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Chip shortage spreads, hurting sales at Apple and Samsung

Caterpillar says its business could be affected this year as well; Ford expects to produce 1.1 million fewer vehicles as a result.

By Jeanne Whalen
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The damage of the global semiconductor shortage continues to widen beyond automakers, with Apple, Samsung and Caterpillar warning this week of current or potential impacts.

Apple on Wednesday said a lack of chips is hampering production of iPads and Mac computers, which could cost the company about $3 billion to $4 billion in sales in the quarter ending in June.

Caterpillar, the tractor and heavy-machinery manufacturer, said Thursday that it has not yet felt any impact but could later this year. And Samsung said its sales of display panels to smartphone manufacturers have suffered because those manufacturers cannot get enough chips to make handsets.

The companies released the details in quarterly earnings reports that were otherwise strong, fueled by soaring demand as the global economy begins to emerge from the coronavirus pandemic. The scarcity of chips could cloud some of that recovery if it continues to hamper manufacturing in the coming months.

“It’s already an impediment. For people who want to purchase cars or computers, they are being told some of the products may not be available,” **Bernard Baumohl, an economist at the Economic Outlook Group**, said in an interview.

Trouble in the auto sector continued to deepen this week as well, with Ford saying it expects to produce 1.1 million fewer vehicles this year because it

cannot get enough chips. The company expects to lose about half of its second-quarter production, up from about 17 percent in the first quarter.

Semiconductor availability “will get worse before it gets better,” Ford said in a statement as it reported earnings. “Currently, the company believes that the issue will bottom out during the second quarter, with improvement through the remainder of the year.”

Also this week, Volkswagen said it will suspend production of Jettas and Tiguan SUVs in Mexico next month because of the chip shortage. General Motors, Ford and others also have been idling factories.

The roots of the shortage lie in the early weeks of the pandemic, when auto plants worldwide abruptly shut down amid stay-at-home orders. Auto sales plummeted, and car companies and their parts suppliers drastically cut their semiconductor purchases.

At the same time, demand for computers and other electronics soared as many consumers began working from home. That caused electronics manufacturers to step up their chip purchases. When auto demand bounced back, car companies found semiconductor factories too busy with other orders to fill their needs.

Making matters worse, semiconductor factories in Texas were forced offline during this year’s cold snap and have taken a while to restore production. Fires at two different Japanese factories also have lowered chip output.

Ford this week said the more recent fire, at a Renasas Electronics factory in March, particularly hurt auto-chip supply. Ford said it expects shipments from that plant to resume by the end of June.

Chip factories cost billions of dollars to build or expand, so there is no simple way to quickly boost production. That has left all chip buyers competing fiercely for scarce supplies.

Apple chief executive Tim Cook said Wednesday that shortages of “legacy nodes,” or older-technology chips, are causing the most problems for his company. The most modern smartphones and tablets use the fastest, most high-tech chips but also require more mature chips to perform certain functions, such as operating screen displays.

Older-tech chips are also in high demand by automakers and others, making it hard to assess when the supply constraints will ease, Cook said in an earnings call.

“There are many different people, not only in the same industry, but across other industries that are using legacy nodes,” Cook said, according to a transcript.

Semiconductor manufacturers have focused their investments on factories that can build the latest and most profitable chip technology, leaving less capacity to produce chips of older designs.

Samsung is a conglomerate that manufactures a variety of goods — including semiconductors and other industrial components, smartphones and appliances — so the semiconductor gyrations are affecting it in several ways.

The company this week reported strong demand for its electronics and chips. But a Samsung plant was among the chip factories in Texas knocked offline this year, hurting the company’s profits. And Samsung expects its sales of mobile display panels to continue to be weak.

The White House has been leaning on big chip producers and their host nations, including Taiwan, to increase output. It is also calling for $50 billion in federal funding to incentivize more domestic chip production, though those funds, if approved by Congress, would be too far off to alleviate the current shortages.

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