EMBEDDED PLANET

EP5020A

Power Architecture Processor AMC

The EP5020A is a single width, full height AMC processor board featuring the high performance, next generation 64-bit Freescale QorIQ P50x0. Choose the P5020 dual core or P5010 single core e5500 PowerPC processor operating at up to 2.0GHz.

The highly integrated multi-core processor makes the EP5020A a natural fit for combined control and data plane applications on a single board, thereby reducing system cost, thermal budget and power consumption. The EP5020A is built for a range of computationally intensive applications in wireless base stations, media gateways, enterprise network access systems, and test and measurement systems. The high performance classic floating point unit (FPU) combined with 64-bit data transfers result in a high computational capacity that creates a powerful solution for Defense and Industrial applications. The built-in RAID 5/6 and Data Path accelerators allow for high-reliability storage area networks (SAN), server blades and network attached storage (NAS) that feature Policy Control and Deep Packet Inspection (DPI).

For fabric connectivity the EP5020A offers extreme flexibility, while maintaining standards compliance. All versions of the board support SGMII on channel 0, compliant with AMC.2, Type E2. Channels 2 and 3 support SATA. The fat pipe region of the AMC (channels 4 - 11) can be configured on a build basis to support combinations of 10G Ethernet XAUI, Gen 2 PCI express, and SRIO 1.3/2.1 controllers.

Feature Summary:

Specification:	Description:
Form Factor:	Full Height AMC.0
Processor:	Freescale Dual-Core QorIQ P5020 or Single-Core P5010 at up to 2.0GHz
Backplane Options:	PCIe version 2.0 up to 5Gbps, SRIO version 1.3 with features of version 2.1 up to 5Gbps. RapidIO message manager (RMan) with Type 5-6 and Type 8-11 support. XAUI 10Gbps Ethernet controller (1 port available). SGMII, Ethernet Controller (Five 1Gbps or four 2.5Gbps available).
Front Panel:	2 x GbE connections and 1 x RS-232 serial
Memory:	Up to 8 GB DDR3 with ECC in two SODIMMS, up to 128 MB of NOR flash and 1GB of NAND flash
SATA:	SATA version 2.0, supporting 1.5 and 3.0Gbps
Debug:	JTAG/COP via an onboard connector
Power Supply:	Via AMC connector per AMC.0 or from barrel connector
Software:	U-Boot bootloader, Linux, INTEGRITY, and VxWorks BSP available

AdvancedMC™

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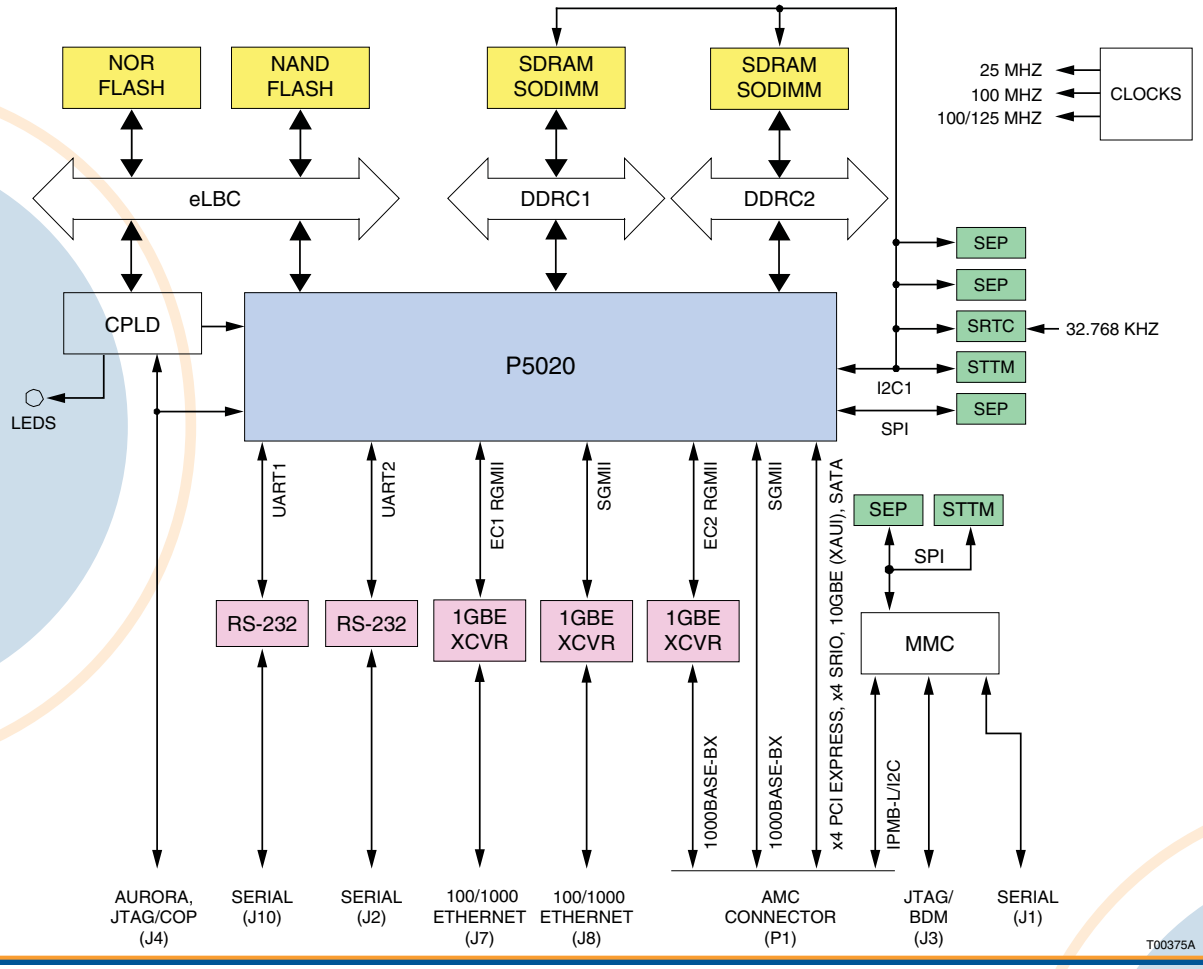
Hardware Block Diagram



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- Embedded Planet has extensive experience with embedded operating systems and firmware. Our stock configurations of operating systems and firmware can be customized to meet your particular needs.
- We can alleviate the headaches associated with volume production of embedded systems. Your product is delivered 100% tested from an ISO-9002 certified manufacturing facility.
- Our capabilities are available on a project basis to design custom solutions specifically tailored to your application.
- Contact Embedded Planet to find out how we can accelerate your project.