8%)
- Japan: $31.10 (9%)
- Europe/ME: $34.30 (10%)
- China: $98.60 (29%)
- Other: $65.90 (20%)

Source: World Semiconductor Trade Statistics (February 2016)
China’s semiconductor market growth, 2000–2014

Source: PWC, CCID Consulting, Semiconductor Industry Association
China’s IC Industry Development Program

- Chinese Government has already invested $50 billion and will invest an additional $100 billion or more over the next ten years
  - additional and separate regional and municipal IC industry funds
  - support via direct investment, subsidies, and beneficial tax policies
  - potential to distort the global semiconductor supply chain and markets
- State-directed investment to acquire overseas companies (mainly U.S. and Taiwan) to help China “leap frog” into the cutting edge of the industry in all segments of IC supply chain
- R&D, intellectual property localization, and joint venture requirements support industry development goals
- Foundational to China’s broader “secure and controllable” information technology indigenization strategy
Global Reactions

- **U.S. industry** and **government** are most **aware/concerned** about China’s policies
- Industry **concerned** that China’s non-market driven investment will lead to **overcapacity**, artificially pushing down prices and impacting profits needed for next gen R&D
- Industry concern that China will use **local content requirements**, develop **indigenous standards**, and deploy **anti-monopoly law** in tandem with investment to shut out U.S. and foreign competition
- Potential for **technology**, **IP**, and **know-how outflows** and **talent poaching**
- Leverage **Chinese policies** and **investment** for commercial advantage while mitigating risks associated with doing business in China
- Closely monitor **Chinese M&A activity** in semiconductor sector
Addressing the China Challenge

Improve Market Access
Support U.S. Industry Leadership
Maintain & Strengthen Value Chain

Minimize Impact of China’s Policies
Strengthen National and Economic Security
Addressing the China Challenge

• Assess the impact and legality of China’s government-directed funding for the semiconductor industry, preferential R&D support and tax policies for domestic entities, as well as state-directed and funded merger and acquisition strategy

• Assess the impact of China’s policies on U.S. industry, the U.S. economy, and U.S. national security

• Consider how to respond to China’s polices
  – Bilateral
  – Multilateral
  – Other policy tools

• Ensure the U.S. semiconductor industry will continue to be a vibrant contributor to the U.S. economy and maintain U.S. leadership in the world’s most innovative industry
Thank You for Listening

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