Features

- 16 KBytes data buffer
- Streamlined programming interface
- Configuration flexibility
- SCSI standard (ANSI X3.131) compatibility
- High-speed 16-bit control processor provides a high level of functionality to offload the host processor
- SCSI Protocol Controller performs the SCSI interface sequencing
- DMA data transfer under microprocessor control
- Maximum transfer rate between the target SCSI device and the VMEbus is approximately 1.5 MBytes per second
- Comprehensive self test

The Integrated Solutions VME-SCSI/U Universal Host Adapter channels and controls the flow of information between host computer memory and a variety of input/output devices that conform to the SCSI Common Command Set. This intelligent controller relieves the host CPU of direct communications with I/O devices and permits data processing to proceed concurrently with I/O operations. The controller offers a high level of functionality and provides support for the following embedded SCSI I/O devices: magnetic disks, optical disks, and tape drives. UNIX 4.3BSD drivers are available for interfacing magnetic disks to the VME-SCSI/U to facilitate system integration of the controller.
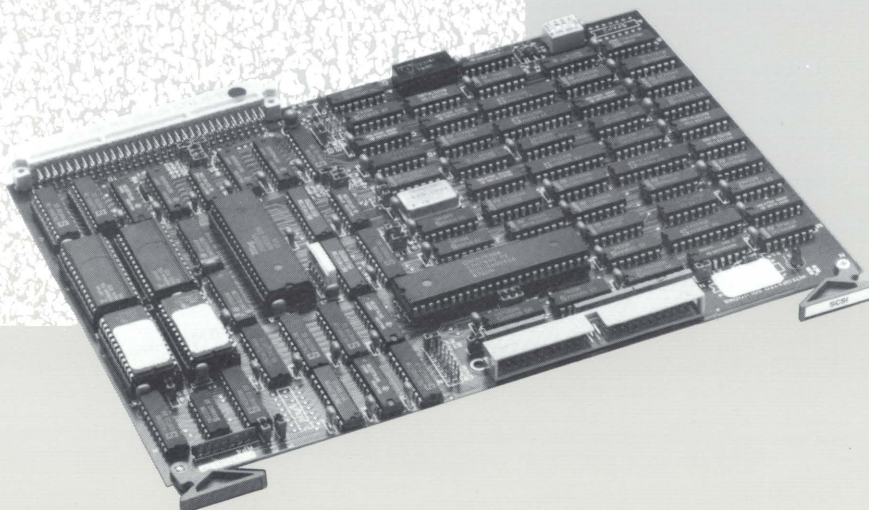
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Company

Configuration Flexibility

The VME-SCSI/U allows the host computer to interface to a variety of SCSI peripheral devices including optical disks, magnetic disks, and tape drives. These target devices can be a combination of different peripherals, up to seven target devices.

VMEbus Interface Logic

The VME-SCSI/U interfaces with the VMEbus as an A24/D16 master and an A24/D16 slave. One of four levels of interrupts are supported (jumper selectable). The VME bus interface logic on theVME-SCSI/U controller provides the capability to interface with the VMEbus specifications for the following VME-defined modules:

  Data Transfer Bus Requester at levels 0-3 (STAT)
  Data Transfer (DTB) Master
    A24/D16, D8
  Data Transfer Bus (DTB) Slave
    A24/D16, D8
  Interrupter
    One of IR(3-6) (STAT)

Data Buffer

All data is transferred between the peripheral devices and the VMEbus memory through the on-board 16 KByte buffer memory.

Control Processor

The high-speed 16-bit processor controls all communication across the VMEbus-host interface. It also establishes and monitors all operations to the SCSI interface using the SCSI protocol controller to control data transmission. Use of a 16-bit processor gives the VME-SCSI/U a high level of functionality independent of host processor intervention.

Diagnostic Indicators

The controller contains power-on self-test diagnostics which respond intelligently to a failed test—it flashes an on-board diagnostic LED indicating the type of failure detected.

Form Factor

The form factor for the VME-SCSI/U is a standard double-wide VME board, 160mm by 233.33mm.

Electrical Requirements

The maximum power requirements of the VME-SCSI/U are +5 volts DC @ 3.1 amps.

Environmental Requirements

Temperature:
  0 to 50 degrees centigrade (operating)
  -40 to 65 degrees centigrade (non-operating)
Humidity:
  10 to 85 percent (non-condensing)