

A Crisis Hits High Technology: Chip Prices Are Rising

The devastating earthquake in high-tech Japan and its dramatic consequences are affecting the microchip industry. The prices of NAND semiconductors, to be used in smartphones among other products, saw a further increase in price Tuesday and now cost a good 20 percent more than before the crisis. The prices of DRAM memory chips climbed again, after rising earlier this week by 7 percent, as DRAMeXchange analysts reported.

A fifth of the world's chips come from Japan. About 40 percent of flash memory chips, which are used in mobile phones, tablets, and other computers, are produced in the Asian island nation. Since Friday, the assembly lines have been quiet in many factories. It will take months before roads, electric power, ports, and railways are fully functional again.

No Power, No Chips

Chip factories usually need an uninterrupted power supply, which is now threatened by the planned shutdowns in Japan's electricity grid. After a power outage, it may take several weeks for a factory to run properly again. During this period, the customers of Japanese suppliers must look around for alternatives. Even if the supply of components for chip production were to start up again in two weeks, there would be shortages and price increases until the third quarter, the research institute iSuppli reported.

The demand for NAND chips, especially, has grown significantly thanks to the boom in tablet computing stemming from Apple's successful iPad tablet. Toshiba is suffering the most from the effects of the quake. This company covers about a third of the world's need for NAND chips. The Japanese do not know when their factory in Iwate, which manufactures microprocessors and image sensors, will be able to re-open. Chipmaker Texas Instruments announced that its two factories in Japan would restore full capacity no sooner than July.

Problems at Sony Corp. and Canon, Inc.

The two export giants Sony Corp. and Canon, Inc. are struggling with the effects of Friday's magnitude 9.0 temblor and the resulting tsunami. Canon could not yet say whether work in their three affected manufacturing plants can be resumed this week. Sony said that its eight factories remain closed. They would not give a date for re-opening.

Other companies tried to remain calm. The Taiwanese company Wintek announced that the short-term consequences would be limited; their semi-conductor stockpile would be sufficient for two weeks of production. Wintek produces modules for the touch screen of the iPad, among other products. According to unnamed sources, the Taiwanese are looking around for other suppliers. The world's second largest chip maker, Hynix, held out the prospect of interruptions in its production schedule. The South Koreans, especially, are dependent on Shin-Etsu. The Japanese wafer producer has closed two manufacturing plants. Analysts estimate that Shin-Etsu supplies half of Hynix's wafers.

German companies have been less affected by the crisis. Infineon earns only six percent of its sales in Japan, most of it in the car industry. According to Infineon's spokesperson, their business depends on the local development of automobile production. This, too, has suffered because of the earthquake. Toyota, Honda, and Nissan Motor combined have closed dozens of factories.