



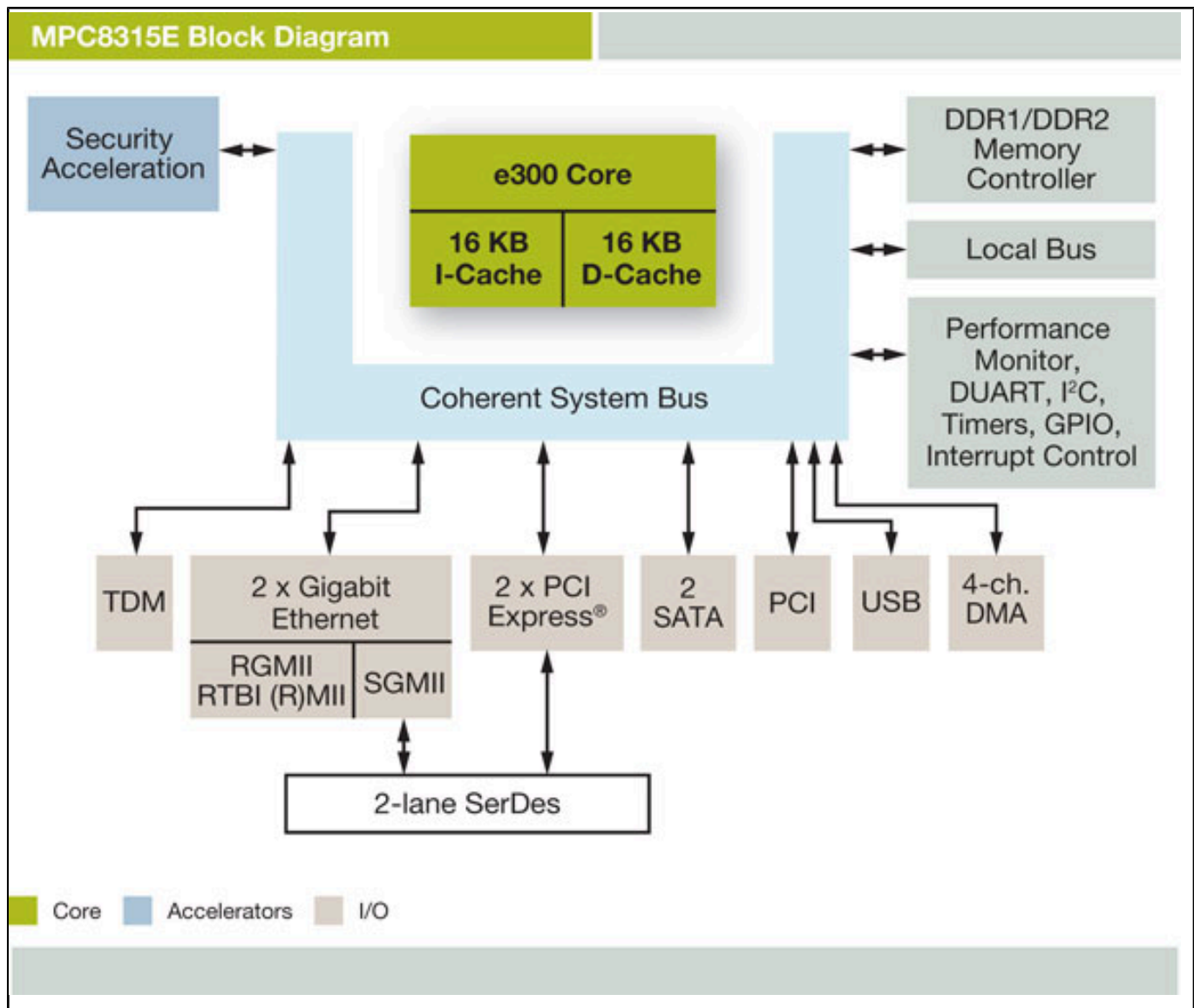
Low-Power PowerQUICC® II Pro Processor with DDR2, TDM, PCI, PCI Express, SATA, 1 GB Ethernet, Security, USB

MPC8315E

Last Updated: May 30, 2025

Increased Internet broadcast and downloads for personal and premium content are driving a need for a secure highly integrated platform for multimedia distribution within the home. The MPC8315E provides a high-performance Power Architecture® e300 core up to 400 MHz with 16K I/D L1 cache and integrated x2 serial ATA controllers that help reduce overall BOM cost. The system-on-chip (SoC) also includes two Gigabit Ethernet® controllers for network connectivity, two x1 PCI Express® lanes, TDM interface for VoIP, high-speed USB 2.0 with PHY integrated and security engine for encryption algorithm offload. The MPC8315E, based in 90 nm process technology, provides high integration that simplifies board design and provides a cost-effective solution for critical applications such as network attached storage.

Freescale PowerQUICC MPC8315E Communications Processor Block Diagram Block Diagram



View additional information for [Low-Power PowerQUICC® II Pro Processor with DDR2, TDM, PCI, PCI Express, SATA, 1 GB Ethernet, Security, USB](#).

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