

# Wide/Fast SCSI-2 Controller MIX Module



## Features

- ❑ 20 MB/sec data transfer rate
- ❑ FTL high level programming language
- ❑ Front panel input and output 'C40 comm ports
- ❑ Front panel full duplex RS-232-C serial port
- ❑ 256k x 32 dual-access SRAM
- ❑ 1k x 32 FIFO's expandable to 16k X 32
- ❑ Utilizes the NCR 53C770 intelligent SCSI-2 processor

## Ordering Information

Model	Description
4260	Wide/Fast SCSI-2 MIX module

## General Information

Model 4260 is a SCSI-2 controller for very high-speed data streaming, high-capacity memory buffering, and very fast communication to other SCSI subsystems. 16-bit wide or 8-bit narrow modes are supported, with peak transfer rate of 20 MB/sec.

Direct connection to low cost, high capacity disk drives is supported with software device drivers. Since all transfers take place locally over either the MIX bus or the front panel comm ports, full host bus bandwidth is maintained.

## Dual-Access Memory

A local 256k x 32 dual-access SRAM provides efficient and convenient staging for input and output data. The SRAM appears as a memory-mapped resource to any MIX bus master, including all Pentek MIX baseboards and 'C40 DSP processor MIX modules.

## 'C40 Comm Port Interfaces

Front panel 'C40 input and output comm port interfaces provide direct bidirectional links between the Model 4260 and Pentek 'C40 DSP boards or other 'C40 comm port peripherals such as A/D and D/A converters, digital receivers, TAXI adapters, and others. Data from these DSP boards or peripherals can be streamed directly to disk or tape.

## Serial Interface

A powerful 16C550A UART controls the RS-232-C communications port with a programmable baud rate generator covering all standard rates up to 38.4 kHz. A full complement of control and status registers supports control and interrupt modes for the SCSI processor and the serial interface.

## Support Software

Pentek's Model 4958 FTL File Transfer Language offers a file management system which supports SCSI devices, data acquisition, and signal analysis MIX subsystems. For more details on FTL, see Section 4. SPOX drivers for this controller are also available.

## Specifications

**Dual access SRAM:** 256k x 32 bits; access from MIX bus and SCSI processor; hardware arbitration with interleaved cycles

**SCSI-2 processor:** NCR 53C770 intelligent controller

**Processor section:** RISC type, SCSI high level languages and compiler

**DMA section:** 16-bit or 32-bit transfers, includes support for unaligned transfers; 50 MB/sec max. FIFO bursts

**SCSI-2 bus width:** 8 bits Narrow/Fast, 16 bits Wide/Fast

**SCSI-2 interface:** peak transfer rates of 10 MB/sec Narrow/Fast, 20 MB/sec Wide/Fast; transfer types: Long-Word Data Burst, Variable Burst Length, Variable Block Size, Scatter/Gather

**Input/Output FIFO:** 1k x 32 input and output FIFO's expandable to 16k x 32

**Serial interface:** 16C550A UART; RS-232-C levels; input lines SIN, RTS, DSR, RI; output lines SOUT, DTR, CTS, DCD; programmable baud rates to 38.4 kHz

**MIX interface:** 32-bit slave

**Memory map:** 256k x 32 R/W dual access SRAM, 8 x 32 SCSI registers, 1 x 16 R/W control registers, 1 x 8 R/O status registers, 8 x 8 R/W UART registers

**Power:** 1.0 A at +5 V, 0.05 A at +12 V, 0.05 A at -12 V from the MIX bus

## Block Diagram, Model 4260

