

# For industrial applications with on-chip CAN FD module

**Cypress has expanded its FM4 portfolio of MCUs for industrial control and home appliances. The ARM Cortex M4 chips are available in volume production by end of this year.**

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"Our FM4 MCU portfolio provides the performance needed for Industry 4.0 applications and the scalability to minimize development costs and accelerate time-to-market." (Photo: Cypress)

"DESIGNING SYSTEMS FOR INDUSTRY 4.0 and the Industrial Internet requires high-performance, ARM-based MCUs that enable support for international safety standards and deliver fast, secure and reliable communication interfaces," said Sudhir Gopalswamy from Cypress. The S6E2C-Series, in full production, delivers a 675 CoreMark score at 200 MHz, and the S6E2G-Series as well as the S6E2H-Series feature Core Mark scores of 608 at 180 MHz and 540 at 160 MHz respectively.

The portfolio delivers M2M communication with high-speed communication interfaces, including CAN FD and IEEE 1588 (Ethernet), and with hardware-based encryption accelerators. The MCUs are equipped with up to 2-MiB flash and 256-KiB SRAM memory, along with integrated hardware-based features and standards-compliant firmware libraries that simplify functional safety compliance. They provide 190 (S6E2C), 153 (S6E2G), or 100 (S6E2H) general-purpose input/output ports. The chips support a diverse set of on-chip peripherals for motor control, factory automation and home appliance applications. For safety applications, the flash and SRAM memory is protected by a hardware-based error-correcting code (ECC). Firmware libraries compliant to international functional safety standards are available, as well. They can be used to implement dedicated safety algorithms.