PQC-Enabled MCX N94T, N54T, N53T, N52T, N55T and N24T: Low-Power Dual-Core Arm® Cortex®-M33 MCUs with Accelerators and Advanced Security

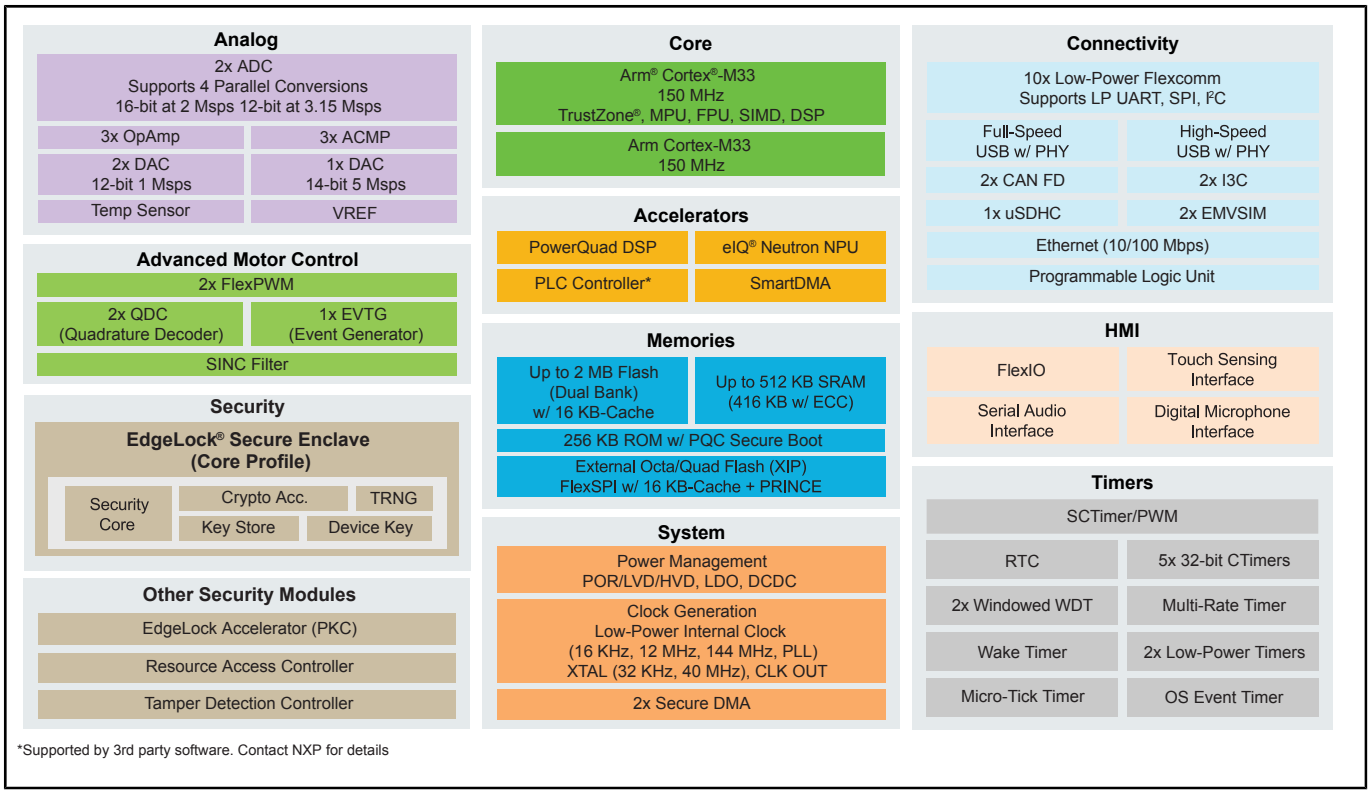
MCX-N94T-N55T-N54T-N53T-N52T-N24T NEW

Last Updated: Nov 16, 2026

Start your next MCX design with confidence, backed by NXP's resilient manufacturing strategy and dependable product availability.
The N94T, N55T, N54T, N53T, N52T and N24T are highly integrated, PQC-enabled MCUs based on dual high-performance Arm® Cortex®-M33 cores running up to 150 MHz, with 2 MB of Flash with optional full ECC RAM, a DSP co-processor and an integrated eIQ Neutron NPU. The NPU delivers up to 42x faster machine learning throughput compared to a CPU core alone enabling it to spend less time awake and reducing overall power consumption.

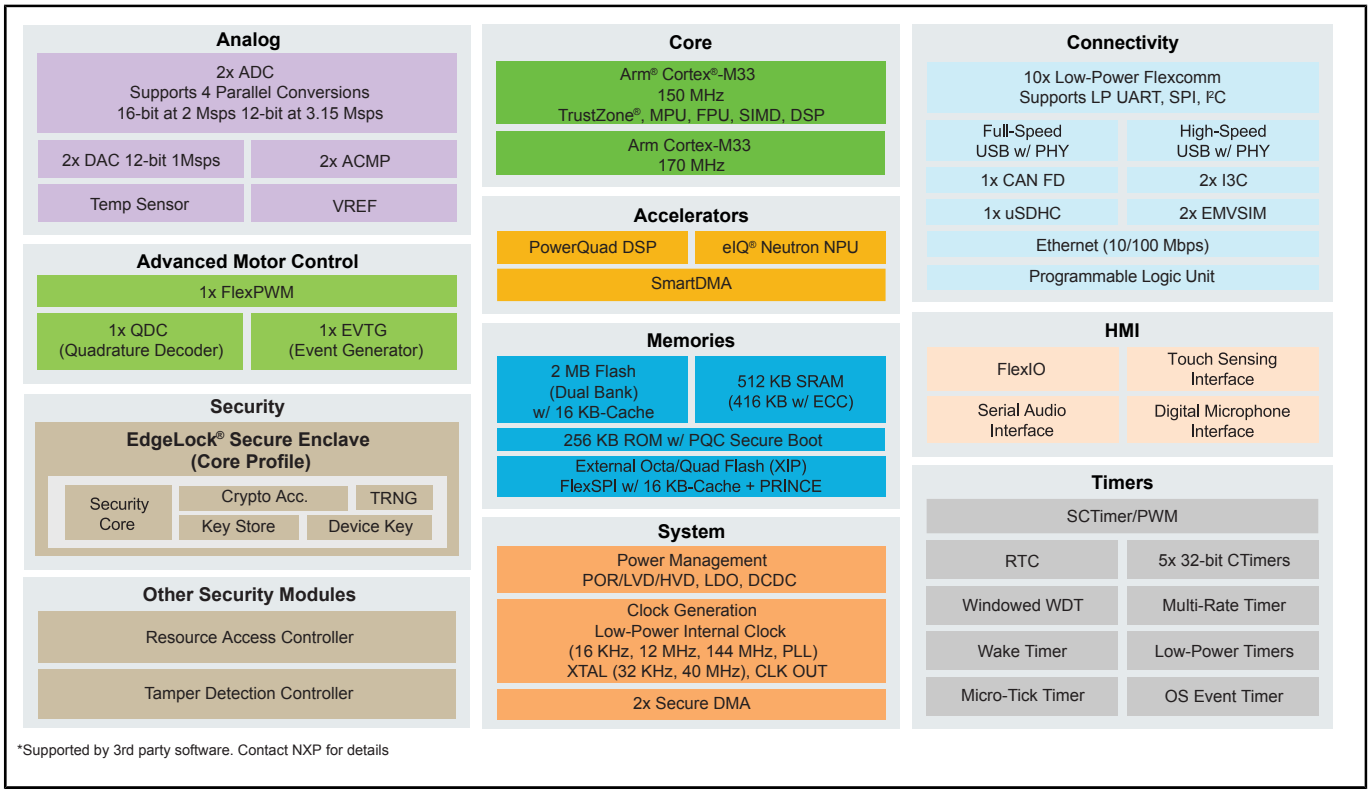
The multicore design delivers improved system performance and reduces consumption by enabling smart, efficient distribution of workloads to the analog and digital peripherals. The devices are supported by the MCUXpresso Developer Experience to optimize, ease and help accelerate embedded system development.

MCX N94T MCUs Block Diagram



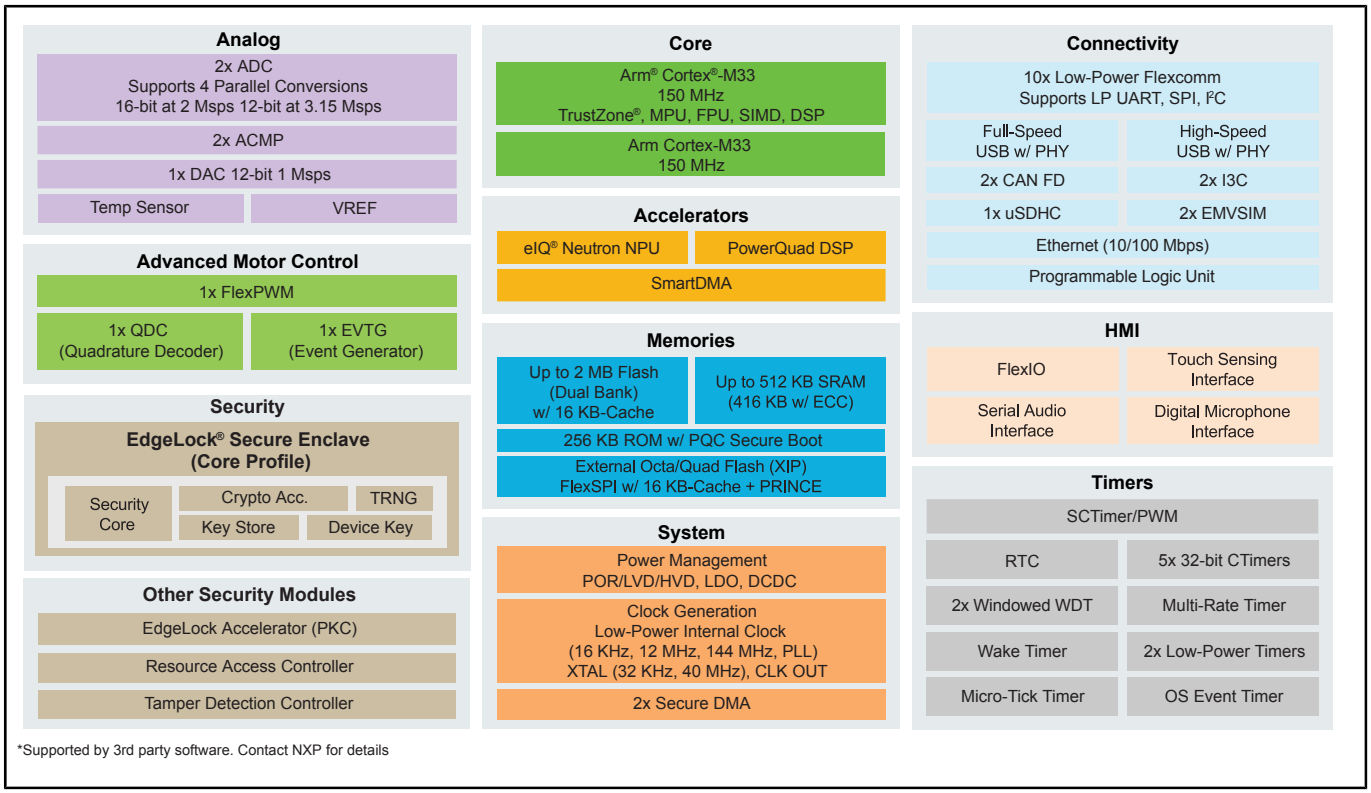
*Supported by 3rd party software. Contact NXP for details

MCX N55T MCUs Block Diagram



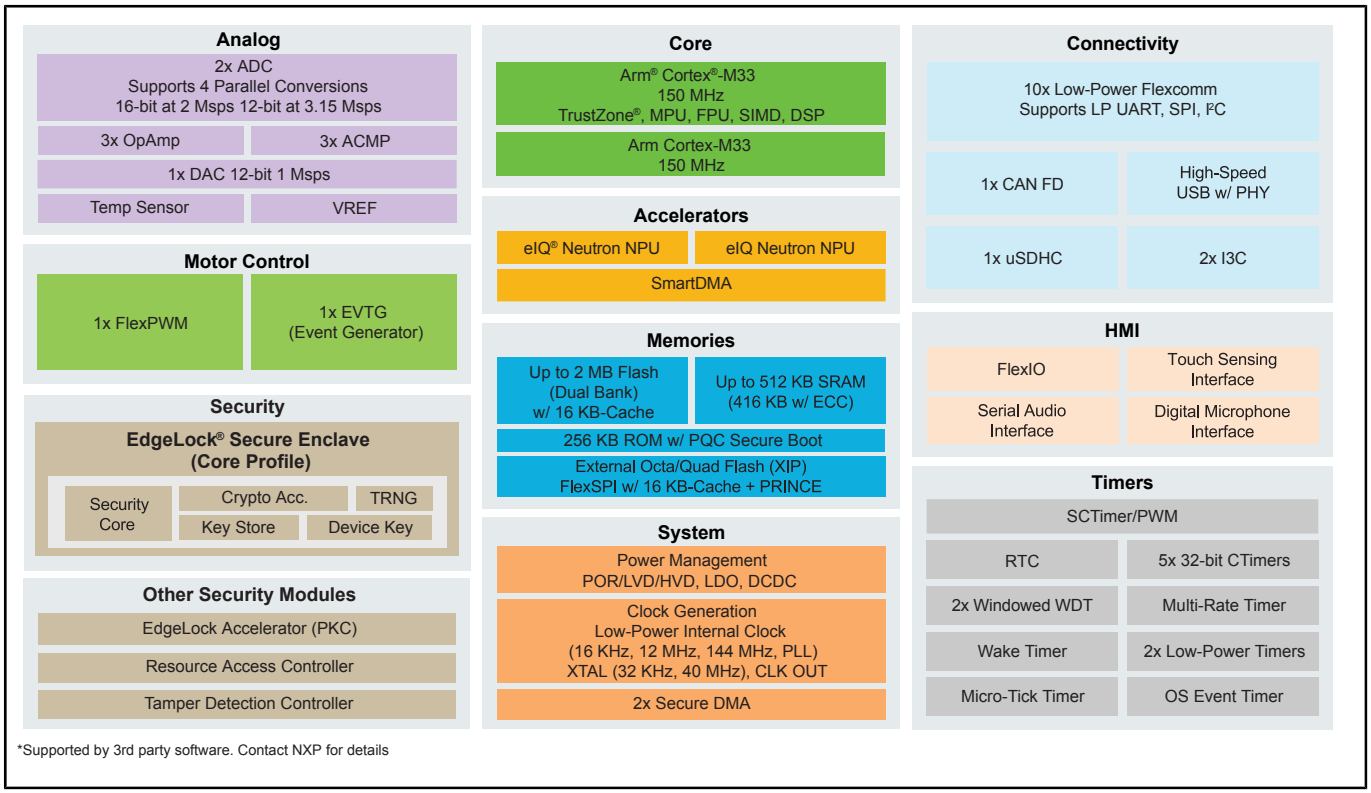
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MCX N54T MCUs Block Diagram



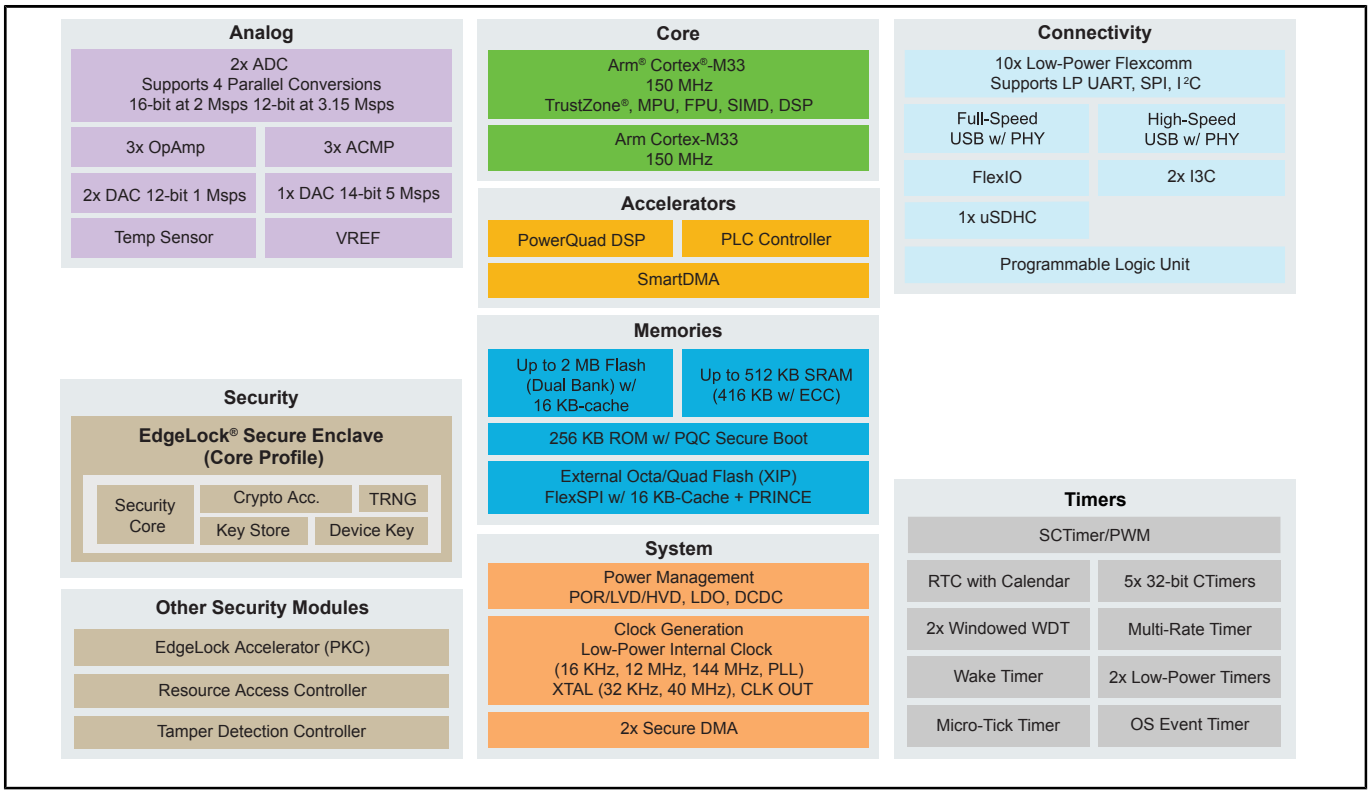
*Supported by 3rd party software. Contact NXP for details

MCX N53T MCUs Block Diagram

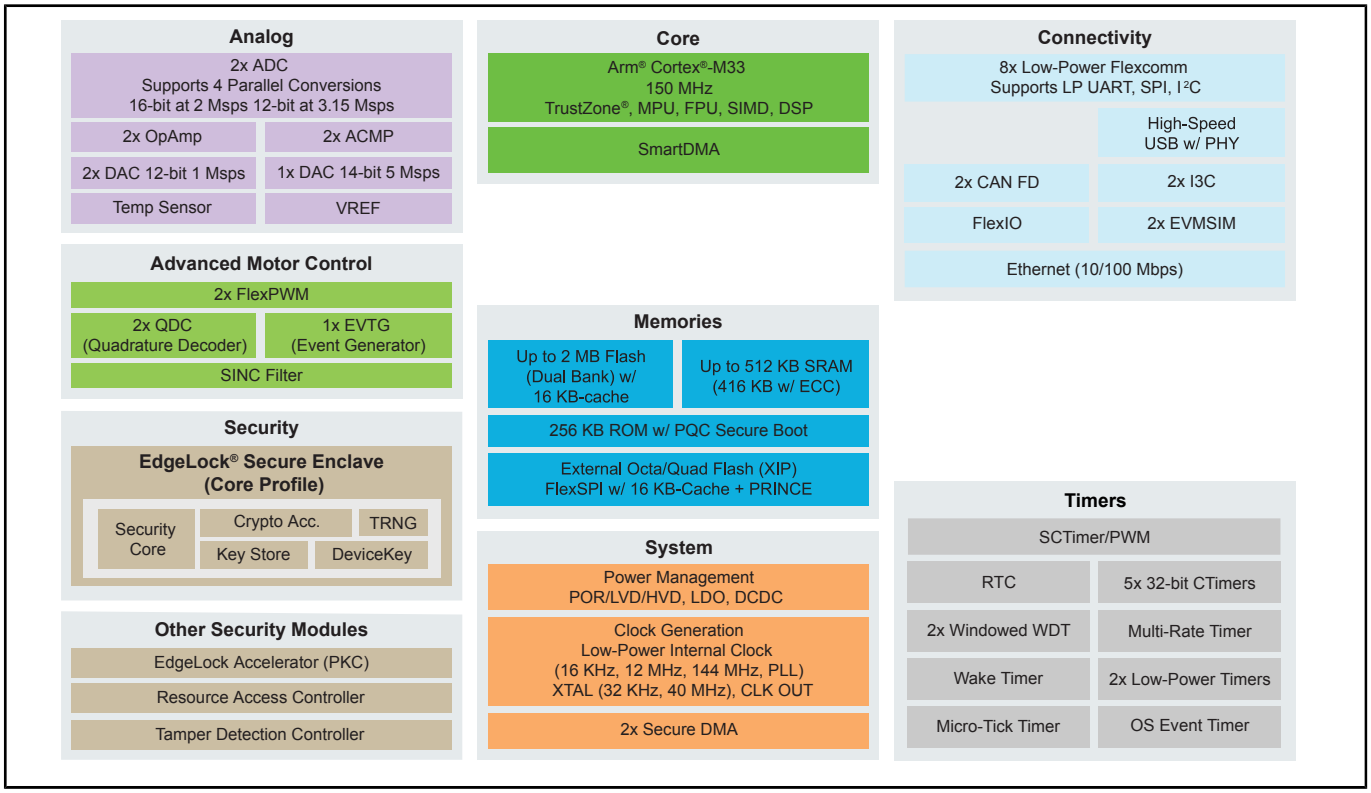


*Supported by 3rd party software. Contact NXP for details

MCX N52T MCUs Block Diagram



MCX N24T MCUs Block Diagram



View additional information for PQC-Enabled MCX N94T, N54T, N53T, N52T, N55T and N24T: Low-Power Dual-Core Arm® Cortex®-M33 MCUs with Accelerators and Advanced Security.

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