Low-Power PowerQUICC® II Pro Processor with DDR2, TDM, PCI, Security, USB, QUICC Engine® with UTOPIA

MPC8323

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The MPC8323 PowerQUICC® II Pro is part of the MPC8323E family of cost-effective network communication processors that meet the requirements of multi-protocol control applications. It provides better CPU performance, additional functionality and faster interfaces than current PowerQUICC II processors while addressing important time to market, price, power consumption and board real estate requirements.

QUICC Engine® Technology A new single-reduced instruction set computing (RISC) version of the QUICC Engine communications engine forms the heart of the networking capability of the MPC8323. The QUICC Engine block contains several peripheral controllers and a single 32-bit RISC controller. Microcode packages provide support for ATM, network address port translation (NAPT), firewall, IPsec, and advanced quality of service (QoS). Protocol support is provided by the main workhorses of the device—the unified communication controllers (UCCs). Each of the five UCCs can support a variety of communication protocols:

- Up to three 10/100 Mbps Ethernet
- Asynchronous transfer mode (ATM) support up to OC-3 speeds
- Serial ATM
- Up to 31 multi-physical layer (PHY) ATM
- High-level data link control (HDLC)
- Up to four time division multiplexing (TDM)
- Binary synchronous communications protocol (BISYNC)
- UCC can also support USB 2.0 (full/low-speed)

MPC8323 Block Diagram Block Diagram
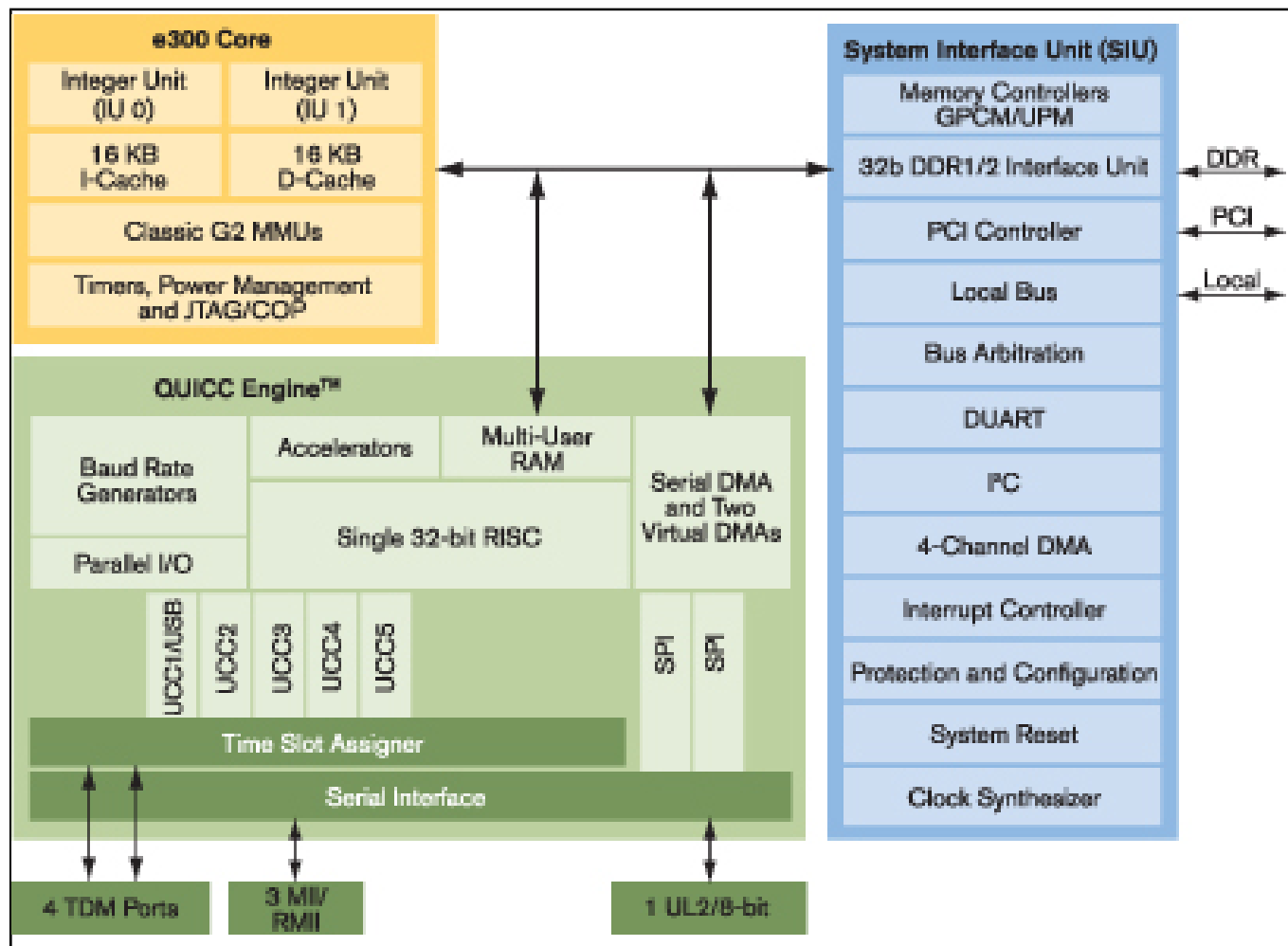
View additional information for Low-Power PowerQUICC® II Pro Processor with DDR2, TDM, PCI, Security, USB, QUICC Engine® with UTOPIA.

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