

RESEARCH BULLETIN

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Top 13 Foundries Account for 91% of Total Foundry Sales in 2013

TSMC, five other foundries with more than \$1.0 billion in revenue.

Information in this Research Bulletin comes from the 2014 edition of IC Insights' McClean Report. The 900-page report includes over 400 charts and figures! Details of the new report are provided at the end of this bulletin.

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IC Insights' ranking of the leading IC foundries—both pure-play and IDM—by foundry sales for 2013 is shown in Figure 1. In total, the top 13 foundries in the figure represented 91% of total foundry sales in 2013. For comparison, the leading 13 foundries accounted for 84% of total foundry marketshare in 2009, the year before Samsung dramatically ramped up its IC foundry production for Apple.

Major 2013 IC Foundries (Pure-Play and IDM)

2013 Rank	2012 Rank	Company	Foundry Type	Location	2011 Sales (\$M)	2012 Sales (\$M)	2012/2011 Change (%)	2013 Sales (\$M)	2013/2012 Change (%)
1	1	TSMC	Pure-Play	Taiwan	14,299	16,951	19%	19,850	17%
2	2	GlobalFoundries	Pure-Play	U.S.	3,195	4,013	26%	4,261	6%
3	3	UMC	Pure-Play	Taiwan	3,760	3,730	-1%	3,959	6%
4	4	Samsung	IDM	South Korea	2,192	3,439	57%	3,950	15%
5	5	SMIC*	Pure-Play	China	1,320	1,542	17%	1,973	28%
6	8	Powerchip**	Pure-Play	Taiwan	374	625	67%	1,175	88%
7	9	Vanguard	Pure-Play	Taiwan	520	582	12%	713	23%
8	6	Huahong Grace***	Pure-Play	China	619	677	9%	710	5%
9	10	Dongbu	Pure-Play	South Korea	500	540	8%	570	6%
10	7	TowerJazz	Pure-Play	Israel	611	639	5%	509	-20%
11	11	IBM	IDM	U.S.	420	432	3%	485	12%
12	12	MagnaChip	IDM	South Korea	350	400	14%	411	3%
13	13	WIN	Pure-Play	Taiwan	304	381	25%	354	-7%
—	—	Top 13 Total	—	—	28,464	33,951	19%	38,920	15%
—	—	Top 13 Share	—	—	89%	90%	—	91%	—
—	—	Other Foundry	—	—	3,446	3,669	6%	3,920	7%
—	—	Total Foundry	—	—	31,910	37,620	18%	42,840	14%

*Does not include Wuhan Xinxin (now XMC) for 2012 or 2013.

Source: IC Insights, company reports

**Powerchip transitioned from an IDM foundry to a pure-play foundry in 2013.

***Hua Hong NEC and Grace merged in 2012 (excludes Shanghai Huali).

Figure 1

TSMC, by far, remained the leader with almost \$20 billion in sales in 2013. In fact, TSMC's 2013 sales were over 4x that of second-ranked GlobalFoundries and 10x the sales of the fifth-ranked foundry SMIC. As shown, there are only three IDM foundries in the ranking—Samsung, IBM, and MagnaChip. Samsung was easily the largest IDM foundry in 2013 with over 8x the sales of IBM, the second-largest IDM foundry.

Powerchip has recently done very well in the foundry business after struggling to remain competitive in the DRAM business. Powerchip announced in January 2011 that it would stop selling DRAMs under its own brand name to focus on producing other devices such as LCD drivers, CMOS image sensors, flash memory, and power management devices both for self-branded products and on a foundry basis for others. The move came after Powerchip agreed to sell all of its DRAM-production output to Elpida, which had been buying about half of the company's commodity DRAMs under a previous foundry agreement.

In 2011, Powerchip's foundry sales were \$374 million, which represented 29% of the company's semiconductor sales. In 2012, Powerchip's foundry sales surged 67% to \$625 million, which represented 67% of the company's total semiconductor sales, and in 2013, Powerchip's disclosed that it had made the complete transition to a pure-play foundry with sales reaching \$1,175 million, 100% of the company's total IC sales. Slowly but surely the company has transformed itself into a major IC foundry.

In 2013, Samsung had a 15% increase in its foundry sales and was less than \$10 million behind the third-largest IC foundry in the world—UMC. Samsung has the ability (i.e., leading-edge capacity and a huge capital spending budget) and desire to become a major force in the IC foundry business. It is estimated that the company's dedicated IC foundry capacity reached 150K 300mm wafers per month in 4Q13. Using an average-revenue-per-wafer figure of \$3,000, it is estimated that Samsung's IC foundry business segment has the potential to produce annual sales of about \$5.4 billion.

With the barriers to entry (e.g., fab costs, access to leading edge technology, etc.) into the foundry business being so high and rising, IC Insights expects the "top 13" marketshare figure to continue to slowly rise in the future.

Report Details: *The 2014 McClean Report*

Additional details on the pure-play and IDM foundry markets is provided in the 2014 edition of IC Insights' flagship report, *The McClean Report—A Complete Analysis and Forecast of the Integrated Circuit Industry*. This highly regarded service features more than 900 pages and more than 400 tables and graphs that provide the user with a thorough analysis of IC industry trends throughout the year. 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 2014 edition of *The McClean Report* is priced at \$3,490 and includes an Internet access password. A multi-user worldwide corporate license is available for \$6,490.

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