

A Complete Development Platform

Based on the AMCC (IBM) 32-bit PowerPC 405GPr RISC processor, TAMS MOAB Embeddable Single Board Computer offers an OEM platform for software development and integration into custom equipment.

Interfaces available at the backplate:

- USB 1.0/1.1/2.0 host controller, high speed
- 10/100 MHz Ethertwist with autosensing (x2)
- RS-232 port, 8 pin male
- Soft Reset switch

Interfaces available elsewhere on the board:

- PCI 2.2 at the card edge connector
- RS-232 port, 4 lines at a 10 pin header
- 2 USB 1.0/1.1/2.0 at a header (10 pin)
- RiscTrace and RiscWatch via two headers.
- External power connector
- IIC bus available via a header
- 3 uncommitted GPIO bits available

Ethernet Implementation:

- 2 10/100 Ethertwist interfaces
- Both connections on PCI backplate, RJ-45.

Memory:

- 512 KB bootrom, protected from accidental erasure by hardware jumper.
- 128 MB NAND flash.
- EEPROM 4 KB for configuration parameters.
- 64 MB SDRAM, 133 MHz.

Software Provided:

- RedBoot provided in bootrom as boot code.
- 2.4 and 2.6 Linux ports
- Cross-compile environment eases software development effort.



Other facilities on the board:

- **IBM PPC 405GPr 400 MHz processor.**
- 512 KB x 8 bootrom (flash technology)
- 128 MB x 8 flash main NV storage
- 64 MB SDRAM (32 bits wide)
- RTC with replaceable lithium battery
- Mounting holes for mounting in other than a PCI cage.

PCI Implementation:

- 33 MHz, 32 bits, 3.3/5 volt universal keying.
- Useable with PICMG style passive backplane.
- Supports up to four external cards, with bus master capability.
- USB and secondary LAN chip on common PCI bus.

USB Implementation:

- 3 physical ports, 3 shared controllers
- 1 EHCI, 2 OHCI controllers. . 5 amp current sourcing capability per port. Common 10-pin header for the two internal ports.

RS-232 Implementation:

- 8 wire interface on 9-pin male connector at PCI backplate, 4 wire interface on 10-pin header.
- NS16550 compatible interface.

