RESEARCH BULLETIN

IC Insights

APRIL 26, 2016

Apple Drove Entire Foundry Sales Increase at TSMC in 2015

Without Apple, TSMC's 2015 foundry sales would have dropped by 2% as compared to a 6% increase.

IC Insights' April *Update* to the 2016 *McClean Report,* to be released later this week, includes IC Insights' final 2015 top 50 company rankings for total semiconductor and IC sales as well as rankings of the leading suppliers of DRAM, flash memory, MPUs, IC foundry services, etc.

MORE INFORMATION CONTACT

Bill McClean
President
Phone: +1-480-348-1133
Email: bill@icinsights.com

Figure 1 ranks the top 13 IC foundries (pure-play and IDM) by foundry sales in 2015.

Major 2015 Foundries (Pure-Play and IDM)

2015 Rank	2014 Rank	Company	Foundry Type	Location	2013 Sales ($M)	2014 Sales ($M)	2014/2013 Change (%)	2015 Sales ($M)	2015/2014 Change (%)
1	1	TSMC	Pure-Play	Taiwan	19,935	24,975	25%	26,439	6%
2	2	GlobalFoundries*	Pure-Play	U.S.	4,122	4,355	6%	5,019	15%
3	3	UMC	Pure-Play	Taiwan	3,959	4,331	9%	4,464	3%
4	4	Samsung	IDM	South Korea	3,450	2,590	-25%	2,670	3%
5	5	SMIC	Pure-Play	China	1,962	1,970	0%	2,236	14%
6	6	Powerchip	Pure-Play	Taiwan	1,182	1,291	9%	1,268	-2%
7	7	TowerJazz	Pure-Play	Israel	505	828	64%	961	16%
8	10	Fujitsu	IDM	Japan	440	645	47%	870	35%
9	8	Vanguard	Pure-Play	Taiwan	713	790	11%	736	-7%
10	9	Hua Hong Semi	Pure-Play	China	585	665	14%	650	-2%
11	11	Dongbu	Pure-Play	South Korea	452	541	20%	593	10%
12	12	SSMC	Pure-Play	Singapore	496	480	-3%	460	-4%
13	15	WIN	Pure-Play	Taiwan	354	327	-8%	379	16%
—	—	Top 13 Total	—	—	38,155	43,788	15%	46,745	7%
—	—	Top 13 Share	—	—	91%	92%	—	93%	—
—	—	Other Foundry	—	—	3,755	3,689	-2%	3,515	-5%
—	—	Total Foundry	—	—	41,910	47,477	13%	50,260	6%

*Includes $740 million in 2H15 sales after IBM purchase.

Source: IC Insights, company reports

Figure 1

TSMC, by far, was the leader with $26.4 billion in sales last year. In fact, TSMC's 2015 sales were over 5x that of second-ranked GlobalFoundries (even with the addition of IBM's chip business in the second half of 2015) and almost 12x the sales of the fifth-ranked China-based foundry SMIC. As shown, there are only two IDM foundries in the ranking—Samsung and Fujitsu—after IBM and Magnachip fell from the list in 2015. Despite losing a significant amount of Apple's business, Samsung easily remained the largest IDM foundry last year, with more than 3x the sales of Fujitsu, the second-largest IDM foundry.

Illustrating the dramatic effect of exchange rate fluctuations on the IC sales numbers, TSMC's 2015 growth rate was about half (6%) of what it was in its local currency (11%). Thus, while the company met its stated goal of 10% or better growth in 2015 in NT dollars (840.5 billion), its growth rate in U.S. dollars was only 6%.

Driving home just how important Apple's foundry business is, TSMC's foundry sales increased by $1,464 million last year while its sales to Apple jumped by $1,990 million, representing more than 100% of TSMC's total foundry sales increase in 2015. ***As a result, without Apple, TSMC's foundry sales would have declined by 2% last year, eight points less than the 6% increase it logged when including Apple.***

Second ranked GlobalFoundries took over IBM's IC business in early July of 2015. It should be noted that besides $515 million in IDM foundry sales IBM made in 2014, the company also had about $1.0 billion of internal transfer IC revenue that year. As a result, GlobalFoundries' quarterly sales in 4Q15 were about $1.4 billion, an annual run-rate of $5.6 billion, about 12% greater than the company's 2015 sales of $5.0 billion. ***Moreover, without the addition of IBM's sales in the second half of last year, GlobalFoundries' sales would have declined by 2% in 2015.***

Sales from the top 13 foundries' shown in Figure 1 were $46.7 billion and represented 93% of the $50.3 billion in total foundry sales in 2015. This share was two points higher than the 91% share the top 13 represented two years earlier in 2013. 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 this "top 13" marketshare figure to continue to slowly rise in the future.

Report Details: *The 2016 McClean Report*

Additional details on semiconductor sales rankings by company are included in the 2016 edition of IC Insights' flagship report, *The McClean Report—A Complete Analysis and Forecast of the Integrated Circuit Industry*. A subscription to *The McClean Report* includes **free** monthly updates from March through November (including a 250+ page *Mid-Year Report*), 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.

To review additional information about IC Insights' new and existing market research products and services please visit our website: www.icinsights.com

About IC Insights
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.

Web Site: www.icinsights.com • **Phone:** +1-480-348-1133 • **E-mail:** info@icinsights.com