VRM-PMC-8280-4E1/T1/J1

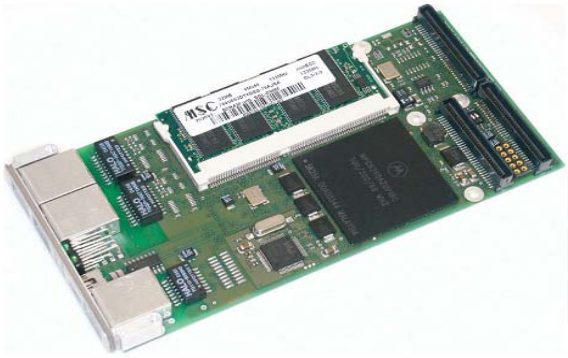
Product Datasheet

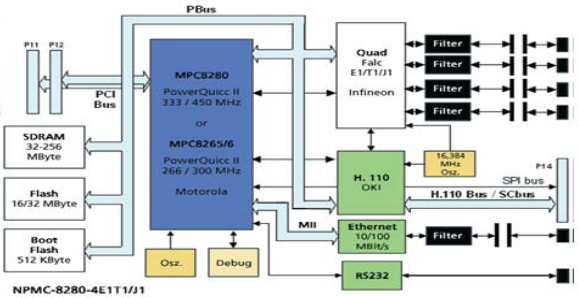
Overview:

The **VRM-PMC-8280-4E1/T1/J1** is a high-performance PMC module, based on the Motorola versatile MPC8280 "Power Quicc II" processor. It supports four E1/T1/J1 ports, a 100BaseT Ethernet port using standard RJ45 connector and a RS232 on a SUBD connector on the front panel. Equipped with an H.110 TDM bus controller and due to the CPU providing up to 855 MIPS, the **VRM-PMC-8280-4E1/T1/J1** is optimized for use in sophisticated telecom applications in SS7, ISDN, ATM or VoP environments.

The **VRM-PMC-8280-4E1/T1/J1** is a P1386.1/Draft 2.0 compatible PMC module that can be plugged onto any VME, cPCI or other carrier board offering a PMC extension slot. Using the on-chip PCI bridge of the MPC8280, this PMC is PCI Rev. 2.2 compatible. The MPC8280 PowerQUICC II processor provides computing resources up to 855MIPS (450MHz). For less demanding applications, the MPC8280 can be replaced by the pin-compatible MPC8265. The four primary rateline interfaces (E1/T1/J1) are driven using Infineon PEB22554 "Quad Falc" framer, and are available on two standard RJ-45 connectors on the front panel. In addition to the four E1/T1 lines, the **VRM-PMC-8280-4E1/T1/J1** offers a RS232 serial interface on a mini SUB-D connector and a 10/100 Megabit/sec (10/100BASET) Ethernet interface on a RJ45 connector to be used with a standard CAT5 UTP cable. Thus the **VRM-PMC-8280-4E1/T1/J1** is the generic platform for any implementation switching between the classic TDM streams as on E1/T1/J1 and the new generation of packetized data applications running on Ethernet. Moreover, the 100BaseT port can serve as a configuration and management port (ie. For SNMP). The onboard OKI CT812 H.110 bus controller offers access to the H.110 TDM bus and its SC Bus subset on the PMC P14 multi-purpose I/O connector.

Equipped with up to 256MB SDRAM and either 16 or 32MB onboard erasable Flash-Memory, the **VRM-PMC-8280-4E1/T1/J1** is optimized to meet the performance andmemory requirements of state of the art communication protocols and applications. Communication protocols like SS7,ISDN, etc., are available as binary firmware images as well as operating system independent source code licenses. By default, these firmware protocols run on the well proven V Rose real-time kernel OK-1, which is optionally available in source code. Also, available are BSP's for other operating systems such as VxWorks or Linux. Enhanced software development and effective debugging is supported by the onboard BDM/JTAG interface.





Features:

CPU: Motorola MPC8280 "PowerQuicc II" at 333MHz or 450 MHz.
PCI Interface and Compliance: MPC8280 on-chip PCI Bridge, 32bit/33MHz, PCI Rev. 2.2
H.110 Bus: OKI CT812, H.110 on PMC P14 connector
DRAM: 256MB SDRAM (PC-100, 64 bit) installed in a SODIMM slot
Flash PROM: 16 or 32MB Flash PROM (32bit)
Line Interface: Four primary rate E1/T1/J1 lines (1.431) on standard RJ45 connectors on the front panel supplied by Infineon PEB22554 "QuadFalc".
Serial I/O: RS232 compatible on front panel
Networking: 100BaseT Ethernet (IEEE 802.3) on standard RJ45 connector on the front panel
Indicator LEDs: 6 software programmable LEDs and 2 systems status indicator LEDs on the front panel
Operating System Support and Firmware: OK-1, VxWorks, LINUXSS7, ISDN and others
Power Consumption: 3.3V 0.85A typ., 5V 0.55A typ
Environmentals:
Temperature (operating): 0ºC to +60ºC with forced air cooling
Temperature (storage): -40º to +85ºC
Relative Humidity: 10% to 90% at +55ºC (non-condensing)
Standard Compliance: P1386 and P1386.1/ Draft 2.0.

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