i.MX RT700 Crossover MCU with Arm® Cortex®-M33, NPU, DSP and GPU Cores

i.MX-RT700

Preproduction

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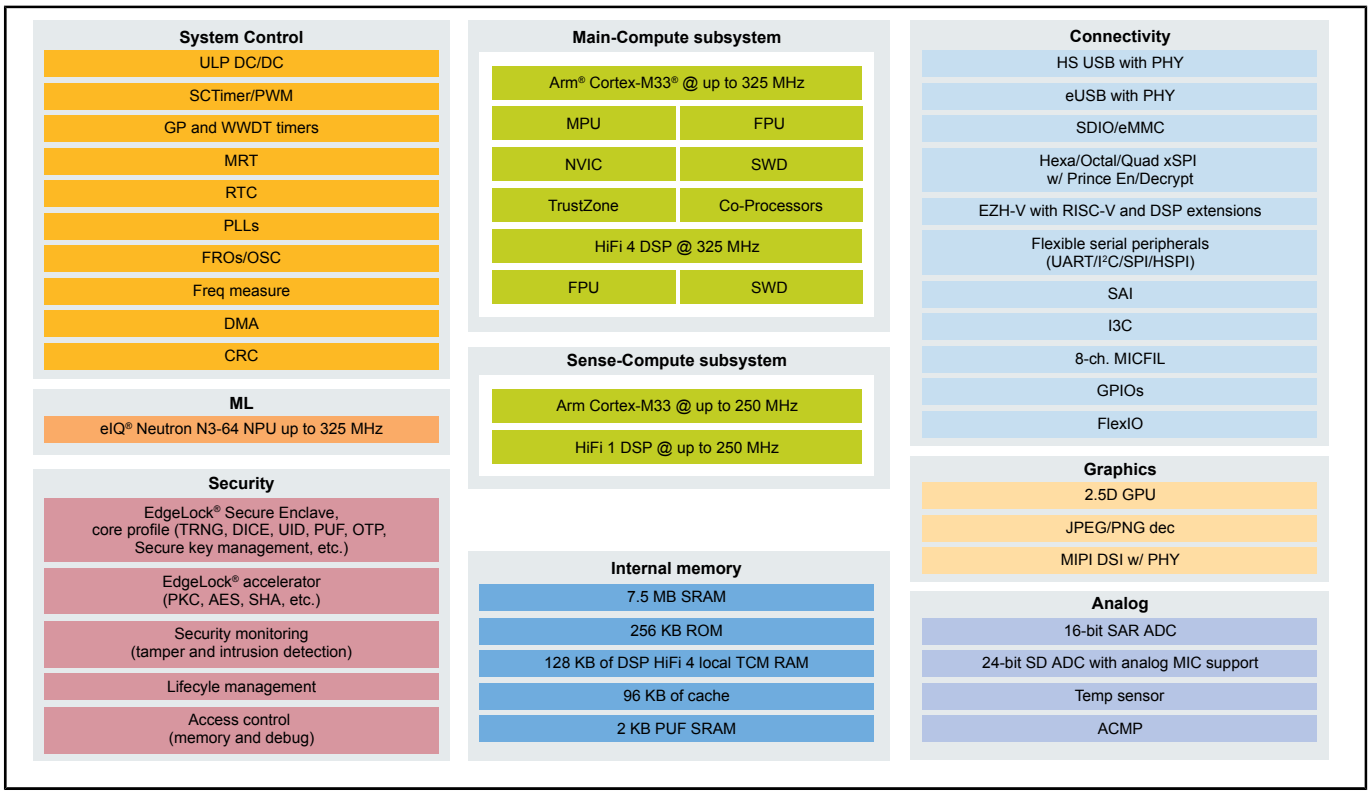
The i.MX RT700 features up to five computing cores designed to power smart AI-enabled edge devices such as wearables, consumer medical, smart home and HMI devices. Its Compute Subsystem includes a primary Arm® Cortex®-M33 running at 325 MHz and Cadence® Tensilica® HiFi 4 DSP for more DSP and audio processing. An ultra-low power Sense Subsystem includes a second Arm Cortex-M33 and Cadence Tensilica HiFi 1 DSP. This removes the need for an external sensor hub reducing system design complexity, footprint and BOM costs. i.MX RT700 includes NXP's eIQ® Neutron NPU accelerating AI workloads by up to 172x and integrates up to 7.5 MB of onboard SRAM.

The i.MX RT700 is supported by the MCUXpresso Developer Experience, which includes an SDK, a choice of IDEs and secure provisioning and configuration tools to enable rapid development.

i.MX RT700 Crossover MCU Block Diagram



View additional information for i.MX RT700 Crossover MCU with Arm® Cortex®-M33, NPU, DSP and GPU Cores.

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