



i.MX RT1180: Crossover MCU with TSN Switch and EdgeLock®

i.MX-RT1180

Preproduction

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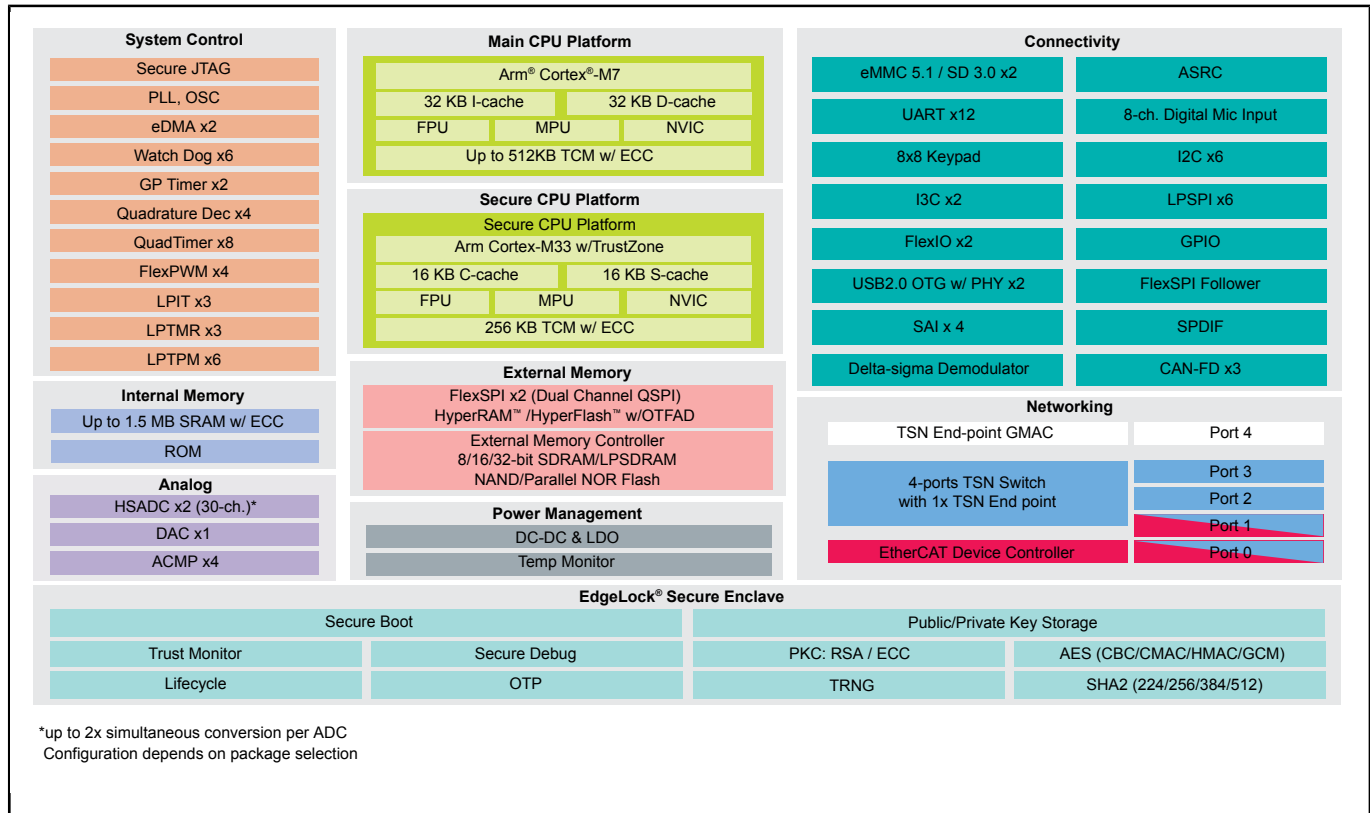
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i.MX RT1180 Crossover MCUs are dual-core, real-time microcontrollers (MCUs) featuring an Arm® Cortex®-M7 and Arm® Cortex®M33 for high performance and real-time functionality. The i.MX RT1180 includes an integrated Gbps time-sensitive networking (TSN) switch and EtherCAT Slave Controller making it ideal for industrial and automotive communication applications.

The i.MX RT1180 CM7 operates at up to 800 MHz and the CM33 up to 240 MHz with 1.5 MB on-chip RAM. The family supports multiple protocols, bridging communications between real-time Ethernet and Industry 4.0 systems. The i.MX RT1180 offers advanced security with the integrated EdgeLock® Secure Enclave.

The i.MX RT1180 family is supported by the [MCUXpresso ecosystem](#), which includes an SDK, a choice of IDEs and secure provisioning and configuration tools to enable rapid development.

i.MX RT1180 Crossover MCU Block Diagram



View additional information for [i.MX RT1180: Crossover MCU with TSN Switch and EdgeLock®](#).

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