

COMPUTER-ON-MODULE

Supporting two CAN FD interfaces

Advantech launched the Smarc 2.1 SOM-2532 module for real-time automation control, edge-connected, and safety-critical applications.



The Smarc 2.1 design SOM-2532 is already available (Source: Advantech)

The device integrates the 10-nm Intel Elkhart Lake processor with up to four cores and an up to 16 GiB LPDDR4 memory. The CPU (central processing unit) performance is increased by more than 40 % and graphic performance up to two times compared to its predecessor.

The design features two CAN FD ports, two GbE LAN interfaces with TSN (time sensitive networking) Phy (physical layer), and three independent displays with up to 4K resolution. Classical CAN devices can be supported as well. The TSN Phy improves the precision of data synchronization over the network and minimizes jitter reducing latency during the real-time device communication. Thus, the device is suited for usage in e.g. industrial control, transportation, and medical applications. Further peripherals include four PCIe, one Sata, two USB 3.2, four USB 2.0, and 14 GPIO (general purpose I/Os) ports.

Via the two LAN interfaces users can connect multiple systems or schedule firmware updates using the company's Wise-PaaS/Ota server. They can also conduct external communication via an independent LAN in diverse usage conditions. Additionally, the design provides functional safety features to reduce dangers caused by machine malfunction. The possible operating temperature ranges from -40 °C to +85 °C.

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