

**DECEMBER 18, 2014**

## **S. Korean and Taiwanese Companies Control 56% of Global 300mm Fab Capacity**

*Vast majority of that wafer capacity is local to those two countries.*

***Information in this Research Bulletin comes from IC Insights' Global Wafer Capacity 2015-2019 report, which was released this month. The new report provides great detail regarding the current status and forecast of global wafer fab capacity. More information found at the end of this bulletin.***

South Korean and Taiwanese chip companies are well known for manufacturing prowess when it comes to efficiently fabricating huge amounts of IC wafers. Most of the IC industry's biggest fab facilities are located in these two countries. Because of their fab operation and wafer fabricating expertise, IC companies headquartered in South Korea and Taiwan lead the way in capital-intensive segments of the IC industry such as high-unit-volume products like DRAM and flash memory or foundry services making ICs for companies without fabs and a growing number of companies with fabs.

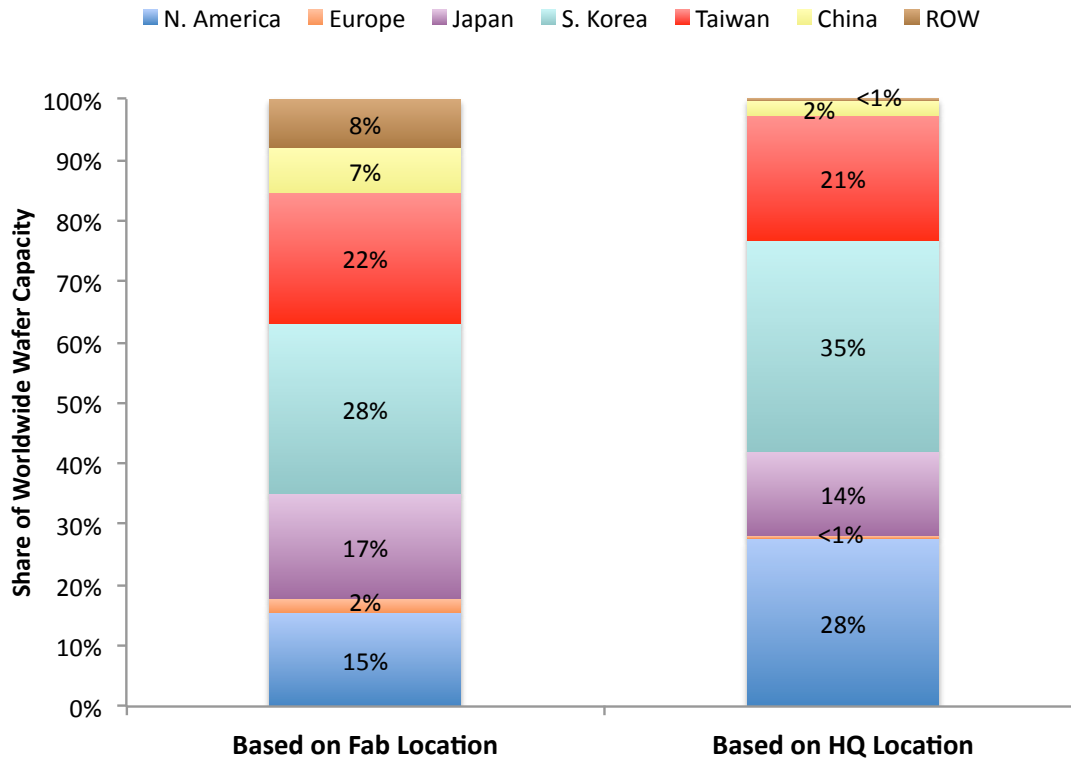
Figure 1 shows that South Korea-based companies Samsung and SK Hynix currently account for 35% of global 300mm wafer capacity. Samsung alone controls about 24% of all the world's 300mm capacity. When looking at 300mm wafer capacity according to fab location instead of headquarters location, 28% of worldwide capacity is in South Korea. Samsung and SK Hynix both own big 300mm fabs outside of South Korea. In fact, SK Hynix's largest fab is in China. Samsung also has a 300mm fab in China as well as two in the U.S.

Taiwanese companies currently manage 21% of the world's 300mm capacity, with about 85% of that capacity being committed to foundry services. The remaining 15% of Taiwan-controlled 300mm capacity is mostly used to produce memory devices. The vast majority of the 300mm wafer capacity in Taiwan is owned by Taiwanese companies, with the only exception being the 300mm capacity that U.S.-based Micron gets from its Inotera joint-venture with Nanya and its wholly owned fab in Taichung acquired in 2013. There is only one Taiwanese-controlled 300mm fab located outside of Taiwan and that is UMC's fab in Singapore.

### **MORE INFORMATION CONTACT**

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## Comparing 300mm Wafer Capacity Based on Fab Location and HQ Location (4.2M Wafers, Dec-2014)



Source: IC Insights

**Figure 1**

Figure 1 also shows that even though 15% of the world’s 300mm wafer capacity is located in the North America, 28% of global 300mm capacity is controlled by companies with North American headquarters. Two other noticeable share differences in the comparison are in China and the ROW region, which in this case is essentially just Singapore and Israel. The vast majority of 300mm wafer capacity in China and ROW is controlled by foreign companies.

### **Report Details: *Global Wafer Capacity 2015-2019***

Additional details and a forecast of the IC industry’s wafer fab capacity through 2019 are provided in IC Insights’ *Global Wafer Capacity 2015-2019—Detailed Analysis and Forecast of the IC Industry’s Wafer Fab Capacity* report. Released in December 2014, the *Global Wafer Capacity* report assesses the IC industry’s capacity by wafer size, minimum process geometry, technology type, geographic region, and by device type through 2019. The report also includes detailed profiles of the companies most likely to build 450mm wafer fabs and gives detailed specifications on existing wafer fab facilities. Coupled with IC Insights’ *Strategic Reviews* database of more than 200 company profiles, the two provide a tremendous resource

for researching, evaluating, and comparing wafer fab facilities and industry capacity. *Global Wafer Capacity 2015-2019* is priced at \$4,290 for an individual user password. A multi-user worldwide corporate license is available for \$6,990.

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