



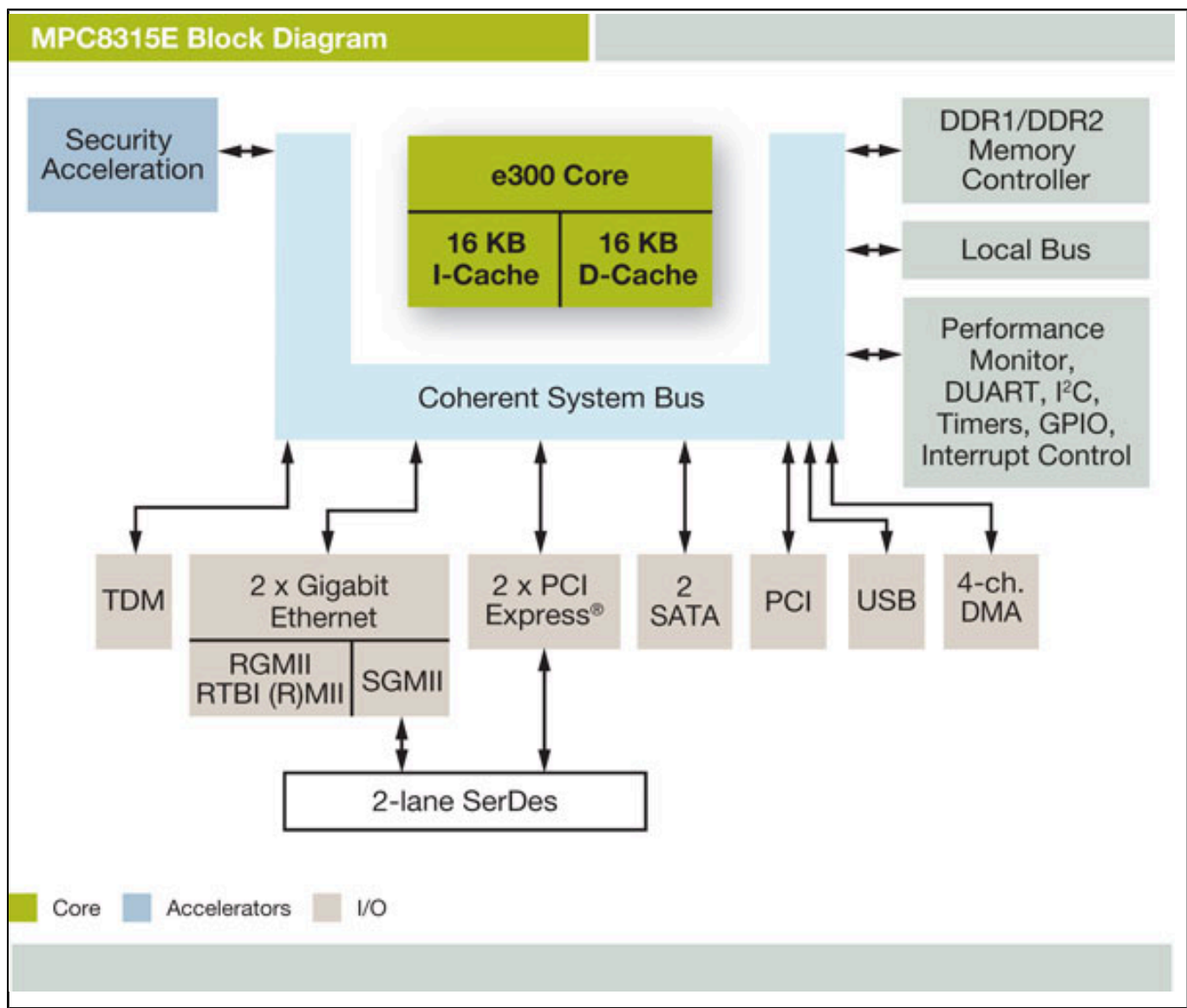
Low-Power PowerQUICC® II Pro Processor with DDR2, TDM, PCI, PCI Express, SATA, 1 GB Ethernet, Security, USB

MPC8315E

Last Updated: Dec 15, 2024

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](#).

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

www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2025 NXP B.V.