

Gartner Says Worldwide Semiconductor Capital Equipment Market Growth is Accelerating

Total Market Growth of 45 Per Cent is Predicted for 2010

STAMFORD, Conn. December 11, 2009 — Worldwide semiconductor equipment spending is forecast to end the year with a 42.6 per cent decline in 2009, but the market is now in the midst of a very strong growth spurt, according to Gartner, Inc. Gartner expects semiconductor equipment spending to increase 45.3 per cent in 2010.

“Foundry spending and select spending by a few memory companies drove the growth in the semiconductor equipment segment in the second half of 2009,” said Dean Freeman, research vice president at Gartner. “2010 growth will be driven by technology upgrades for the first half of the year. The quarterly growth may see a slight lull in the third quarter of 2010 before capacity additions, starting in late 2010, ramp up the equipment industry into 2011.”

While all segments of the semiconductor equipment market experienced significant declines in 2009 (see Table 1), all segments of the market will experience strong double-digit growth in 2010.

Table 1
Worldwide Semiconductor Capital Equipment Spending Forecast 2009 – 2014 (Millions of Dollars)

	2009	2010	2011	2012	2013	2014
Semiconductor Capital Spending	25,272.4	36,728.4	47,826.3	56,959.0	48,734.6	53,636.9
Growth (%)	-42.6	45.3	30.2	19.1	-14.4	10.1
Capital Equipment	16,297.2	25,471.8	32,660.4	38,584.4	31,469.5	35,604.7
Growth (%)	-46.8	56.3	28.2	18.1	-18.4	13.1
Wafer Fab Equipment	12,572.2	19,685.9	25,451.0	30,466.7	25,297.3	28,475.1
Growth (%)	-48.1	56.6	29.3	19.7	-17.0	12.6
Packaging and Assembly Equipment	2,378.1	3,634.7	4,626.1	5,270.9	3,996.7	4,686.4
Growth (%)	-40.5	52.8	27.3	13.9	-24.2	17.3
Automated Test Equipment	1,346.9	2,151.2	2,583.3	2,846.8	2,175.5	2,443.1
Growth (%)	-44.9	59.7	20.1	10.2	-23.6	12.3
Other Spending	8,975.3	11,256.6	15,165.9	18,374.6	17,265.1	18,032.3
Growth (%)	-32.9	25.4	34.7	21.2	-6.0	4.4

Source: Gartner (December 2009)

Worldwide wafer fab equipment (WFE) spending is expected to decrease 48.1 per cent in 2009. For 2010, the most likely scenario is for WFE spending to increase 56.6 per cent, representing a significant improvement from Gartner’s last forecast in September which had WFE spending in 2010 up by only 38 per cent. For 2010, the big question will be the availability of 193 immersion steppers. These are the critical items for all technology upgrades. In Foundry, TSMC will be installing its first immersion steppers. For memory, the leading edge for DRAM will move into the 4xnm range, also requiring immersion. At this time, Gartner analysts do not see that a shortage of immersion tools will develop, but the availability of long lead items could limit WFE growth in 2010 if the market heats up more.

Worldwide packaging and assembly equipment (PAE) spending is forecast to decrease 40.5 per cent in 2009, then increase 52.8 per cent in 2010. During Gartner’s forecast period, certain equipment segments will have substantially higher growth. For example, demand for equipment for advanced

processes, such as wafer-level packaging, 3-D processes, and through-silicon vias (TSV) manufacturing, is expected to grow faster than demand for the general market.

For 2009, worldwide automated test equipment (ATE) is on pace to decline 44.9 per cent. This will be followed by growth of 59.7 per cent in 2010. After falling substantially for several quarters through the first quarter of 2009, the ATE market recovered in the second quarter of 2009. Growth is expected to continue during the next several quarters as device demand improves. For 2010, Gartner's forecast projects substantial ATE industry growth of nearly 60 per cent, mainly from the transition to the mainstream adoption of DDR3 memory.

"The impact of fewer equipment customers will continue to play out in the semiconductor equipment market and further consolidation is to be expected, with mergers and acquisitions, as well as companies closing down that can no longer afford to run a business in the semiconductor industry," said Bob Johnson, research vice president at Gartner. "While initially this may seem to be a dark time for the equipment segment, as the industry consolidates a much stronger equipment sector will emerge to carry on in the future."

Additional information is available in the Gartner report " Forecast: Strong Growth Propels Semiconductor Capital Equipment Market into 2010." The report is available on Gartner's website at <http://www.gartner.com/resId=1246985>.

This research is produced by Gartner's Semiconductor Manufacturing program. This research program, which is part of the overall semiconductor research group, provides a comprehensive view of the entire semiconductor industry, from manufacturing to device and application market trends. More information on Gartner's semiconductor research can be found in the Gartner Semiconductor Focus Area at http://www.gartner.com/it/products/research/asset_129176_2395.jsp.

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