

# FPGA and Power MOSFET Shortage Will Continue in the Second Half of the Year

HONG KONG, CHINA, March 7, 2023 /EINPresswire.com/ -- According to [JAK Electronics](#), Component analyst Supplyframe believes many semiconductor and electronic component prices are stabilizing and will improve by the second half of 2023. But it still sees shortages in [FPGAs](#), power MOSFETs, and automotive resistors.

According to the latest Commodity IQ report, the supply and demand balance is normalizing, with pricing and availability challenges decreasing.

Global demand and procurement activity for electronic components is expected to fall 2 percent quarter-on-quarter in the first quarter, while engineering is expected to fall 20 percent - further evidence of demand erosion.

Excluding memory devices, 85% of the semiconductor pricing dimension will remain stable, with the rest becoming totally buyer friendly in the second half of 2023.

However, delivery times will continue to extend for certain semiconductors, including passive components such as FPGAs and automotive resistors, into the second half of the year.

"Delivery times for electronic components are still longer than historical norms. As demand has deteriorated in some markets, component delivery times have improved faster than prices," said Steve Flagg, CEO and Founder of Supplyframe.

"In these times of macroeconomic uncertainty, it is becoming increasingly difficult to forecast demand amid mixed end-market signals, further intensification of the Russian-Ukrainian war, and any other disruptions may arise."

"The resilience of the world economy to the threat of inflation and recession, and the reopening of China's economy in the second half of the year, suggest there is the reason for optimism. Commodity IQ shows that component availability has greatly improved, and many commodity and sub-commodity prices have stabilized."

For the first quarter of 2023, Commodity IQ forecasts indicate that delivery times and commodity volumes in the global market will decline by 8%, partially allocated to active and passive components.

According to the Commodity IQ Price Index for the first quarter, the number of component pricing dimensions will be reduced by 14 percent.

While there is an overstock of components such as memory and small ceramic capacitors, auto-grade microcontrollers and FPGAs remain well below the Commodity IQ inventory index baseline. Analog integrated circuits ([ICS](#)), microcontrollers, and discrete IC (especially power MOSFETs) will remain constrained and costly in the first quarter and beyond.

Global delivery times for all electronic components will be significantly shorter in the third quarter of 2023 compared to the third quarter of 2022. Commodity IQ expects to reduce delivery times by nearly 60 percent in the third quarter, with no increase expected in the third quarter compared to 73 percent in the same quarter in 2022. But Commodity IQ expects longer delivery times for semiconductors, including FPGAs and passive component-specific resistors such as automobiles, to continue into the second half of the year.

Although destocking will likely be completed by the end of the first half, IC orders, wafer starts and capacity utilization will start to rise and memory prices will bottom in the second half of this year. The firm forecasts DRAM prices will begin to recover in the third quarter and NAND prices will begin to recover in the fourth quarter or early 2024.

#### Eurozone demand rebounded in January

Following seasonal trends, global demand activity rose 7 percent month-on-month in January, rising in all regions except Asia, which fell 14 percent from December to January due to general economic weakness and the Chinese lunar holiday.

In the Europe/Middle East/Africa region, growth was driven by significant purchasing activity in Germany (44%), France (37%), Italy (32%), Israel (15%), and the United Kingdom (55%). As of January, transistors (including restricted IGBTs) in these countries were up a whopping 68% month-on-month, microcontrollers, and microprocessors up 34%, capacitors up 30%, and diodes up nearly 40%.

Commodity IQ global electronic component demand forecast is weaker in the first half of 2023 compared to 2022, with only 1% growth expected in the first quarter compared to the fourth quarter of 2022. Supplyframe expects overall second-half demand to begin to rebound, given optimism in automotive and industrial component orders and a resilient macroeconomic outlook.

"Commodity IQ data indicate that some aspects of the electronic components space are moving towards greater stability, but the fact remains that disruption is the new normal worldwide," Flagg said.

"Sanctions between the US and China and sanctions between other countries and the trend towards friend-sourcing, nearshore outsourcing, reshoring, and reshoring is a game changer. A shift to more mature semiconductor process nodes could benefit Chinese companies and industries that have no limits on the Chinese content of their finished products. Supply chain complexity is increasing as product and demand cycles shorten."

"Buy-side and sell-side organizations in the electronic components supply chain can leverage the power of intelligence to better position themselves in this complex, uncertain world," said Richard Barnett, chief Marketing officer and SaaS sales leader at Supplyframe. "They can use this intelligence to enhance the resilience of their products, better understand and take action to meet current and future needs. As Commodity IQ demonstrates, there are many opportunities to enhance supplier negotiation, more timely sourcing activities, and 360-degree supply chain visibility."

JAK Electronics  
JAK Electronics  
+852 9140 9162  
it@jakelectronics.com

---

This press release can be viewed online at: <https://www.einpresswire.com/article/620595981>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2023 Newsmatics Inc. All Right Reserved.