

China Semiconductor Manufacturing Market Tracker

China's Semiconductor Industry in Serious Jeopardy: The Need to Reorganize & Restructure

By Len Jelinek, Principal Analyst

Forecast

Frequency, Time Period

- Annual
- Quarterly

Measures

- Revenue
- Capacity
- Wafer shipments

Regions, Markets

- Worldwide

Detail Level

- All

Applications/Products Covered

- All

Technologies Covered

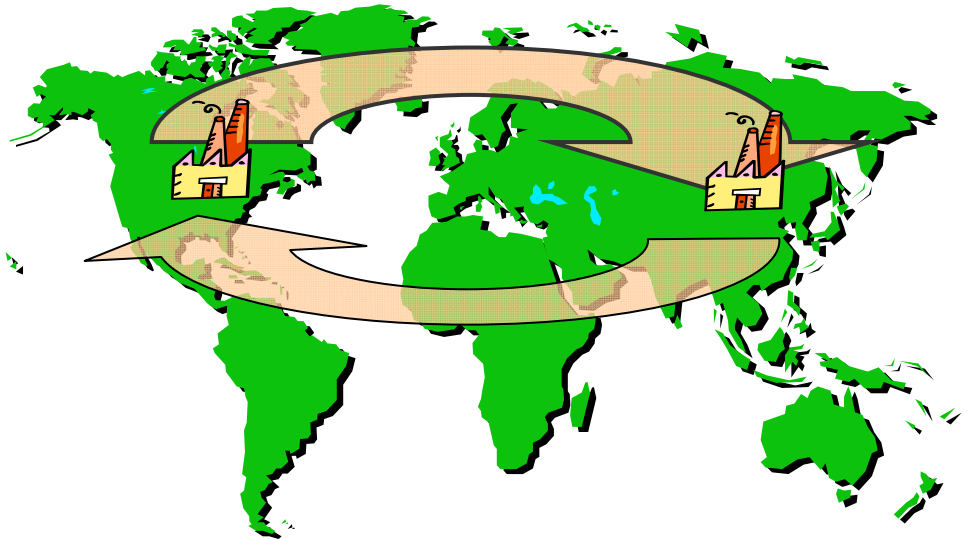
- CMOS logic

The global economic downturn has placed China's semiconductor industry in serious jeopardy. What was once a major pillar in the country's political agenda has crumbled to a point where there is open discussion concerning the long-term necessity of its existence.

China grew by becoming a low cost manufacturing center for the world, however, domestic technology has not been able to keep up with global demands leaving China as a fast follower with cost as its only distinctive competency.

As the global market resizes, the need for low cost semiconductors falls precipitously. China must downsize to meet the new demand for semiconductors. During 2009, companies must merge and resize manufacturing operations if they are going to survive. What companies are the most likely to merge? What will China's semiconductor industry look like in 2011?

China – The Shortest Manufacturing Supply Chain



Critical Questions Answered

- How did the Chinese suppliers do in 2008?
- What new partnerships are being formed?
- What fab projects have started? Who is managing the project and what are the expected outcomes?
- How many fabs are being built in China?
- What are the strategic goals of the top foundries and IDM's in China?
- How will the manufacturing landscape in China be affected by the current global recession?

Who Should Read This?

- Purchasing
 - Global Procurement Managers
- Managers
 - Contracts Managers
 - Desk Purchasers
- Supplier/Distributors
 - Purchasing Managers
- Other
 - Sales Directors
 - CEOs

Lead Analyst**Len Jelinek, Chief Analyst**

Since joining iSuppli, Len has focused his research on capacity management and technology transitions within the semiconductor industry. Len works with clients to access individual corporate strategies that may be impacted by additional wafer manufacturing capacity in China as well as other global locations.

Len has developed an extensive database of wafer manufacturing suppliers both leading IDM's and pure play foundries service providers. This database can be used by clients to define corporate manufacturing strategies such as expand internal capacity versus transitioning to an outsourcing model.

Len came to iSuppli after 28 years of experience in semiconductor manufacturing and business management in the semiconductor industry. He has gained invaluable experience with specific emphasis on program management, financial analysis, and manufacturing during his employ with ON Semiconductor and Motorola.

Len holds a BS in Chemistry from Arizona State University and an MBA from the University of Phoenix.

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 - Cension Semiconductor Manufacturing Corporation
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- Revenue by Feature Size of Major Chinese Manufacturers
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- Chinese Total Industry Factory Capacity and Utilization

Sample Database**Chinese Major Pure Play Foundries**

- Advanced Semiconductor Manufacturing Corporation (ASMC)
- Grace Semiconductor Manufacturing Corporation
- HeJian Technology
- Semiconductor Manufacturing International Corporation (SMIC)
 - Cension Semiconductor Manufacturing International
 - Wuhan Xinxin Semiconductor Manufacturing Corporation
- Shanghai Hua Hong NEC (HHNEC)
- Shougang-NEC Electronics Co. Ltd.
- Ningbo Sinomos Semiconductor Incorporated (NSSI)

Taiwan Semiconductor Manufacturing Corporation (TSMC) - China Fab only

Chinese Multi-national Joint Ventures

Hynix-Numonyx
NXP Jilin Semiconductor Company Ltd.

Chinese Integrated Device Manufacturers (IDM's)

- First Tier Companies (Data is collected quarterly)
 - China Resources Microelectronics Limited
CSMC Technologies Corporation (CSMC)
China Resources Semiconductor (Hong Kong) Ltd. (Acquired by CSMC in 2007)
China Resources Logic Limited (formally Wuxi Huajing Microelectronics Company Ltd.)
 - Jilin Sino-Microelectronics Company Ltd. (JSMC)
 - BCD Semiconductor Manufacturing Company Ltd.
- Second Tier Companies (Data is collected yearly)
 - Advanced CMOS Semiconductor Manufacturing Corporation (ACSMC or Nanker)
 - Hangzhou Silan Microelectronics Co. LTD (Silan)
 - Jinan Jingheng (group) Co. Ltd
Jinan Jifu Semiconductor Company Ltd.
Jinan Huaxi Semiconductor Ltd. Co.
 - Hangzhou Lion Microelectronics Company Ltd.
 - Shanghai Belling
 - Shenzhen SI
 - Yangzhou Jinglai Semiconductor (Group) Co. Ltd.
Yangzhou Gemini Electronics Co. Ltd
Yangzhou Geminis Microelectronics Co. Ltd

Emerging Chinese Manufacturers

ProMos Technologies
Intel Corporation
Elpida Memory

China Total Fab Forecast
Chinese Front End Wafer fabs and Capacity

Sample Database (continued)

Chinese Front end Wafer fabs 8-inch equivalents
Total Chinese Wafer Manufacturing Capacity and Utilization
Chinese Fab Capacity and Utilization 0.5 Micron process node
Chinese Fab Capacity and Utilization 0.35 Micron process node
Chinese Fab Capacity and Utilization 0.25 Micron process node
Chinese Fab Capacity and Utilization 0.18 Micron process node
Chinese Fab Capacity and Utilization 0.13 Micron process node
Chinese Fab Capacity and Utilization 90 nanometer and less process node
Chinese Capacity by Feature Size in 8-inch Equivalents
Chinese Fab Capacity as a Percentage of Total Global Capacity

Revenue Analysis of Major Chinese Semiconductor Manufacturers

Revenue of Major Chinese Manufacturing Companies
Revenue of the Major Chinese Foundries by Feature Size
Sales of Major Chinese Semiconductor Companies by Segment
Sales of Major Chinese Semiconductor Companies by Region
Sales By Technology for Chinese Semiconductor Companies

Chinese CAPEX Supporting Front End Wafer Expansions