

Not recommended for new designs!

CPCI-CPU/5200

CompactPCI PowerPC with FPU, ETHERNET and CAN



esd gmbh

- PowerPC Motorola MPC5200 with FPU
- 10/100BaseT ETHERNET
- CAN & RS-232 interfaces
- CompactFlash slot on-board
- Low power consumption

CompactPCI PowerPC board

The CPCI-CPU/5200 is a CompactPCI board in 3U format. The Motorola PowerPC MPC5200 with 400 MHz enables a performance of up to 760 MIPS. With the internal FPU the board is well prepared for closed loop control applications.

The board is equipped with up to 128 Mbyte SDRAM and 32 Mbyte Flash and a CompactFlash slot to carry various memory cards. A non-volatile NVRAM enables the CPCI-CPU/5200 to save valuable process variables during power off sequences.

A local RTC with battery backup offers real time date and time.

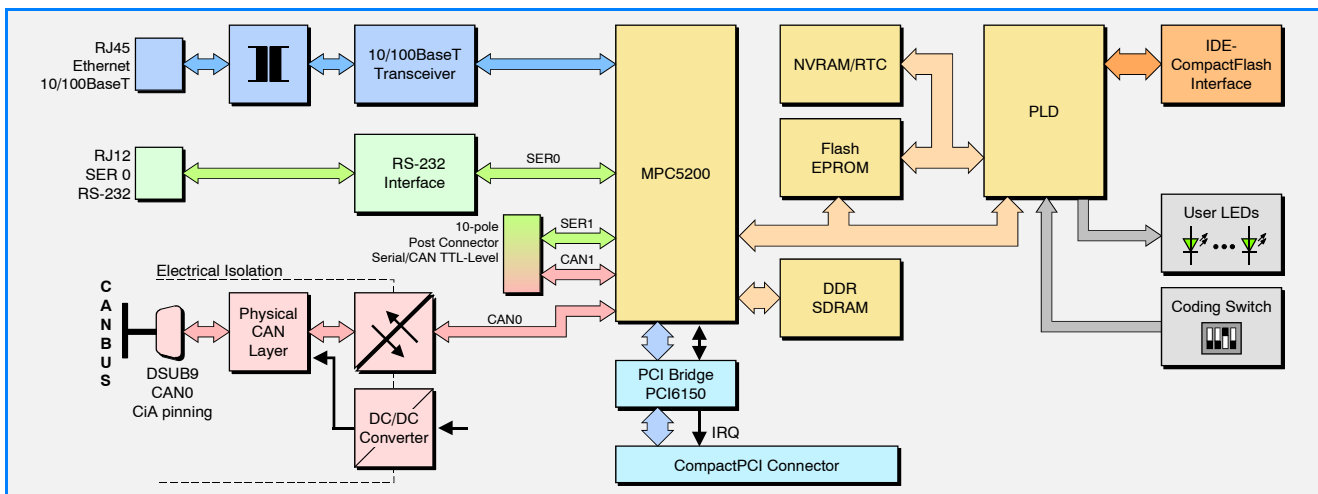
Network Interfaces

The CPCI-CPU/5200 comes with an ETHERNET interface for 10/100 Mbit/s nets that is accessible via a RJ45 connector in the front panel. The ISO11898 compatible CAN interface CAN0 is accessible via a DSUB9 connector in the front panel. The CAN interface is electrically isolated and supports bit rates up to 1 Mbit/s. The serial interface SER0 with RS-232 transceiver can be connected via a RJ12 connector in the front panel. Additionally a second CAN and a second serial interface (CAN1/SER1) are accessible via a 10-pole post connector. These interfaces have TTL-level signals only and can be adapted easily with add-ons for physical layers (please order CPCI-CAN-ISO-11898).



Software Support

The flash memory carries the standard 'U-Boot' program that enables the CPCI-CPU/5200 to boot various operating systems from network, on-board Flash or CompactFlash. Thus Linux and VxWorks are directly supported with full support of on-board drivers by esd, others on request. There is also a bunch of higher layer protocols like CANopen, DeviceNet as well as an on-board web server available.



Technical Specifications:

CompactPCI interface and microcontroller:	
Microcontroller:	Motorola MPC5200, 400 MHz, 760 MIPS
Memory equipped:	from 8 M x 32 bit SDRAM (32 MB), up to 32 M x 32 bit SDRAM (128 MB), 32 M Flash EPROM, 32 KB NVRAM
Interfaces:	
ETHERNET:	10/100BaseT, IEEE802.3, RJ45-connector
Serial:	1x RS-232 at RJ12, 1x TTL-level at 10-pole post-connector
CAN:	CAN 2.0A/B, 1 Mbit/s, 1x electrically isolated ISO11898 at 9-pole DSUB, 1x TTL level at 10-pole post-connector
CompactFlash:	type I cards, true IDE mode

General:		
Ambient temp.:	0...50 °C	
Humidity:	max. 90 %, non-condensing	
Power supply:	5 V, 3.3 V	
Connectors:	CAN:	9-pole DSUB (male)
	Serial:	RJ12
	10/100BaseT:	RJ45
Order information:		
Designation		order no.
CPCI-CPU/5200	PowerPC MPC5200, 400 MHz 128 MB SDRAM, 32 MB Flash	1.2404.02
CPCI-CPU/5200-VxW	VxWorks BSP/adaption	1.2404.30
CPCI-CPU/5200-Linux	Linux BSP/adaption	1.2404.32
CPCI-CAN-ISO-11898	CAN and RS-232 adapter, 3 U / 4 HP front panel	1.2301.03