

The Technobox SCSI/ETHERNET/RS232 Multifunction I/O Adapter provides a variety of industry-standard I/O interfaces on a single-wide PMC card.

A 53C810A-based 1-byte wide Single-Ended SCSI Narrow interface is available at the Rear I/O connector on the PMC. Active termination is provided on the PMC for the SCSI bus.

A DEC 21041-based Ethernet controller provides a 10 Mb/s 10BASE/5 (also known as the Attachment Unit Interface) for connection to Media Attachment Units (MAU) out the rear of the PMC. Also, the 10BASE/5 connection is converted to 10BASE/2 (Thinnet) by an on-board AUI-to-10BASE/2 coaxial interface. The 10BASE/2 connection is available at the PMC front panel via a standard BNC connector. The 10BASE/5 and 10BASE/2 connections are mutually-exclusive as controlled by software, and may not be active simultaneously.

The 21041 (Ethernet) and 53C810A (SCSI) controller are accessed from the PCI bus via a DEC 21152 PCI-to-PCI bridge. Once the bridge is initialized, the 21041 and 53C810 are transparently accessible from the host processor, enabling use of off-the-shelf drivers.

The Adapter also provides two RS232 Asynchronous Communication interfaces, based on the industry-standard 16550 UART. The full 9-pin RS232 interface per the de-facto Personal Computer standard is available out the PMC front panel using two "MicroD9" connectors. The MicroD9 connector (ITT Canon) is a small form factor D-Sub connector which is commonly used in VMEbus front panel applications. The 16550 UARTS are mapped into the 21041 Ethernet Controller's BIOS ROM space, and are accessed using programmed I/O instructions issued from the host processor. The Ethernet BIOS ROM is not supported in this implementation.

The Transmit Data (TXD) and Receive Data (RXD) lines for both RS232 ports are also connected to the PMC Rear I/O connector for access out the VMEbus P2 connector. In this mode, the front panel MicroD9 connectors are unused.

In a typical system configuration, the RS232 and 10BASE/2 connections are used out the front panel, while the SCSI Narrow connection is used at the VMEbus P2 connector. In this case, the SCSI peripheral device is connected via the P2 connector using a straightforward DIN ribbon-cable assembly.

When rear I/O access to the 10BASE/5 and RS232 ports in addition to the SCSI port is required, a transition module which adapts the VMEbus P2 to suitable rear-accessible standard connectors is required. In this configuration, the front panel connections for 10BASE/2 and RS232 may be left unused, or de-populated for cost reduction by special order. Please contact Technobox for your requirements.

Visible from the non-component side of this PMC are six LEDs which indicate SCSI and Ethernet status. SCSI TERMINATION POWER and SCSI activity LEDs are provided. Ethernet LINK PASS, Receive Data, and Transmit data LEDs are also supplied.





Product Summary

Technobox Part Number:	2305
Typical Power Dissipation:	TBD watts
Power Supplies Required:	+5, +12, -12
PCI Signaling Environment:	5 Volt or 3.3 Volt