

**JULY 26, 2016**

## China's Final Chance to Achieve Its IC Industry Ambitions Now Underway

*IC Insights' Mid-Year Update to The McClean Report 2016 discusses China's Three-Phase Strategy.*

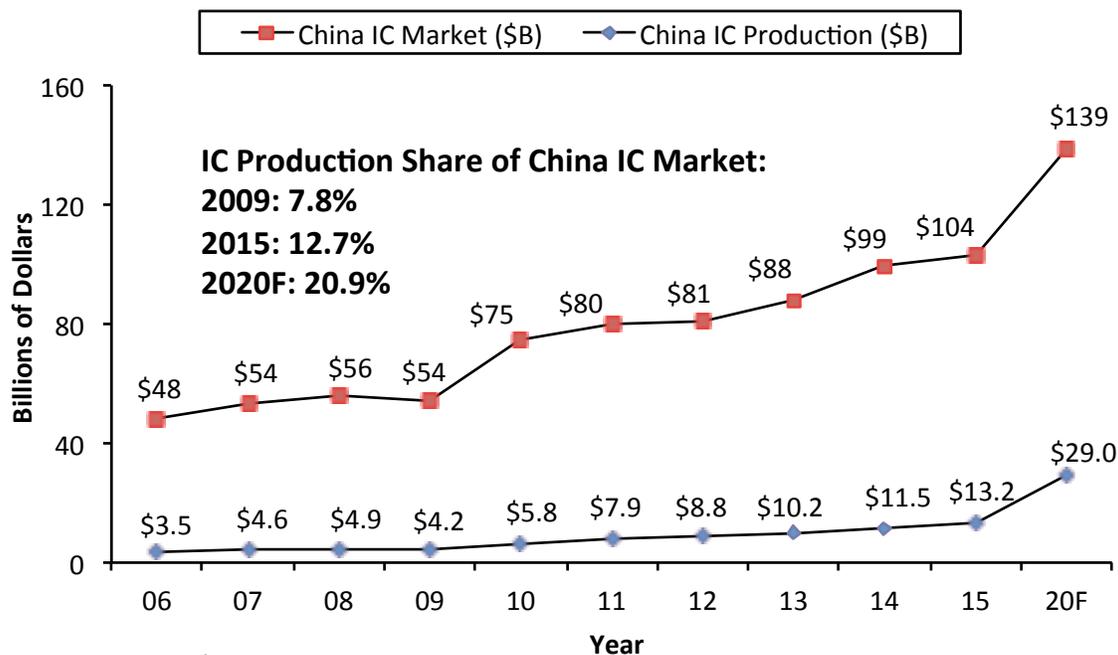
Over the past 20 years, China has become increasingly frustrated over the gap between its IC imports and indigenous IC production (Figure 1). It has oftentimes been quoted over the last couple of years that China's imports of semiconductors exceeds that of oil.

In its upcoming *Mid-Year Update to The McClean Report 2016* (released at the end of this week), IC Insights examines the "Three-Phase" history of China's attempt at strengthening its position in the IC industry that started in earnest in the late 1990s (Figure 2).

### MORE INFORMATION CONTACT

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### China IC Market vs. China IC Production Trends



Source: IC Insights

**Figure 1**

## The Three Phases of China's IC Industry Strategy

Phase	Approach	Timeframe Initiated	Successful?
1	Build a strong indigenous pure-play foundry industry	Late 1990s - Early 2000s	No
2	Build a strong presence in the fabless IC supplier space	Early 2000s - Mid 2000s	No
3	Build a strong China-based IC supplier/manufacturer base with startups, acquisitions, and mergers	Mid 2010s - Late 2010s	????

Source: IC Insights

**Figure 2**

In the late 1990s China began to contemplate ways to grow its indigenous IC industry and assisted in creating Hua Hong NEC, which was founded in 1997 as a joint venture between Shanghai Hua Hong and Japan-based NEC (it merged with Grace in 2011). Then, as part of the country's 10th Five Year Plan (2000-2005), establishing a strong China-based IC foundry industry became a priority. As a result, pure-play foundries SMIC and Grace (now Hua Hong Semiconductor) were both founded in 2000 and XMC was founded in 2006. This effort is categorized by IC Insights as Phase 1 of China's IC industry strategy.

In the early 2000s, to help boost the sales of its indigenous foundries, as well as ride the strong wave of fabless IC supplier growth, the Chinese government began attempts to foster a positive environment for the creation of Chinese fabless companies. It should be noted that eight of the current top 10 Chinese fabless IC suppliers were started between 2001 and 2004 and seven of them were in the top 50 worldwide ranking of fabless IC companies last year. This stage of China's IC industry strategy is labeled by IC Insights as Phase 2.

IC Insights believes that Phase 3 of China's attempt at creating a strong China-based IC industry began in 2014, just before the start of its 13th Five Year Plan which runs from 2015 through 2020. As discussed in detail in the *Mid-Year Update*, this Phase is being supported by a huge "war chest" of cash that is intended to be used to purchase IC companies and their associated intellectual property, provide additional funding to China's existing IC producers (e.g., SMIC, Grace, XMC, etc.), and to help establish new IC producers (e.g., Sino King Technology, Fujian Jin Hua, etc.).

In 1Q16, the U.S. Department of Commerce slapped an export ban on U.S. IC suppliers' shipments of ICs to China-based telecom giant ZTE in response to the company allegedly shipping telecommunications equipment to Iran while it was under trade sanctions by the U.S. This ban, if fully enacted, would have a devastating effect on ZTE's telecom equipment sales (including mobile phones). Thus far, the export ban

has been postponed until August 30, 2016 pending further investigation by the U.S. Department of Commerce.

The situation regarding ZTE and the abrupt announcement earlier this year of export controls on the company by the U.S. government sent shock waves throughout the Chinese government as well as China's electronic system manufacturers. ***At this point in time, such potentially drastic measures taken by the U.S. government against such a large Chinese electronics company has bolstered the Chinese government's resolve to make China more self-sufficient regarding IC component production, spurring increased emphasis on "Phase Three."***

Further trends and analysis relating to China and worldwide IC market forecasts through 2020 are covered in the 250-plus-page *Mid-Year Update* to the 2016 edition of *The McClean Report*.

### **Report Details: *The 2016 McClean Report***

*The McClean Report—A Complete Analysis and Forecast of the Integrated Circuit Industry* (released in January 2016) is IC Insights' flagship market research report, with more than 400 charts and graphs providing data on all aspects of IC industry. A subscription to *The McClean Report* includes **free** monthly updates from March through November (including a 250+ page *Mid-Year Update*), and **free** access to subscriber-only webinars throughout the year. An individual-user license to the 2016 edition of *The McClean Report* is priced at \$3,890 and includes an Internet access password. A multi-user worldwide corporate license is available for \$6,890.

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IC Insights, Inc., based in Scottsdale, Arizona USA, is dedicated to providing high-quality, cost-effective market research for the semiconductor industry. Founded in 1997, IC Insights offers coverage of global economic trends, the semiconductor market forecast, capital spending and fab capacity trends, product market details, and technology trends, as well as complete IC company profiles and evaluations of end-use applications driving demand for ICs.

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