Integrated Host Processor with DDR, PCI, RapidIO® and 1G Ethernet
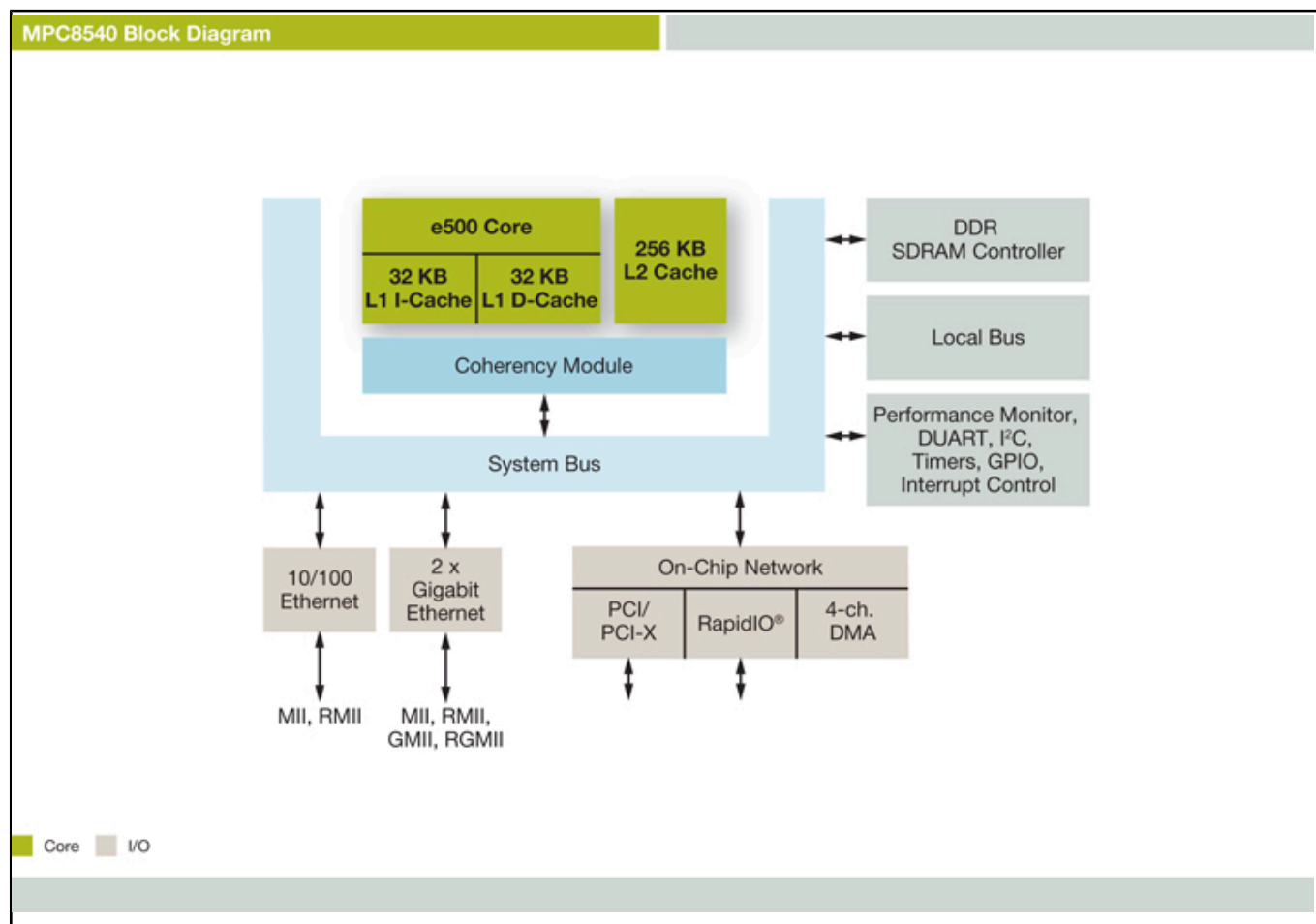
MPC8540

Not Recommended for New Designs

This page contains information on a product that is not recommended for new designs.

Last Updated: Apr 9, 2022

Addressing the needs for higher compute density and lower system cost, Our MPC8540 integrated host processor is designed to provide the highest level of performance and integration available today. The MPC8540 is Our first device utilizing the e500 core, is the industry's first RapidIO®-enabled processor, and provides dual gigabit ethernet controllers. Balancing processor performance with I/O system throughput, the MPC8540 is a powerful control element for network routers and switches, storage subsystems, network appliances, and print and imaging devices.

Contact your local NXP Sales Office or NXP Authorized Distributor.

Freescale PowerQUIICC MPC8540 Communications Processor Block Diagram Block Diagram

MPC8540 Block Diagram

e500 Core		256 KB L2 Cache
32 KB L1 I-Cache	32 KB L1 D-Cache	
Coherency Module		

System Bus

- DDR SDRAM Controller
- Local Bus
- Performance Monitor, DUART, I²C, Timers, GPIO, Interrupt Control

- 10/100 Ethernet — MII, RMII
- 2 x Gigabit Ethernet — MII, RMII, GMII, RGMII
- On-Chip Network: PCI/PCI-X | RapidIO® | 4-ch. DMA

Legend: Core / I/O

View additional information for Integrated Host Processor with DDR, PCI, RapidIO® and 1G Ethernet.

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