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

MPC8314E

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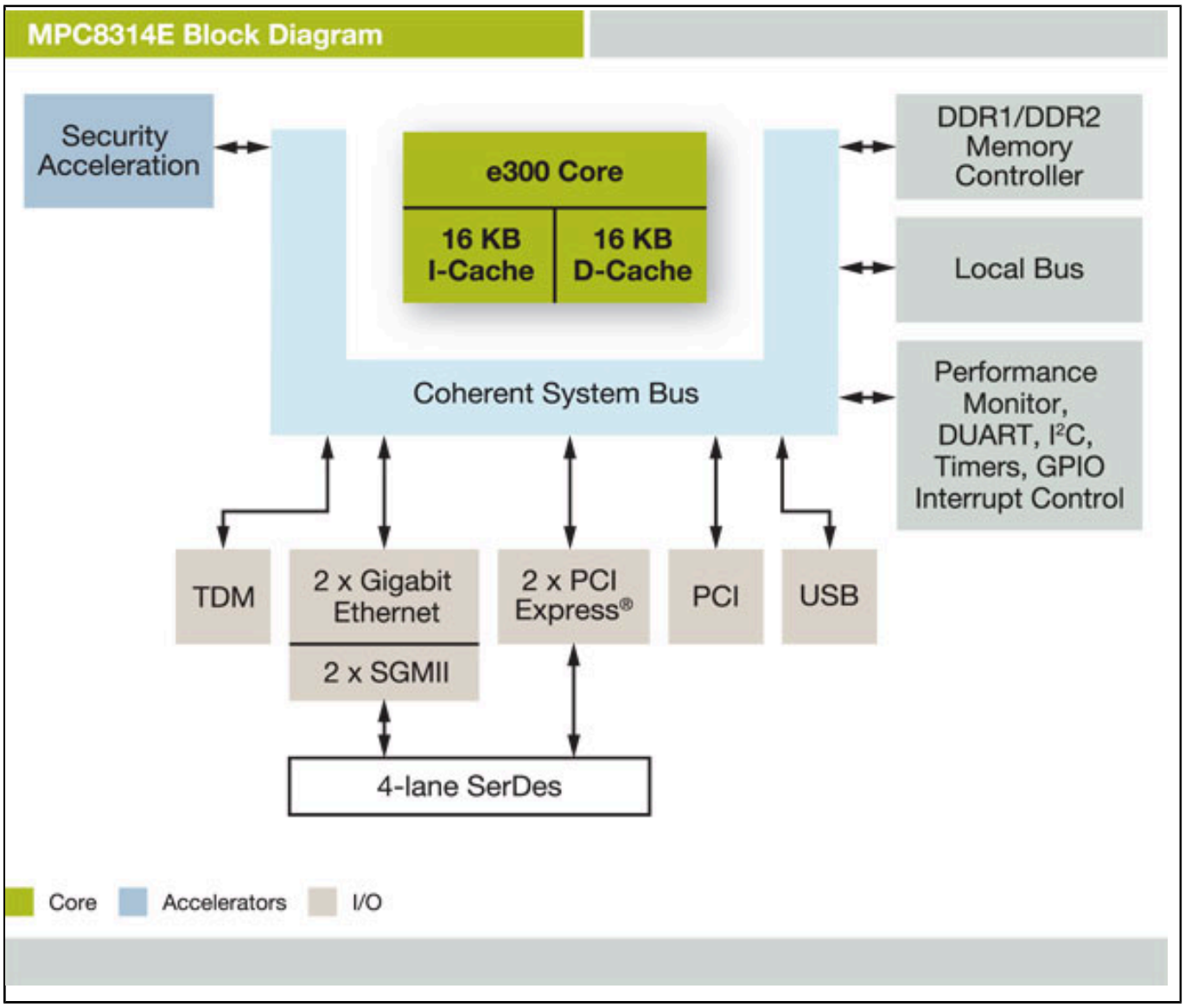
Today's digital home consumers require a robust converged platform that supports distribution of voice, video and data simultaneously. The MPC8314E provides a high-performance Power Architecture® e300 core up to 400 MHz with 16K I/D L1 cache, integrated high-speed USB 2.0 with PHY and x2 PCI Express® controllers that help to reduce overall BOM cost. The system-on-chip (SoC) also includes two Gigabit Ethernet (GbE) controllers for network connectivity, TDM interface for supporting multiple channels of VoIP and a security engine for encryption algorithm offload. The MPC8314E, based in 90 nm process technology, provides high integration that simplifies board design and provides a cost-effective solution for applications such as converged home gateway supporting VoIP, Wi-Fi and streaming high-definition video content throughout the home.

NXP PowerQUICC MPC8314E Communications Processor Block Diagram Block Diagram



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

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