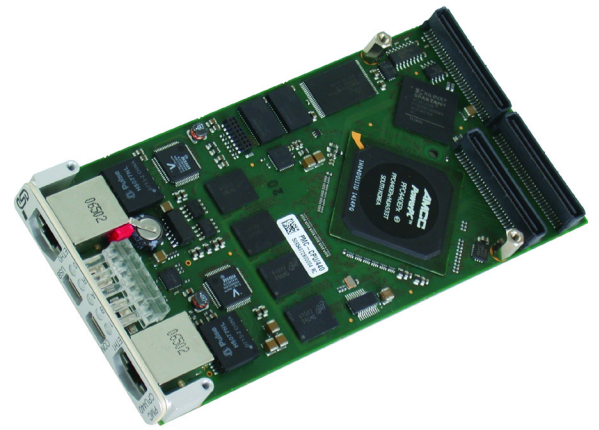




# PMC-CPU/440

## PowerPC™ PrPMC Module w/Gigabit Ethernet, USB & CAN

- PowerPC™ AMCC PPC440EPx
- 2x 1000BaseT Ethernet
- 2...4x CAN interface, TTL-level signals
- 1x RS-232 access via PMC-I/O connector
- 1x serial console via USB
- 1x USB 2.0 High Speed Interface, host or device
- 1x IRIG-B time code interface



PMC-CPU/440

### PMC PowerPC™ Board

The PMC-CPU/440 is a PCI Mezzanine Card that automatically switches to monarch (PrPMC) or non-monarch mode according to the system's requirements. The PowerPC™ AMCC PPC440EPx with 533 MHz or 667 MHz enables a performance of 1334 DMIPS peak, is equipped with at least 256 Mbyte DDR2 RAM and 256 Mbyte NAND Flash, and offers system time support by RTC (with double layer capacitor) or IRIG-B. For CAN bus synchronization tasks, a high-resolution CAN hardware timestamp is supported.

### Connectivity

The PMC-CPU/440 comes with two Gigabit Ethernet interfaces that are accessible as 1000BaseT via RJ45 connectors at the front panel. The PMC-CPU/440 provides 2...4 CAN interfaces controlled by an FPGA IP-Module. The CAN signals are available as TTL only via PMC connector. External converters from CAN-TTL to CANISO11898 are available. All CAN interfaces allow data transfer rates of 1 Mbit/s. An RS-232 serial port is available via the PMC-I/O connector, too. One USB 2.0 interface (host or device) is available at the front panel.

For further information please visit  
<http://www.esd-electronics-usa.com/PMC.html>

### Software Support

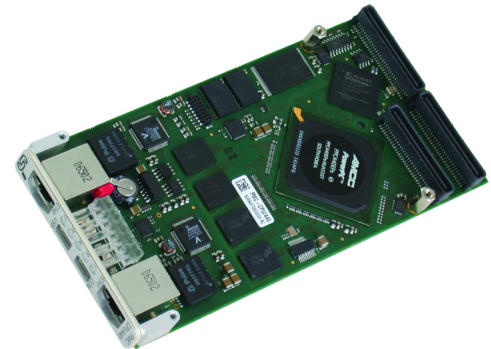
The flash memory carries the open source firmware 'U-Boot' that enables the PMC-CPU/440 to boot various operating systems from network or on-board Flash, directly and fully supporting Linux, VxWorks (5.5 and 6.3), OS/9 and QNX on-board drivers, as well as supporting higher layer protocols like CANopen and DeviceNet.

growing with the  
challenge

# PMC-CPU/440

## PowerPCTM PrPMC Module w/Gigabit Ethernet, USB & CAN

- PowerPCTM AMCC PPC440EPx
- 2x 1000BaseT Ethernet
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- 1x RS-232 access via PMC-I/O connector
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- 1x USB 2.0 High Speed Interface, host or device
- 1x IRIG-B time code interface



PMC-CPU/440

For further information please visit  
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### Technical Specifications

PMC interface and microprocessor	
Microprocessor	AMCC PPC440EPx, 533/667 MHz, 32 bit
Memory	>256 Mbyte DDR2 RAM, >256 Mbyte NAND flash, >4 Mbyte NOR flash
RTC	EPSON RX8025, backup by double layer capacitor
PCI	PCI 2.2, 32 bit 33/66 MHz, signal voltage 3.3 V only, PrPMC acc. to Vita 32, monarch/non-monarch
Interfaces	
Ethernet	2x 1000BaseT, IEEE802.3, RJ45-connector
USB	USB 2.0 host or device interface at front panel
Serial	1x serial console via local USB/serial converter, 1x RS-232 at PMC-I/O connector Pn4 (4-pin)
CAN	2...4x CAN, controller FPGA IP module, ISO11898-1 (CAN 2.0), TTL-level signals, 1 Mbit/s, high resolution CAN-hardware timestamp (FPGA), PMC-connector
IRIG-B	Digital differential physical layer, IRIG B100 time code format, decoding and time code generation

### General

Ambient temperature	0 ... 50° C (without forced convection)
Humidity	Max. 90%, non-condensing
Power supply	5 V, 3.3 V
Connectors	PMC-connector Pn4: CAN, serial, IRIG-B, I <sup>2</sup> C; Front panel 2x Mini-USB (console, host/device), 2x 1000BaseT

### Order information

Designation		order no.
PMC-CPU/440	PrPMC processor AMCC PPC440EPx 533 MHz, 256 MB RAM, 256 MBNAND Flash, 4 MB NOR Flash	V.2027.02
PIM-CPU/405	PIM I/O module (acc. to Vita 36) with 2x CAN ISO11898-2	V.2025.02
PMC-CPU/440-VxW	VxWorks BSP	V.2027.30
PMC-CPU/440-Linux	Linux BSP	V.2027.32
PMC-CPU/440-QNX	QNX BSP	V.2027.33
PMC-CPU/440-OS9	OS/9 BSP	V.2027.34



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