ECIA Releases February Update on Component Shortages

Atlanta – As demand for electronics and electronics components grows in 2021 it is anticipated that supply chain pressure will build. Recent ECIA research and analysis has identified extending lead times for a broad range of electronic components. However, specific component sectors will see greater challenges as the ability of suppliers to increase production is limited by capacity constraints.

ECIA has compiled recent analysis of the data about lengthening lead times in the component supply chain, with a summary available to the industry, and the full report for members. Highlights from one source include:

- A new explanation for what is causing widespread problems across many markets is the insufficient investment in 200 mm wafers.
- While significant amounts of production have shifted to 300 mm wafers and smaller process geometries, major foundries such as TSMC and Samsung still run 200mm fab lines. Several second-tier foundries also run 200 mm wafers such as: GlobalFoundries, SMIC, UMC, TowerJazz, and SkyWater.
- The economics of chip design and production drive attractive, lower-cost solutions produced at larger process geometries on 200 mm wafers. Many IoT and 5G chips are built on 200mm, as are many analog processors, power management devices, MEMS devices, image sensors, RF components, etc.
- As demand for these components has grown, 200mm capacity has become constrained.
- Large foundries like TSMC have been slow to add new 200mm capacity. Utilization was already high at many 200 mm fabs before the pandemic hit.
- As demand for automotive electronics has rebounded, the shortage of chips produced on 200mm wafers has become much more acute. The typical car requires anywhere from 50 to 150 semiconductors.
- Automaker difficulties in securing adequate supplies of chips are heightened due to the lower priority they receive from semiconductor manufacturers. Higher volume / higher profit margin orders are positioned at the head of the line in tight supply situations.

The complete report includes insights from Len Jelinek, widely recognized as one of the world’s foremost authorities on semiconductor manufacturing issues.

The Summary of this report can be found here.

About ECIA

The Electronic Components Industry Association (ECIA) is made up of the leading electronic component manufacturers, their manufacturer representatives and authorized distributors. ECIA members share a common goal of promoting and improving the business environment for the authorized sale of electronic components. Comprised of a broad array of leaders and professionals representing all phases of the electronics components supply chain, ECIA is where business optimization, product authentication and industry advocacy come together. ECIA members develop industry guidelines and technical standards, as well as generate critical business intelligence. For more information, visit www.ecianow.org or call 678-393-9990.