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### *Global Semiconductor Shortage Impacts Automation Components*

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Supply chain issues were clearly evident throughout the COVID-19 pandemic, and with the acceleration in the U.S. economy, there will continue to be challenges. Semiconductor “chips” are currently experiencing a global shortage with lead times pushing out as far as one year. These shortages have led to, for example, production cutbacks and factory downtime at the major automakers which has been in the news recently. In addition to the auto industry, the shortage of semiconductors is pushing out lead times for equipment in the industrial automation space.

There are many factors that have led to this shortage, including several supply-chain disruptions at factories and global transportation, geo-political impacts, and uneven and unprecedented demand caused by the impact of the pandemic, especially for business and consumer electronics to enable remote work. Even before the pandemic, there was (and continues to be) a shortage of other interconnect, electromechanical, and passive electronic components, such as resistors, inductors, and capacitors, with similarly large lead times for many of the same reasons.

Cybertrol already has been warned of specific shortages for specific safety I/O modules with lead times up to 5 months. While Cybertrol is not aware of additional shortages, it is reasonable to expect more given current electronic supply chain issues. Cybertrol will continue to monitor and to advise customers on impacts to upcoming projects. The best defense in these situations is to schedule future projects as early as possible if they might be impacted to account for increased lead times. Cybertrol can help you to understand potential supply chain risk for your specific projects.

For more information, please contact Cybertrol Engineering <https://www.cybertrol.com>.

#### Additional References:

1. <https://hbr.org/2021/02/why-were-in-the-midst-of-a-global-semiconductor-shortage>
2. <https://www.eetimes.com/engineering-a-solution-to-the-ipe-shortage/>
3. [Electronic Component Shortages Update -- 2021 and Beyond \(matric.com\)](#)

