EMBEDDED PLANET

EP88xC
Power Architecture Processor PC/104

The EP885C uses the newest generation of Freescale's PowerQUICC I family, MPC885 and MPC880, to create a full featured PC/104 mechanical CPU module.

The MPC885 and MPC880 processors feature an integrated PowerPC core and Communications Processor Module (CPM) to provide a scalable computing solution for networked devices. The PowePC core can run at speeds of 133MHz and provide general purpose control and computing functionality, while the dedicated CPM offloads communications functions such as USB, Fast Ethernet, HDLC, and ATM. In addition the MPC885 includes an integrated security engine to accelerate processing of encryption protocols such as AES, DES/3DES, and SHA/MD5/HMAC.
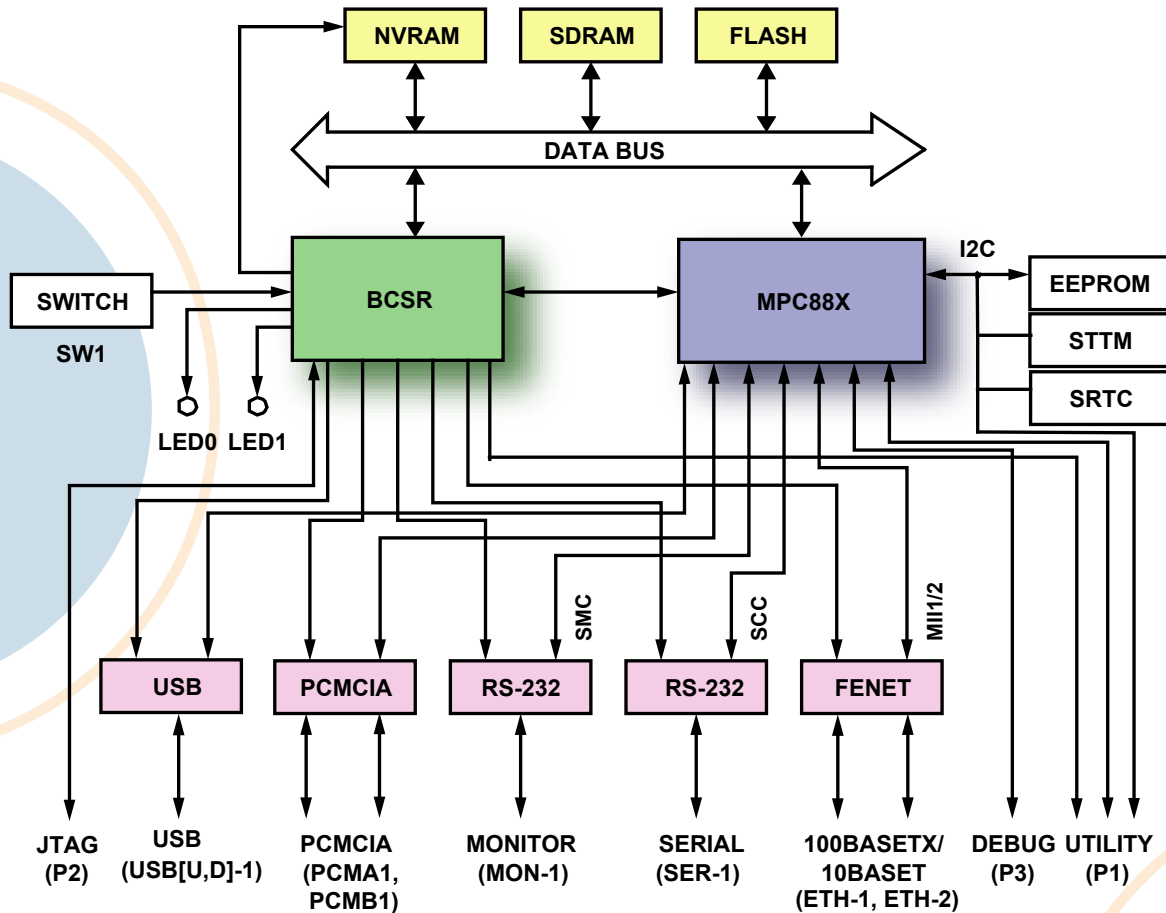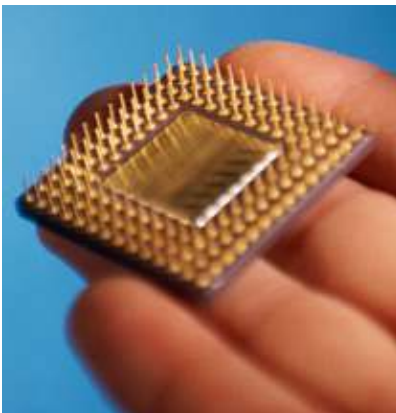
The processor expansion bus on the EP885 brings all of the processor signals to standard connectors allowing you simple and full access to the power of the processor. Like all Embedded Planet products, the EP885C can be custom configured to meet your requirements and is volume production ready.

For a smaller form factor single board computer featuring the MPC885 and MPC880 see the Credit Card Sized EP88xS.

Feature Summary:

Specification:	Description:
Form Factor:	PC/104 Mechanical (90mm x 96mm)
Expansion:	EPX Bus for direct access to processor signals
Ports:	Two 10/100 Ethernet Two RS-232 Serial Ports
Processor:	Freescale PowerQUICC I MPC885 or MPC880
Memory:	RAM: Up to 128MB FLASH: Up to 64MB NVRAM: Up to 512KB
Debug:	JTAG/COP via an onboard connector
Power Supply:	5.25 to 3 VDC single supply
Software:	PlanetCore firmware is provided with each module and includes a Bootloader, Flash Burner, and Diagnostics

Hardware Block Diagram

NVRAM   SDRAM   FLASH

DATA BUS

SWITCH
SW1

BCSR

MPC88X

I2C

EEPROM

STTM

SRTC

LED0   LED1

SMC   SCC   MII1/2

USB   PCMCIA   RS-232   RS-232   FENET

JTAG
(P2)

USB
(USB[U,D]-1)

PCMCIA
(PCMA1,
PCMB1)

MONITOR
(MON-1)

SERIAL
(SER-1)

100BASETX/
10BASET
(ETH-1, ETH-2)

DEBUG
(P3)

UTILITY
(P1)

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.