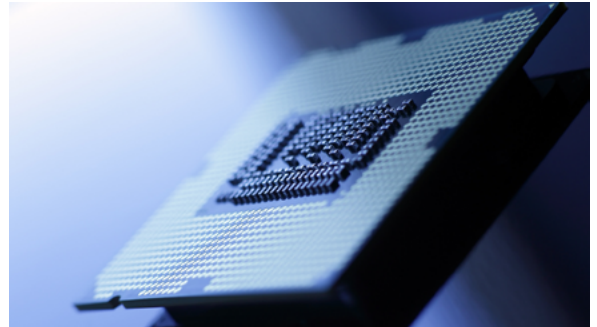


The Semiconductor Tipping Point: When Will the Shortage Become a Surplus?



As we head into 2023, finding chips to put into laptops and smartphones is getting easier.

For the last two years, companies in most industries scrambled to get the semiconductor chips they needed to make their products. As lead times extended further and further out, the global chip shortage became a serious disruptor for industries like automotive manufacturing, where the average modern car has between 1,400 and 1,500 semiconductor chips (some have as many as 3,000 chips).

“No one has been able to escape the global shortage of semiconductor chips. The automobile industry will lose \$210 billion in revenue because of the lack of computer chips,” *Forbes* reported just over a year ago. “Game console makers have missed targets. Even the seemingly unstoppable smartphone manufacturers are facing slowdowns.”

Fast-forward to today and the reports about those disruptions, lead times and slowdowns have waned. Chip manufacturers stepped up production, new plants were announced (albeit on fairly lengthy timelines) and governments enacted new initiatives to help expand and/or speed up the chip production pipeline.

A Glut of Chips

Next year, companies that rely on chips to make their products may have more semiconductors than they could have dreamed of having just one year ago. The economic slowdown, high rates of inflation, the potential for a national recession and an overall drop in consumer demand are some of the key factors that may contribute to the glut of chips.

“The shortage of semiconductor chips required for advanced technologies will soon turn into a surplus, reversing the semiconductor shortage that has afflicted the automotive industry for the majority of the previous two years,” Tim Tyler writes in “[Semiconductor Shortage Could Soon Become A Glut Of Chips.](#)”

Tyler goes on to say that consumers have been quick to cut back on their spending as a global recession looms and a cost-of-living issue begins to bite. “Smart consumers are opting to keep their current equipment for extended periods of time rather than upgrading to the newest smartphone or getting a new laptop on credit,” he writes. There’s also been more cancellations from manufacturers of complex products like tablets and smartphones.

“It may still take some time for this freer-flowing supply to trickle down to car-buying consumers, as manufacturers work to clear the backlog that’s accumulated over the last couple of years,” VNC Automotive’s Tom Blackie told CleanTechnica. “But in a time of economic gloom, it’s good to find a cloud with a silver lining.”

Lower Demand = Lower Revenues

Global semiconductor revenue is projected to decline 3.6% in 2023, according to the latest [forecast from Gartner, Inc.](#), which expects revenue to drop to \$596 billion for the sector over the next 12 months. In 2022, the global semiconductor market grew by 4% and posted \$618 billion in revenues.

“The short-term outlook for semiconductor revenue has worsened,” said Gartner’s Richard Gordon. “Rapid deterioration in the global economy and weakening consumer demand will negatively impact the semiconductor market in 2023.”

Gartner says several factors are at play here. Weakness in the consumer-driven markets is being driven largely by the decline in disposable income caused by rising inflation and interest rates, it explains, but also by the reprioritization of consumer discretionary spending to other areas such as travel, leisure and entertainment. The latter is having a negative knock-on effect on technology purchases.

“While the deterioration in the macroeconomic environment will weaken consumer demand, we expect relatively better semiconductor consumption from business investments,” Gordon concludes. “Consequently, markets such as industrial, telecom infrastructure and data centers will be less impacted by consumer sentiment and spending in the short term.”