

Cypress 32-Bit FM4 Family of Flexible Microcontrollers S6E2CC Series

200MHz Performance, New Interfaces and Protocols, 2MB Memory, and 5V I/O Combine for Easy-to-use, Leading Edge MCUs

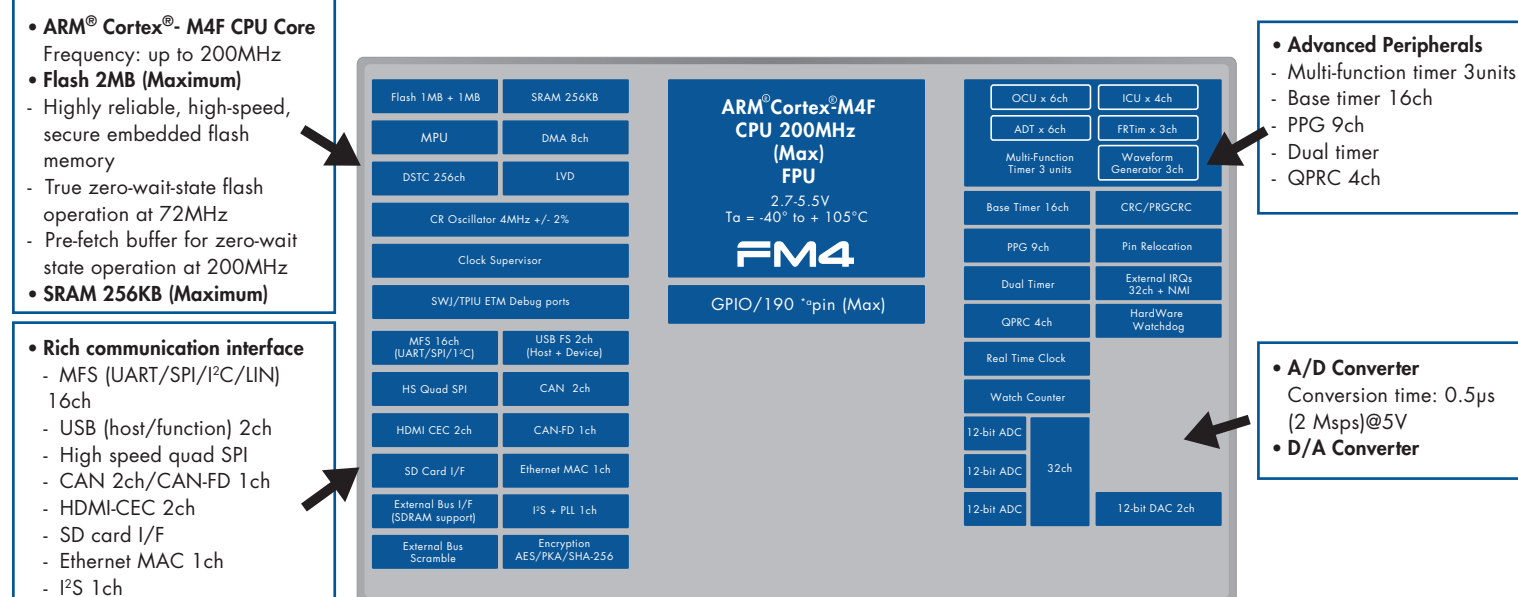
Cypress's S6E2CC series, based on the ARM® Cortex® - M4F core, boasts a 200 MHz operating frequency and supports a diverse set of on-chip peripherals for enhanced human-machine interfaces (HMI) and machine-to-machine (M2M) communication. The architecture is optimized for very high performance allowing efficient data movement with a 16kB flash accelerator enabling zero wait state execution. Peripheral-to-RAM and RAM-to-peripheral data movement is possible without CPU intervention by either an 8-channel DMA or the unique and powerful descriptor system data transfer controller (DSTC). In addition, this series supports up to 2MB flash and 256 KB SRAM memory, more than a dozen different communication and memory interfaces and motor control functionality.

The rich set of peripherals and large memory of this series, allows single-chip solutions for a wide variety of applications requiring advanced, high-speed computing performance including wireless communication hubs with special accommodation for over-the-air (OTA) programming, factory automation, industrial Internet of Things (IoT), motor control, office automation, building management systems, smart meters, digital cameras and multi-function printers.

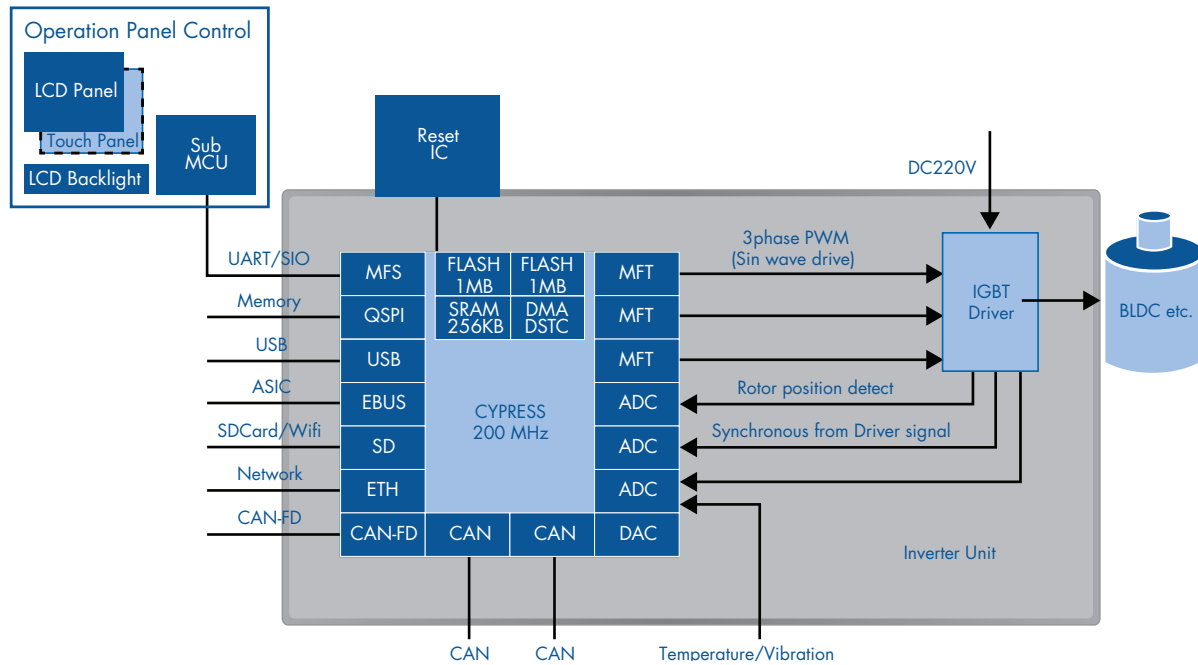
KEY FEATURES

- ARM® Cortex®- M4F CPU Core
- Frequency: up to 200MHz
- FLASH/SRAM: 2MB/256KB
- Rich Set of Communication Interfaces
 - MFS (UART/SPI/I²C/LIN) 16ch
 - USB (Host/Function) 2ch
 - High speed Quad SPI
 - CAN 2ch/CAN-FD 1ch
 - HDMI-CEC 2ch
 - SD Card I/F
 - Ethernet MAC 1ch
 - I²S 1ch
- Advanced Peripherals
 - Multi Function Timer (MFT) 3Unit
 - Base Timer 16ch
- Extensive Package Options: LQFP-144/176/216, BGA-192

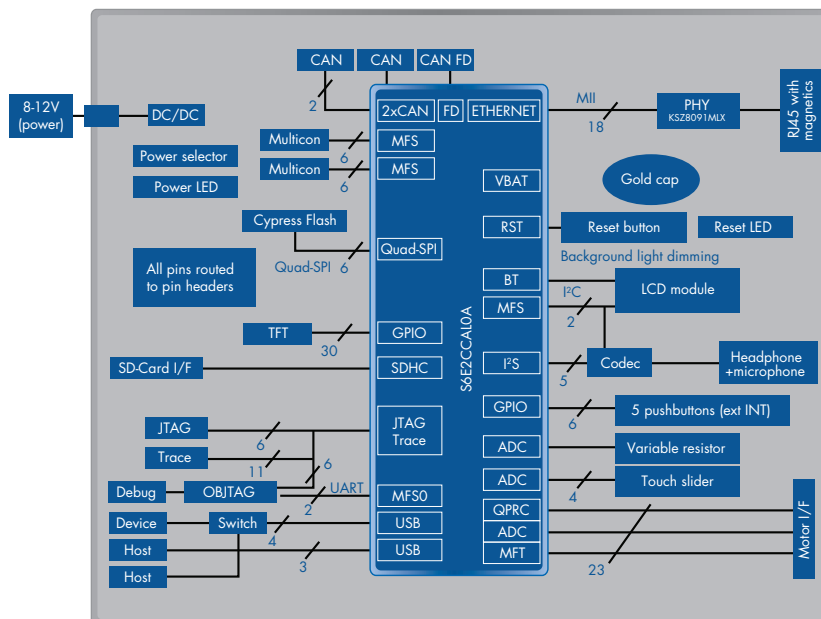
BLOCK DIAGRAM



TARGET APPLICATION / SYSTEM BLOCK DIAGRAM



EVALUATION BOARD / IDE, COMPILERS, DEBUGGERS



Development Tools
ARM (KEIL) / IAR SYSTEMS



Note: This document may be revised by subsequent versions or modifications due to changes in technical specifications.

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