Layerscape® 1020A and 1022A Dual-Core Processors

LS1020A

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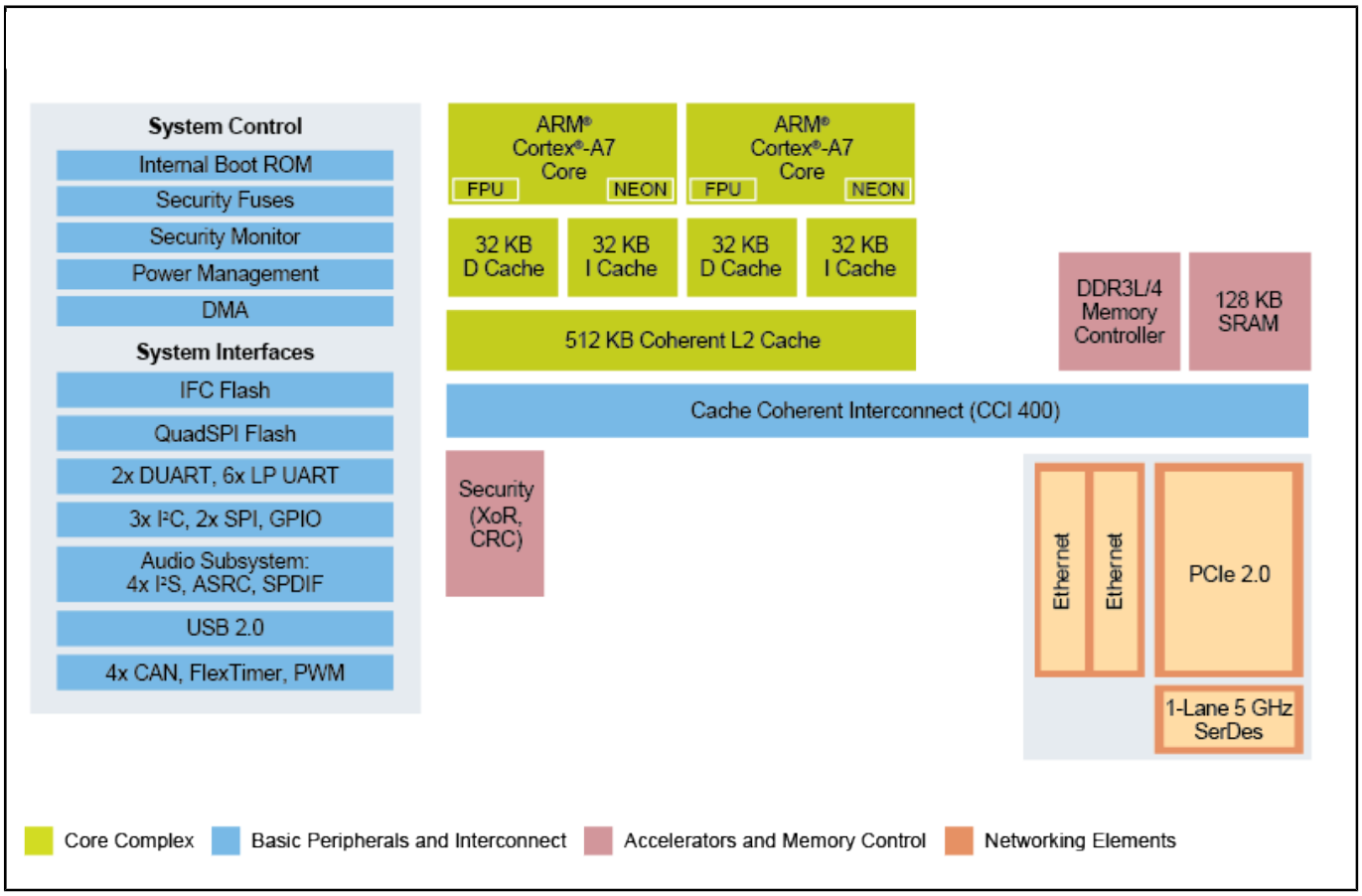
The LS1 family, which includes the LS1020A and LS1022A communications processors, is built on Layerscape architecture, the industry’s first software-aware, core-agnostic networking architecture to offer unprecedented efficiency and scale.

Members of the value-performance tier, the LS1020A and LS1022A processors provide extensive integration and power efficiency for fanless, small form factor enterprise and consumer networking applications. Incorporating dual Arm® Cortex®-A7 cores running up to 1.2 GHz, the LS1020A and LS1022A processors deliver pre-silicon CoreMark® performance of over 7,000, as well as virtualization support, advanced security features and broadest array of high-speed interconnects and optimized peripheral features ever offered in a sub-3 W processor (LS1022A processor is sub-2W typical).

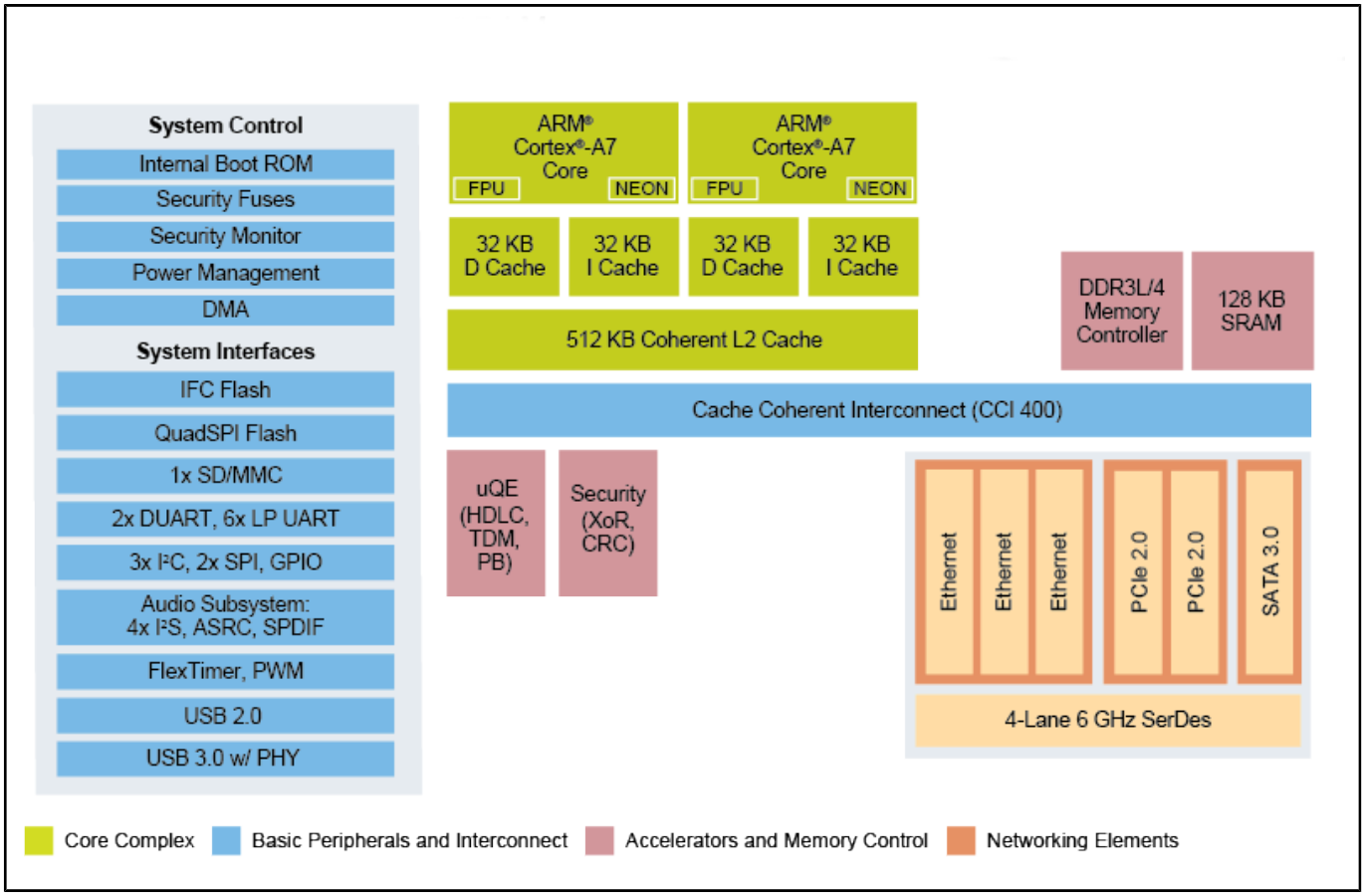
The LS1020A and LS1022A processors features support for multiple industrial protocols, DDR3L/4 running up to 1600 MHz, integrated hardware-based security engine and QUICC Engine®. and ECC protection on both L1 and L2 caches. The LS1020 and LS1022A processors are pin- and software-compatible with the LS1021A processor.

Layerscape processors are part of NXP's EdgeVerse™ edge computing platform.

29841_LS1022A_BD Block Diagram



29841_LS1020A_BD Block Diagram



View additional information for Layerscape® 1020A and 1022A Dual-Core Processors.

Note: The information on this document is subject to change without notice.