



VRM-PMC-860-4SO

Product Datasheet

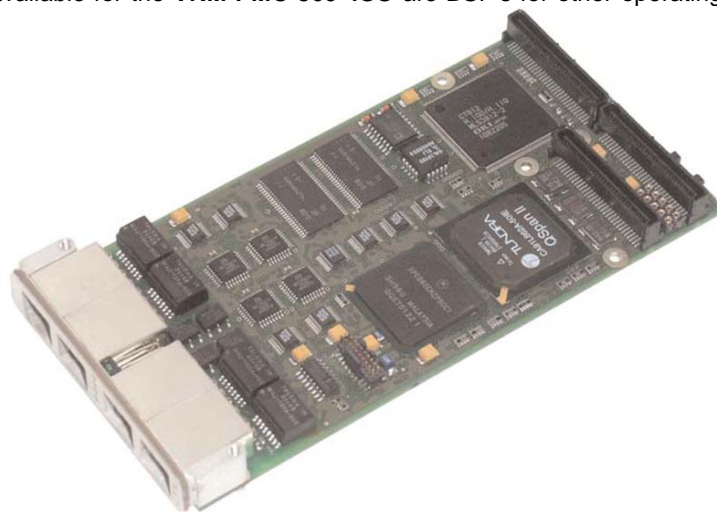
Overview:

The **VRM-PMC-860-4SO** is a telecommunications interface board in PMC (PCI mezzanine card) form factor. Based on the Motorola MPC860 "PowerQUICC" CPU, the **VRM-PMC-860-4SO** is targeted at telecom applications using Basic Rate ISDN interfaces. Equipped with the onboard SCbus, the **VRM-PMC-860-4SO** provides an ideal and cost-effective interface for use in the VME, PCI, CompactPCI and proprietary environments.

The **VRM-PMC-860-4SO** is a P1386.1/Draft 2.4 compatible PMC module that can be plugged onto any VME, cPCI or other carrier board offering a PMC extension slot. Using the Tundra QSPAN II PCI-to-QBUS bridge, the **VRM-PMC-860-4SO** is PCI Rev 2.2 compatible and capable of running in 32 bit PCI architectures. The Embedded PowerPC based PowerQUICC MPC860 processor at 50MHz (optional 66 or 80MHz) provides the capability of processing user data as well as signaling information.

The four BRI S/T (SO) line interfaces are driven using the Motorola MC145574 ISDN S/T-interface Transceiver and are available on four standard RJ45 connectors on the front panel. The four framers can be individually configured to work as a user or network side interface. The line interfaces can be operated in either Point-To-Point or Point-to-Multipoint mode. The **VRM-PMC-860-4SO** is equipped with 4 or 16MB 32-bit DRAM and 2 or 4MB 8-bit on-board programmable Flash. The **VRM-PMC-860-4SO** is equipped with an OKI CT812 H.110 controller, providing the SCbus on the PMC P14 I/O connector. Thus, the CT812 can switch any timeslot to and from any of the line interfaces for either CPU or SCbus access, or even just between the line interfaces.

Communications protocols like ISDN, X.25, X.31 are available as binary firmware images as well as operating system independent source code licenses. By default, these firmware protocols run on the real time kernel OK-1 which is optionally available in source code. Also available for the **VRM-PMC-860-4SO** are BSP's for other operating systems such as VxWorks and LINUX.



Features:

CPU: Motorola MPC860 "PowerQUICC" at 50/66/80MHz

PCI Interface and Compliance: QSPAN II PCI to QBUS Bridge (33 MHz, 32bit), PCI Rev 2.2

SCbus: OKI CT812, SCbus on PMC P14 connector

DRAM: 4 or 16MB 32-bit EDO DRAM

Fast SRAM (opt): 512KB or 1MB 32-bit SRAM

Flash: 2 or 4MB 8-bit Flash, on-board programmable

Line Interface: 4 BRI S/T (SO) line interfaces on standard RJ45 connectors on the front panel supplied by Motorola MC145574

Serial I/O: RS-232 compatible

Operating System Support and Firmware: OK-1, VxWorks, LINUX, ISDN, SS7

Power Consumption: 3.3V 0.5A (typ.), 5.5V 0.8A (typ.)

Environmental:

Temperature (operating): 0°C to +50°C

Temperature (storage): -40°C to +85°C

Relative Humidity: 5% to 95% (non-condensing)

Standard Compliance: PCI Rev 2.2 P1386 and P1386.1/Draft 2.4a