



General Information

Model 6223 is a VIM-2 module which attaches directly to VIM-compatible processor boards. Since the C6000 DSPs provide no native high-speed interprocessor communication facilities, Model 6223 is especially useful for linking processors to peripherals and to other processors in multiprocessing systems.

Each of the four front panel comm port connectors is directly compatible with the Texas Instruments C40 communication port (comm port). These comm ports are byte-serial communication links capable of delivering data at sustained rates of 15 MB/sec using standard flat ribbon cable. Front panel multipin connectors allow easy cabling and reconfiguration of data paths.

Two Model 6223's may be attached to VIM-compatible processor boards to provide eight comm ports, while nesting in the same VMEbus slot. Alternatively, the Model 6223 may be combined with another VIM-2 module to provide additional I/O functions.

Operation

Model 6223 contains two identical sections which are independently configurable. Each section provides two comm ports that can be configured as one input and one output (split mode), or one bidirectional and one not used (bidirectional mode). The comm port interface engine provides timing, handshaking and data packing for both input and output data transfers.

Four sequential comm port data bytes are packed and unpacked into 32-bit words compatible with the BI-FIFOs and processor data bus on VIM-compatible processor boards. The bidirectional FIFOs support data flow in either direction, depending on whether the input or output comm port is active.

Applications

This adapter allows many available comm port peripherals to be connected directly to the processors of VIM-compatible processor boards. Such peripherals include multichannel data acquisition systems, A/D and D/A converters, SCSI controllers, PCM telecom transceivers, TAXI adapters and high-capacity, high-speed memory buffers.

The comm ports may also be used to connect the C6000 to C40 DSP boards for heterogeneous DSP applications.

Features

- VIM-2 module for VIM-compatible processor boards
- Provides four front panel C40 comm ports configured as one input and one output comm port per processor
- Sustained data rates to 15 MB/sec
- Compatible with Pentek comm port DSP boards and I/O peripherals
- Expands to eight comm ports per slot with two 6223's
- Compatible with other VIM-2 modules to provide additional functions

Ordering Information

Model	Description
6223	Comm Port Adapter - VIM-2

