TCP8300 PowerPC based 4 Slot IndustryPack Carrier (cPCI)

Application Information

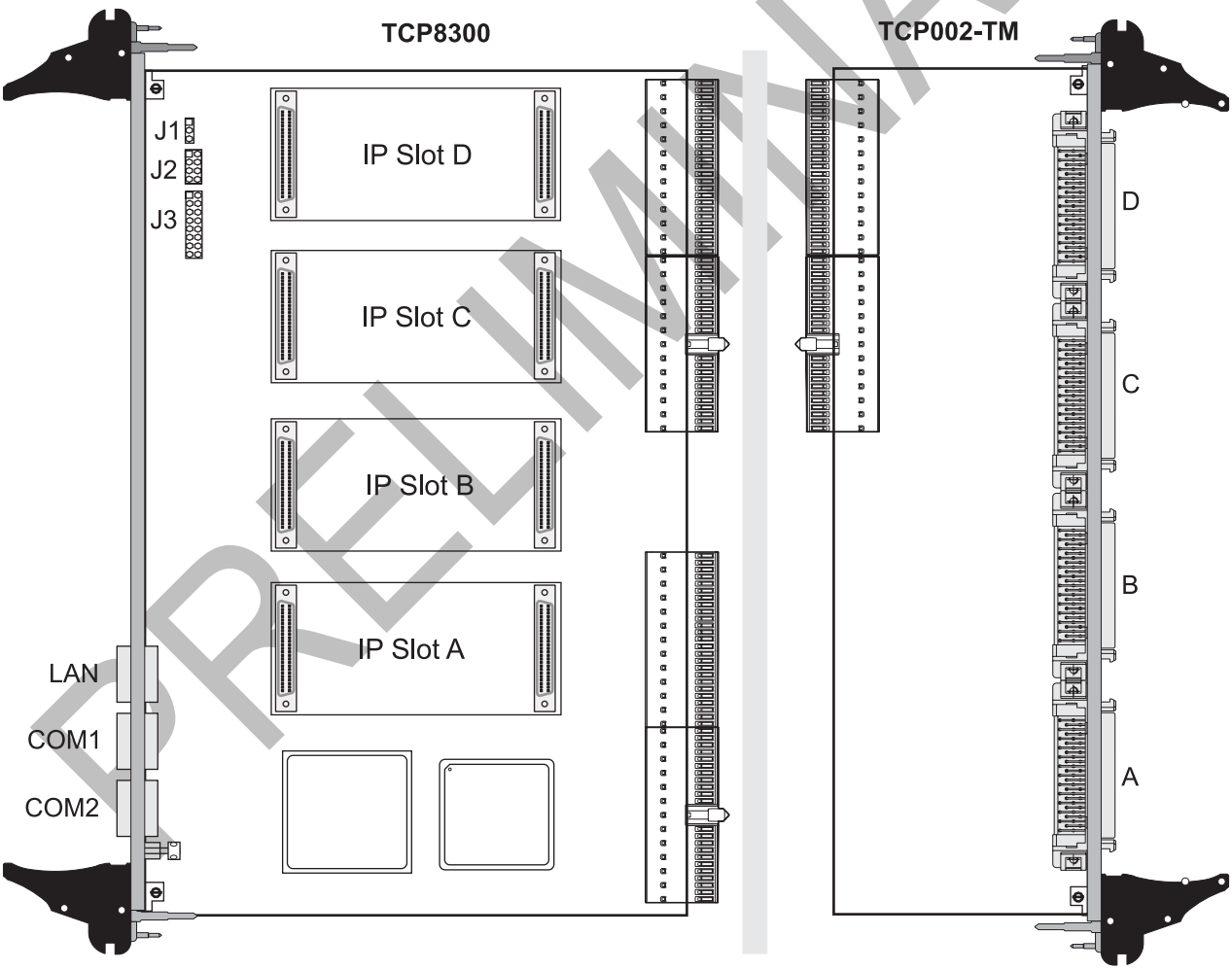
The TCP8300 is a 6U cPCI IndustryPack carrier board featuring the highly integrated MPC8245 Power PC microprocessor including a G2 MPC603e CPU core, a powerful memory controller plus a flexible interrupt controller. The MPC8245 processor directly connects to the TCP8300 on board PCI bus.

The TCP8300 provides four single or two double IndustryPack® (IP) slots (16 bit, 8/32 MHz) with cPCI J4/J5 backplane I/O according to PICMIG 2.4 (IP on CompactPCI).

Along with the TCP001-TM or TCP002-TM rear I/O transition module the TCP8300 provides a complete IP rear I/O solution for cPCI systems.

Other on board resources are : a 10/100 Mb/s Ethernet port (front panel access), 1 + 8 MB Flash memory, 64 MB System Memory, 8 KB NVRAM/RTC plus two asynchronous serial ports (front panel access).

The TCP8300 uses the PLX PCI6254 Universal PCI Bridge at the cPCI interface and supports system slot (cPCI Monarch) and peripheral slot operation (auto mode detection).



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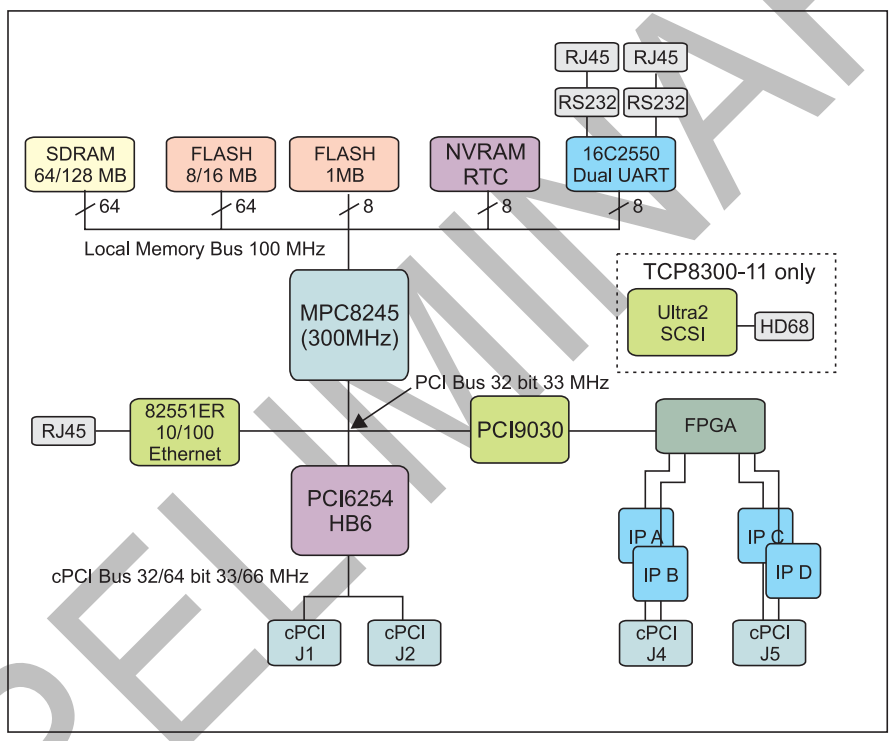
Technical Information

- Freescale MPC8245 CPU, 300 MHz PowerPC G2 Core, 16 KB / 16 KB L1-Cache, timers
- Intel 82551ER Fast Ethernet Controller, 10/100 Mb/s Ethernet Interface, RJ45 front I/O
- PLX PCI6254 Universal PCI-PCI Bridge as CompactPCI interface, System Slot and Peripheral Slot support
- Four single (two double) IP slots (16 bit, 8/32 MHz). CPCI J4/J5 rear I/O (according to PICMG 2.4)
- 64 MB SDRAM (64 bit, 100 MHz) (ask for 128 MB SDRAM)
- 8 MB Flash Memory (64 bit) (ask for 16 MB Flash Memory)
- Two 32-pin PLCC sockets for up to 1 MB firmware Flash memory
- 8 KB NVRAM/RTC (exchangeable battery)
- Two asynchronous RS232 ports with RJ45 front I/O
- On board PMON debug monitor
- IEEE1101 Handles



Block Diagram TCP8300-10

The combination of the MPC8245 processor and the IP slots provides a powerful CPU and a modular I/O solution for applications in process control, telecommunication, medical systems and traffic control.

Software support for the TCP8300 CPU board is available for VxWorks, Linux and LynxOS.

A PMON Bug Monitor is installed on the TCP8300.

For First-Time-Buyers the Engineering Documentation TCP8300-ED is recommended. The Engineering Documentation includes user manual, schematic, assembly drawing and data sheets.

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Order Information

TCP8300-10	MPC8245-300 MHz, 64 MB SDRAM, 1 + 8 MB Flash, Fast Ethernet, 4 IndustryPack slots with J4/J5 backplane I/O, IEEE1101 Handles
TCP8300-11	MPC8245-300 MHz, 64 MB SDRAM, 1 + 8 MB Flash, Fast Ethernet, Ultra2 SCSI, 4 IndustryPack slots with J4/J5 backplane I/O, IEEE1101 Handles
TCP8300-DOC	User Manual, includes documentation for PMON Bug Monitor
TCP8300-ED	Engineering Documentation (TVME8300-DOC; Schematics; Assembly Drawing; Data sheets)
TCP001-TM-10	Transition Module for 6U cPCI IP Carrier, RJ4/RJ5 to four 50 pin ribbon cable connectors, no front panel
TCP002-TM-10	Transition Module for 6U cPCI IP Carrier, RJ4/RJ5 to four HD-50 SCSI-2 type connectors, EMI front panel
TCP8300-SW-40	VxWorks Board Support Package
TCP8300-SW-70	LynxOS Board Support Package
TBSP001-SW-80	Linux Board Support Package
CARRIER-SW-42	VxWorks IP Carrier Software Support
CARRIER-SW-62	Windows NT 4.0 IP Carrier Software Support
CARRIER-SW-65	Windows XP/2000 IP Carrier Software Support
CARRIER-SW-72	LynxOS IP Carrier Software Support
CARRIER-SW-82	Linux IP Carrier Software Support
CARRIER-SW-95	QNX 6 IP Carrier Software Support

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