

Real-Time Systems

ARM Application, MCU, and Real-Time Series of Microprocessors

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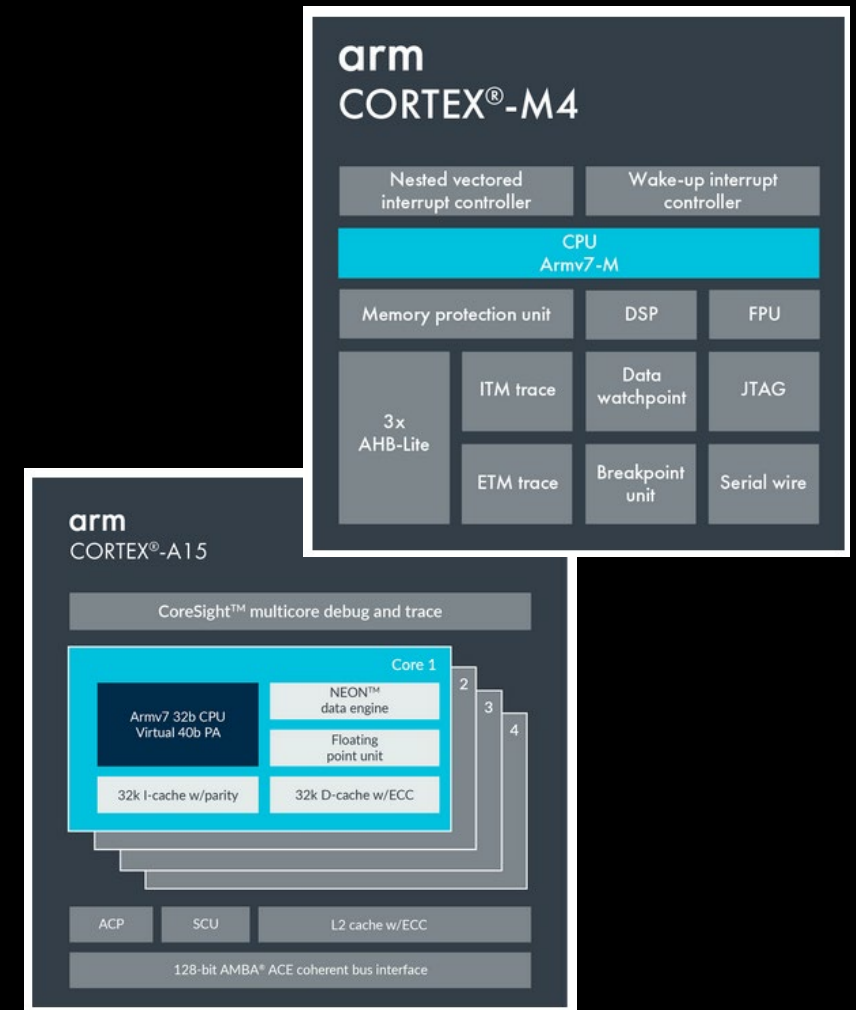
Designed for MCU or Apps: ARM M & A Series

■ ARM M Series - MCU

- TIVA TM4C123G (M4), NXP, Cypress, Silicon Labs
- The Cortex-M4 processor is developed to address digital signal control markets that demand an efficient, easy-to-use blend of control and signal processing capabilities.
- RT Cyclic Executive would work well with M-Series

■ ARM A Series - Advanced Mobile

- Smart Phone
- Qualcomm, Broadcom, NVIDIA
- Harvard Split L1, Unified L2, L3, Multi-core
- The processor cluster has one to four cores. Each core has its own L1 instruction and data caches, together with a single shared L2 unified cache.



Designed for Real-Time: ARM R Series

■ ARM R Series - Real-Time

- Redundancy (no SPOFs) - Lock-step MISD
- Predictable / Deterministic response (TCM)
- Resilience - recovery and fail-safe
- ECC memory
- Flash memory with data protection
- Software sanity monitoring
- RT critical services
- Best-effort services
- The Cortex-R52 processor meets the rising performance needs of advanced real-time embedded systems.

