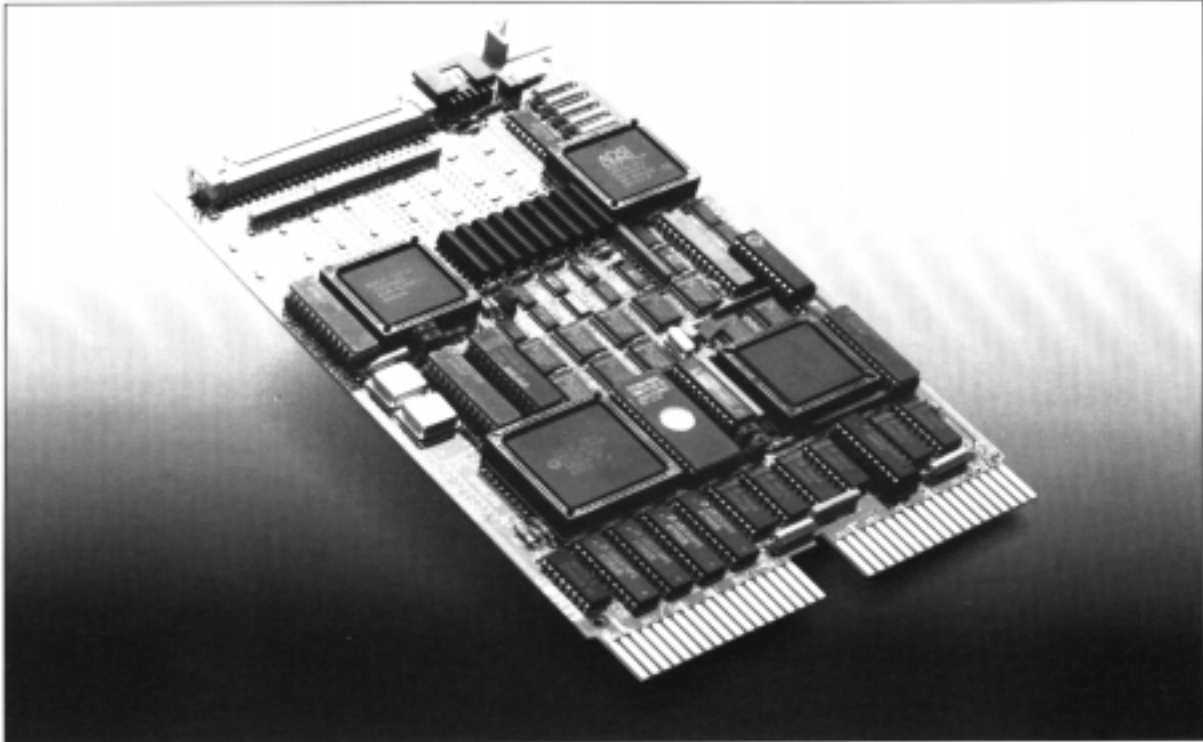


DLIDiverse
Logistics
Inc.

MODEL SQ739 and SQ749

**DUAL EMULATION SCSI HOST ADAPTER
DEC MicroVAX II/Q-BUS COMPATIBLE**

The dual height SQ739 and SQ749 are SCSI dual emulation host adapters which connect both disks (MSCP emulation) and magnetic tapes (TMSCP emulation) to DEC MicroVAX II, Micro PDP-11 or LSI-11 computers. The SQ739 connects single-ended devices to the computer; the SQ749 connects differential devices to the computer.

FEATURES

- Concurrent MSCP and TMSCP emulation (DU and MU driver compatible)
- VMS, ULTRIX, RT-11, RSTS, RSX-11M+, and DSM operating system compatible
- Supports either single-ended or differential interfaces
- SCSI-1 emulation: supports the SCSI Common Command Set
- 16-entry command queue
- Connect/Disconnect support
- Synchronous and asynchronous SCSI data transfer capability; synchronous transfer rates to 4.0 megabytes/second
- On-board utility routine in NOVRAM for formatting disk devices and running diagnostic options
- Block mode memory compatible
- Multiple-initiator support
- 22-bit addressing
- Reassignment of bad blocks

MODEL SQ739, SQ749 - Host Adapter Specifications

EMULATION

The DILOG Models SQ739 and SQ749 are dual emulation host adapters transparent to the MU and DU software drivers contained in VMS, ULTRIX, RT-11, RSTS, RSX-11M+, and DSM. Concurrent information transfers to/from tape and disk drives are implemented.

SCSI INTERFACE

The SQ739 contains a single-ended SCSI interface; the SQ749 contains a differential SCSI interface. The host adapters are compatible with ANSI SCSI spec X3T9.2/85-2 Rev 17B and disk common command set for sequential and direct access devices. Arbitration and connect/disconnect are supported. This allows the host adapters to perform overlap seek and read/write operations as well as concurrent disk/tape information transfers. This feature maximizes the data throughput rate on the SCSI bus when more than 1 drive is connected. Multiple initiator support is implemented.

SYNCHRONOUS/ASYNCHRONOUS TRANSFERS

The host adapters automatically configure themselves to match the data transfer mode (asynchronous or synchronous) of the attached drive(s). To maximize the throughput of the SCSI bus, the adapters will always try the synchronous mode first.

SCSI BUS TRANSFER RATES

The host adapters support data transfer rates up to 4.0 Mbytes per second in the synchronous mode and 2.0 Mbytes per second in the asynchronous mode.

NOVRAM (Non-Volatile Random Access Memory)

The host adapters contain a NOVRAM for storage of user-selected parameters, such as device address, vector address, dwell time, disk drive formatting, etc. The NOVRAM is accessed via either the system console or a terminal connected directly to an on-board DL compatible connector.

AUTOMATIC SELF-TEST

The host adapters contain an automatic self-test function that is run each time power is applied. Should self-test fail, the host adapters disallow any communication between the Host CPU and the drives, which protects critical data from being overwritten. The card edge self-test LED indicator will then flash a code signifying the type of error encountered.

USER BENEFITS

Disk and tape emulations on one board, increased data integrity, ease of user configuration, increased system performance, smaller size, reduced power, improved self-test diagnostics, and higher MTBF.

DOCUMENTATION

Each adapter is supplied with an installation and operations manual.

OPTIONS

Drive I/O cables, integration of customer supplied drives.

DRIVES SUPPORTED

The Models SQ739 and SQ749 comply with ANSI SCSI spec X3T9.2/85-2 Rev 17B and disk common command set for sequential and direct access devices, and spec X3T9.2/85-52 Rev 4B for direct access devices (SCSI-1). The adapters are compatible with tape and disk drives that are also compatible with these ANSI specifications, such as:

Magnetic Tape:

Cipher, Kennedy, Exabyte, Sony

Hard Disk:

Seagate, Fujitsu, Hitachi, Hewlett Packard, Iomega, IBM, Maxtor, Miniscribe, Western Digital, Siemens, Toshiba

HOST ADAPTER SPECIFICATIONS

The host adapters are completely contained on one dual height module 13.2 cm (5.22 in.) wide by 22.56 cm (8.88 in.) high and plug into one dual slot of the Q-bus backplane.

Base Addresses – Eight user-selected addresses per each emulation within the address range 160000-177774.

Interrupt Vector Addresses – Host programmable 0-774.

Priority Level – Factory set at BR4, user selectable BR5, 6, 7.

Address Range – Q-Bus memory to 4 Mbytes.

Number of SCSI Nodes Supported – Eight.

Number of Drives Nodes Supported – Seven.

Disk Drive I/O – ANSI SCSI spec X3T9.2/85-52 Rev 4B for Direct Access Devices

Tape Drive I/O – ANSI SCSI spec X3T9.2/85-2 Rev 17B for Sequential Access Devices.

Connector – A 50 pin ribbon cable type, mounted on outer edge of adapter module. Mate is 3M 3452-5000 or equivalent.

Power – +5 volts at 2.5 amps.

Environment – Operating temperature 50°F to 104°F, humidity 10% to 90% non-condensing.

Shipping Weight – 5 pounds, including documentation.

DLI

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