

d<sup>1</sup>

design.

d<sup>2</sup>

develop.

d<sup>3</sup>

deploy.

## Embedded Planet EP8641A



### Features:

- **Processor:** Freescale MPC8641D scaling to 1.5GHz
- **RAM:** Up to 1GB of RAM in two independent banks of DDRII, one allocated to each core
- **Flash:** Up to 128MB
- **Ethernet:** Dual GigE to the front panel and dual GigE to the AMC connector on AMC channels 0 and 1 (AMC.2 type E2)
- **SRIO:** AMC.4 compliant with lanes configurable as x1/x4 to AMC channels 4-7
- **Serial Ports:** Single RS-232 to front panel for monitor port
- **Power Supply:** 12V from AMC backplane or from power supply when used in stand alone mode
- **Form Factor:** Single width, full height AMC.0
- **Debug:** JTAG/COP via an onboard connector and available on the AMC connector
- **Software:** U-Boot bootloader, Linux, VxWorks, and Green Hills INTEGRITY BSPs available

### Flexible Single Board Computer

The EP8641A is a single width, full height AMC processor board featuring the high performance Freescale MPC8641D dual-core PowerPC processor operating at up to 1.5GHz. In addition to the AMC configuration the EP8641A 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 Linux, VxWorks, and INTEGRITY operating support, the EP8641A 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 EP8641A is compliant with the AMC.4 (AMC channels 4-7) and AMC.2 (AMC channels 0 and 1) specification for Serial RapidIO and Gigabit Ethernet fabric interfaces. PCI Express is optionally available on the AMC connector. Contact us for information.

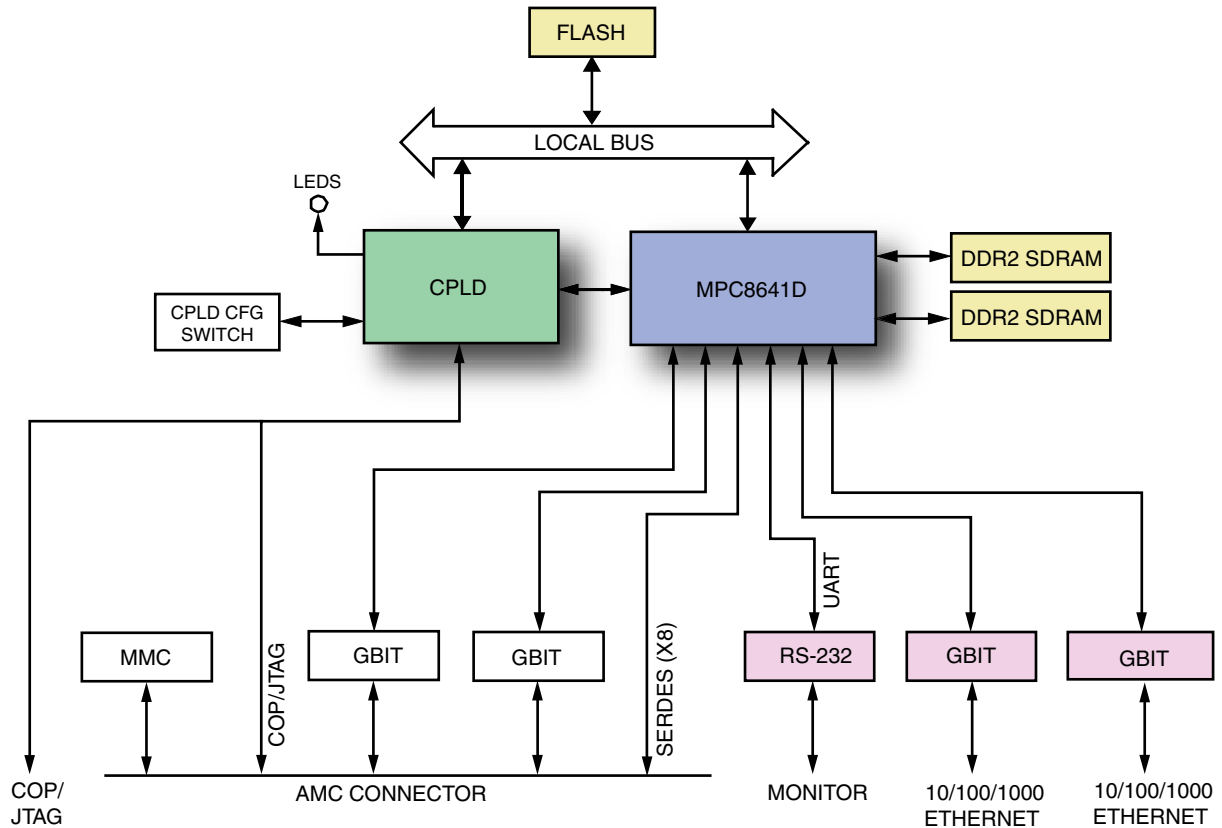
At the heart of the EP8641A is a Freescale MPC8641D dual-core PowerPC processor. The MPC8641D is a highly integrated system-on-chip (SoC) platform that includes dual e600 PowerPC cores, an integrated security engine, integrated PCI Express, Serial RapidIO, and Gigabit Ethernet controllers, and an integrated DDR2 memory interface. The highly integrated SoC architecture improves system performance, simplifies board design, lowers power consumption, and reduces cost.

**design.**  
The next  
generation of  
connected devices.

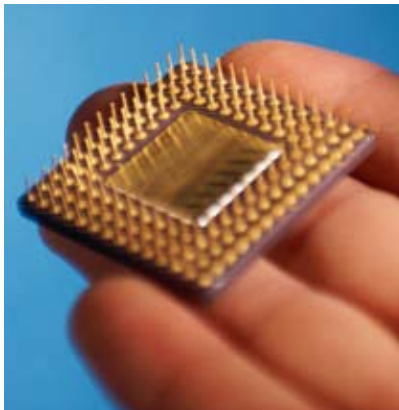
**develop.**  
Your products  
based on our  
platform.

**deploy.**  
Your solution  
faster.

## Block Diagram



## Let Us Do The Heavy Lifting



- Embedded Planet offers a complete set of software and hardware training and customization services to go along with our Off-the-Shelf solutions.
- Our training classes in Linux, VxWorks, and Eclipse can help your engineering team shrink their time-to-productivity and help ensure higher quality products.
- Our custom diagnostics tools, Eclipse applications, U-Boot porting, Linux, Green Hills INTEGRITY, and VxWorks BSPs and applications can extend your engineering team and shrink your time to market.
- Contact Embedded Planet to find out how our Professional Services Division can accelerate your project.

This material is the copyright of Embedded Planet 1997-2006. Embedded Planet is a registered Trademark. Other company and product names may be trademarks of their respective owners. Product specifications subject to change without notice.

Contact Embedded Planet sales:  
[www.embeddedplanet.com](http://www.embeddedplanet.com) or  
 email [info@embeddedplanet.com](mailto:info@embeddedplanet.com)  
 phone (216) 245-4180