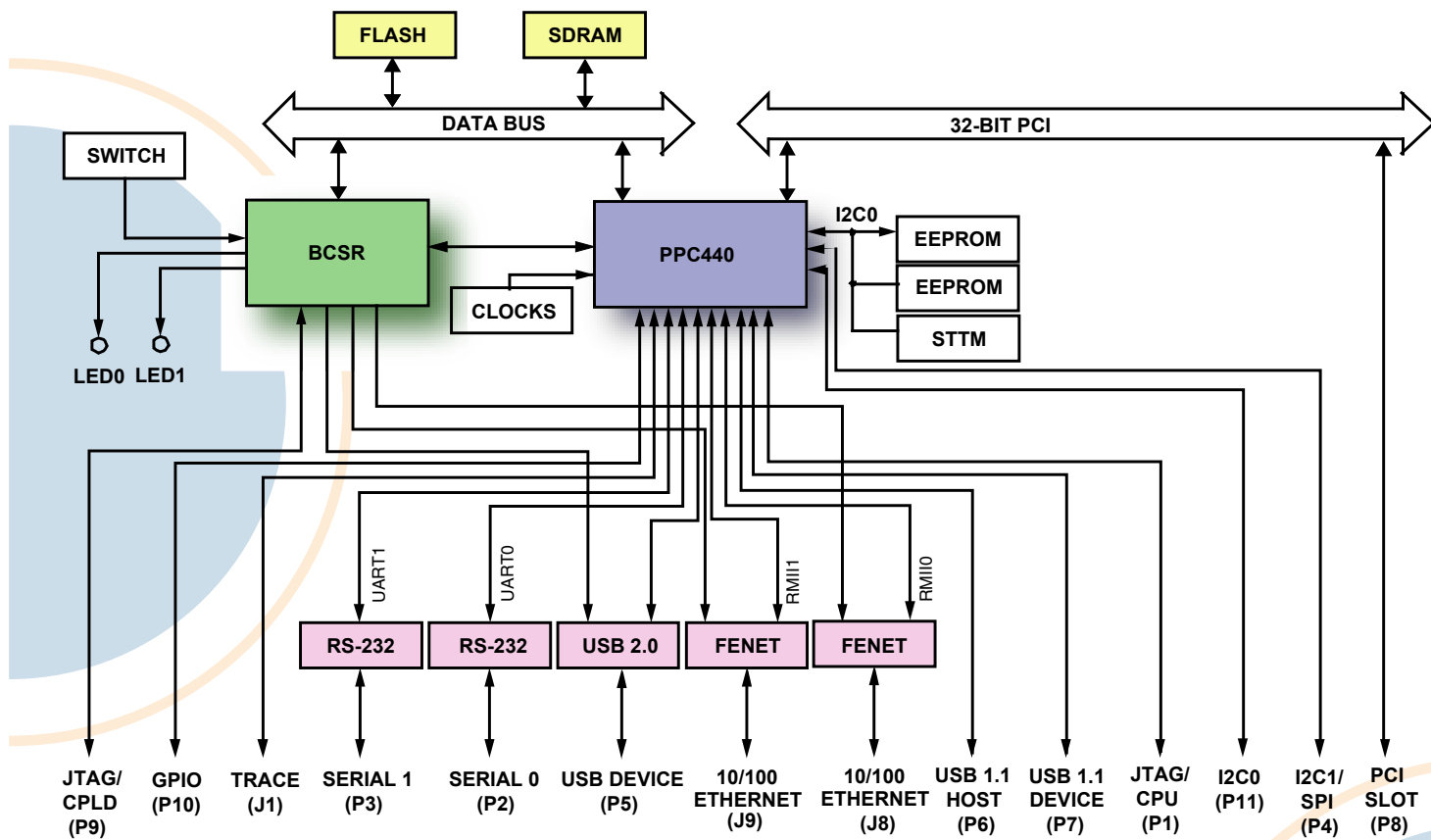# EMBEDDED PLANET

EP440C
AMCC PowerPC

The EP440C single board computer is a flexible and capable development system for the AMCC PowerPC 440EP and 440GR processors. The EP440C board enables rapid prototyping and development of vertical solutions by combining the power of the AMCC PowerPC 440EP and 440GR processors with numerous expansion and debug options. It includes a PCI slot, serial, USB, and Ethernet interfaces for rapid prototyping of systems using standard peripheral components. In addition a full suite of software including a bootloader, flash programmer, and several operating systems ensures that building a system will be greatly simplified.

The AMCC 440EP and 440GR processors are highly integrated, powerful, and low power PowerPC cores. The 440EP runs at speeds up to 533MHz, while the 440GR can go as high as 667MHz and both include double precision floating point units, DDR memory interfaces, and integrated Ethernet, USB, UART, I2C, SPI, and PCI interfaces. The combination of high performance, integrated peripherals, and low power consumption make the AMCC 440EP and 440GR ideal for embedded industrial, medical, and networking applications
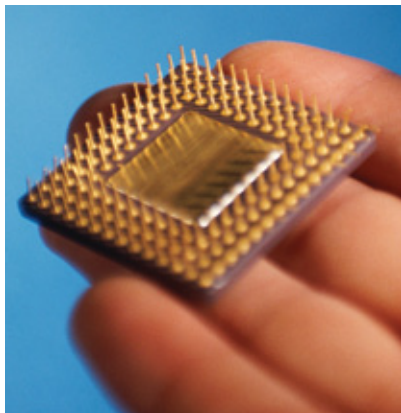
Feature Summary:

Specification:	Description:
Processor:	AMCC PowerPC 440EP up to 533MHz or 440GR up to 667MHz
Memory:	RAM: 256MB DDR RAM FLASH: 64MB NVRAM: Up to 512kB with Real Time Clock
Ethernet:	2 x 10/100
Serial Ports:	2 x RS-232
USB:	USB 2.0 Device, USB 1.1 Host with 440EP processor
Expansion:	PCI slot, I2C/SPI header
I2C Devices:	Serial EEPROM, Temperature Sensor
Debug:	JTAG and RISCTrace with Mictor Connector for Green Hills Super Trace Probe
Power Supply:	5V Wall Cube
Form Factor:	5(in) x 7(in)

EMBEDDED PLANET

Hardware Block Diagram

FLASH

SDRAM

DATA BUS

32-BIT PCI

SWITCH

BCSR

PPC440

I2C0

EEPROM

EEPROM

STTM

CLOCKS

LED0 LED1

UART1

UART0

RMII1

RMII0

RS-232

RS-232

USB 2.0

FENET

FENET

| JTAG/ CPLD (P9) | GPIO (P10) | TRACE (J1) | SERIAL 1 (P3) | SERIAL 0 (P2) | USB DEVICE (P5) | 10/100 ETHERNET (J9) | 10/100 ETHERNET (J8) | USB 1.1 HOST (P6) | USB 1.1 DEVICE (P7) | JTAG/ CPU (P1) | I2C0 (P11) | I2C1/ SPI (P4) | PCI SLOT (P8) |

Let Us Do The Heavy Lifting

- 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.