The EP8548A is a single width, full height AMC processor board with a low power, high performance Freescale MPC8548 processor operating at up to 1.33GHz. In addition to the AMC configuration the EP8548A can operate as a stand-alone module and boot from on board flash allowing for rapid application development outside of the integrated ATCA or MicroTCA environment. With broad software support, the EP8548A is built for a broad range of demanding applications in wireless basestations, media gateways, enterprise network access systems, test and measurement systems, and server blades.

For fabric connectivity the EP8548A offers extreme flexibility, while maintaining standards compliance. All versions of the board support gigabit ethernet on AMC channels 0 an 1, compliant with AMC.2, Type E2. Separate versions of the board are available in one of the following configurations: Serial RapidIO on AMC channels 4-7, PCI Express on AMC channels 4-11, or PCI Express on channels 4-7 and Serial RapidIO on channels 8-11.
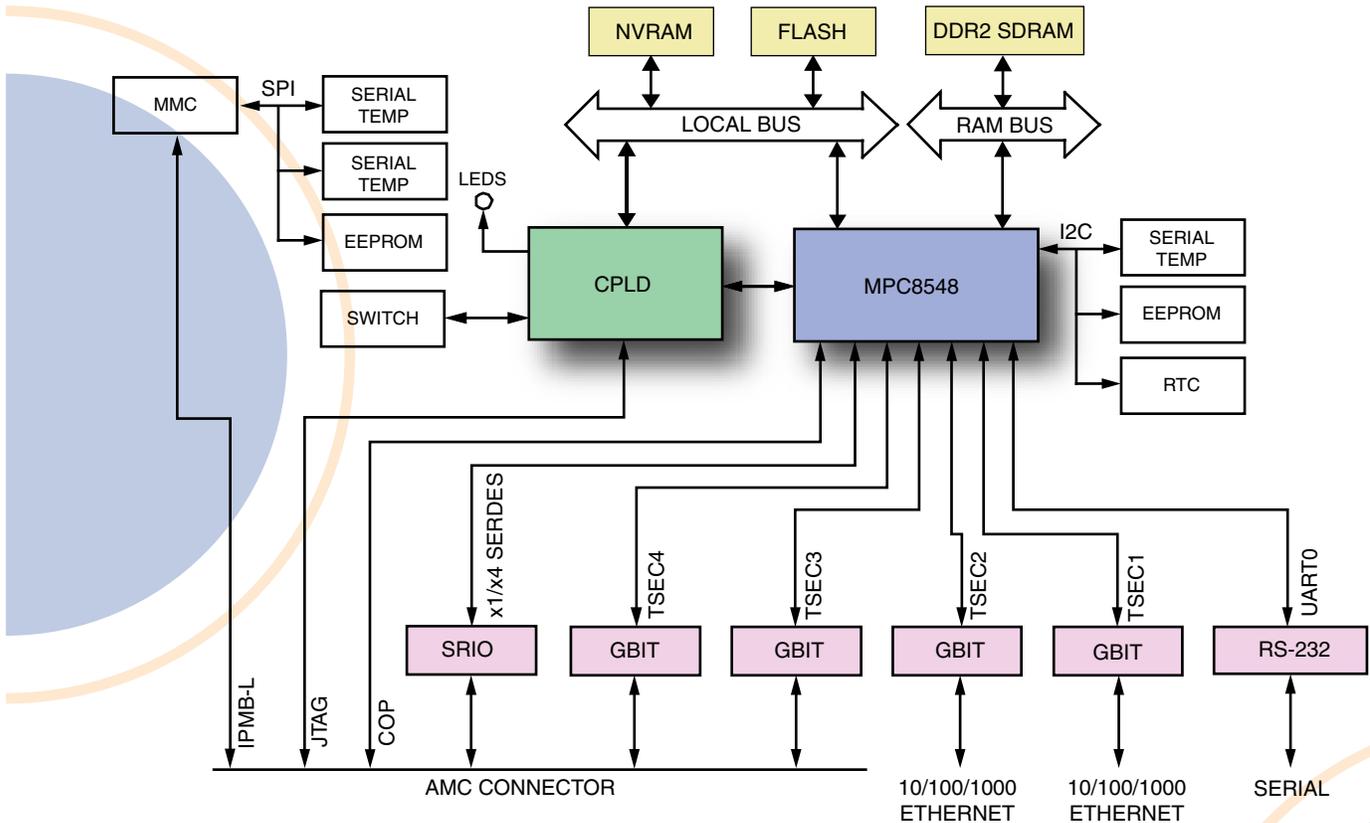
At the heart of the EP8548A is a Freescale MPC8548 PowerQUICC III processor. The MPC8548 is a highly integrated system-on-chip (SoC) platform that includes a PowerPC core, an integrated security engine, integrated PCI Express, Serial RapidIO, and Gigabit Ethernet controllers, and an integrated DDR2 memory interface. The highly integrated SoC architecture improves system performance, simplifies board design, lowers power consumption, and reduces cost.

Feature Summary:

Specification:	Description:
Form Factor:	Full or Mid-Height AMC.0
Backplane Options:	2 x GbE to AMC channels 0 and 1 with options for Serial RapidIO on channels 4-7, PCI Express on channels 4-11, or a combination of PCI Express on channels 4-7 and Serial RapidIO on channels 8-11
Front Panel:	2 x GbE connections and 1 x RS-232 serial
Processor:	Freescale MPC8548E at up to 1.33GHz
Memory:	Up to 2 GB SODIMM, up to 128 MB of flash
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™

EMBEDDED PLANET

Hardware Block Diagram

NVRAM   FLASH   DDR2 SDRAM

MMC

SPI

SERIAL TEMP

SERIAL TEMP

EEPROM

LEDS

SWITCH

LOCAL BUS   RAM BUS

CPLD   MPC8548

I2C

SERIAL TEMP

EEPROM

RTC

IPMB-L

JTAG

COP

x1/x4 SERDES

TSEC4

TSEC3

TSEC2

TSEC1

UART0

SRIO   GBIT   GBIT   GBIT   GBIT   RS-232

AMC CONNECTOR

10/100/1000 ETHERNET   10/100/1000 ETHERNET   SERIAL

T00256D

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- Embedded Planet offers a complete set of software and hardware services to go along with our Off-the-Shelf solutions.
- 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.