

M2S TECH

M2S Tech Q3 2023 Product Highlights

We hope you all had a great summer! M2S Tech is happy to share some of the latest technologies from our supplier partners that may be beneficial in your current design efforts. Feel free to reach out to our team if you are interested in discussing any products in more depth or would like to receive samples.

M2S Tech Contact Page: <https://m2stech.com/contact-us>

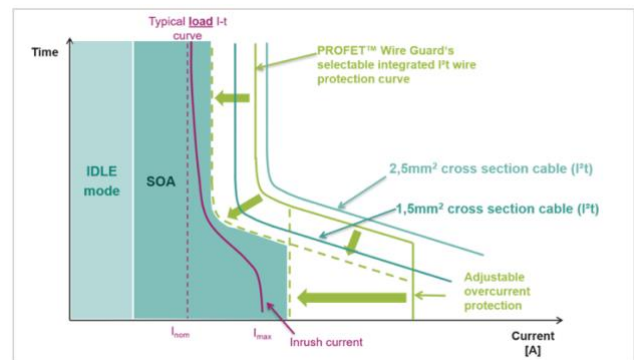
Murata Type 2EA Wifi 6E + Bluetooth 5.3 Module



Murata, an industry leading electronics manufacturer, has further expanded its range of state-of-the-art wireless communication modules. The new LBEE5XV2EA (Type 2EA) module utilises Infineon's CYW55573 system-on-chip (SoC), providing Bluetooth® 5.3 and triband Wi-Fi™ operation – which includes both 2.4GHz and 5GHz bands as well as 6GHz band, Wi-Fi 6E, support.

With many areas of the RF spectrum becoming increasingly overcrowded, Wi-Fi communication speeds can often suffer. The latest Wi-Fi 6E standard allows the same 9.6Gbps data rate as 5GHz Wi-Fi 6, but overall performance is more consistent thanks to less congestion and interference at 6GHz frequencies. Furthermore, Wi-Fi 6E provides additional (and wider) broadcast radio channels, which helps to increase data throughput in high-traffic areas.

Infineon PROFET Wire Guard 12V – Smart High-Side Switch



The PROFET™ Wire Guard portfolio is characterized by standalone hardware-based wire protection via integrated I²t calculation functions, selectable according to the wire profile and system requirements.

This precise and reliable eFuse functionality by hardware enables fuse replacement in modern power distribution and therefore wire harness optimization in terms of cost and weight plus PCB space savings. With the automatic IDLE mode, the devices enable full load control and self-protection functionality in key-off mode, with minimized power consumption. In combination with the adjustable overcurrent threshold, the PROFET™ Wire Guard accurately provides fast failure isolation towards the system power supply for safety-relevant applications. The sequential diagnosis provides detailed status feedback via one single pin. With the capacitive load switching mode, a broad range of capacitive loads can be charged in the safe operating area.

Digi ConnectCore 93 SOM



The ConnectCore 93 SOM is designed for a wide range of medical, industrial, energy and transportation applications, including Internet of Things (IoT), automation, human-machine interface (HMI), equipment monitoring, audio/voice, edge computing and machine learning (e.g. anomaly detection).

Digi ConnectCore 93 features up to two power-efficient Arm® Cortex®-A55 cores, with a Cortex-M33 core, AI/ML Arm Ethos U65 NPU and NXP PMIC for maximum power efficiency. This SOM is designed for industrial reliability and 10+ year product lifecycles of embedded devices. The Digi SMTplus surface-mount form factor provides simplified design integration, efficiency and reliability.

Hirose GT50 Heat/Vibration Resistant Connector



Uniquely designed to be both small in size and high in reliability, this connector outperforms competitors who fall short in delivering this invaluable combination. With its ability to withstand heat, resist vibration, and offer a secure, robust connection, the GT50 Series is primed to meet the demanding requirements of various automotive applications and more.

- Contributes to space-saving and weight reduction
 - High heat resistance up to 125C
- Stabilizer reduces contact wear and enables high vibration resistance
- Robust design for cable routing that resists disconnecting
 - User-friendly lock design

Nichicon SLB Series Eval Board with Energy Harvesting Control



SLB Series Small Lithium-Titanate Rechargeable Battery

Nichicon has begun marketing evaluation boards to accelerate the design process for applications where the SLB series of small lithium-titanate rechargeable batteries are to be used.

In order to promote carbon neutrality, disposable non-rechargeable batteries are being replaced by rechargeable batteries paired with environmentally friendly power generation from sustainable sources. The evaluation board allows for easy evaluation of power circuits incorporating the SLB series and various environmental power generation devices.

Cactus 270P Series M.2 NVMe NAND Flash



Cactus Technologies Industrial MLC M.2 with PCIe Interface are reliable, cost-effective flash storage devices based on high-reliability Industrial 3D TLC NAND. They are intended for applications that demand very high performance in a rugged small, footprint form factor guaranteed to MIL-810 Standard shock and vibration.

The Cactus Industrial MLC M.2 have long life cycles with high performance. If the highest endurance or longer life cycle product is needed, Cactus also offers Industrial Grade products to meet these requirements.