

# DILOG

Model DQ330

## 1/4" 3M CARTRIDGE MAGNETIC TAPE COUPLER DEC LSI-11 COMPATIBLE

### FEATURES

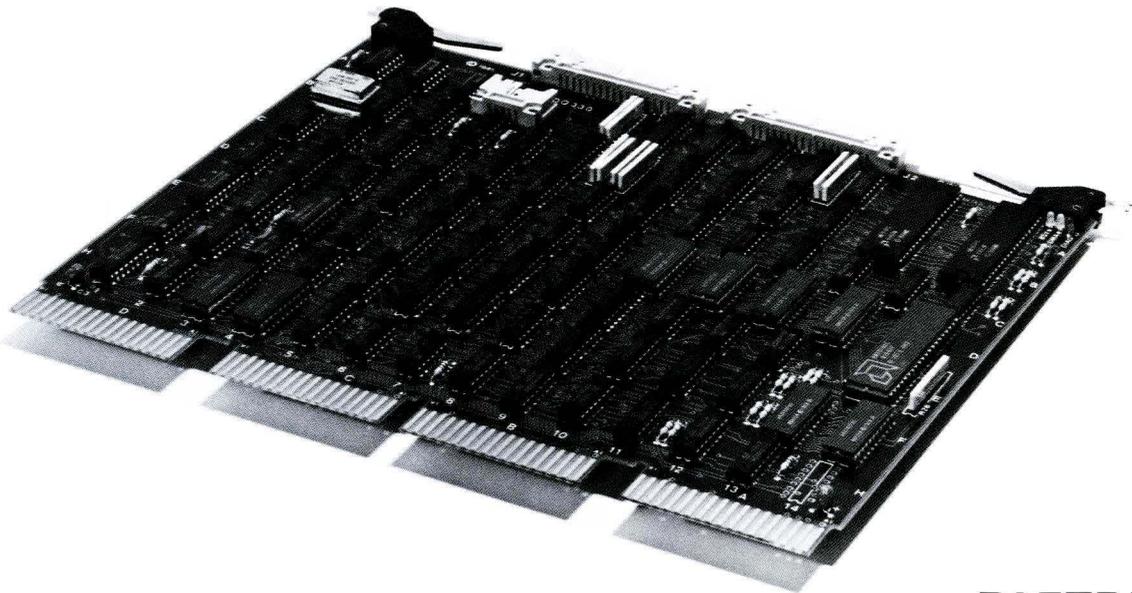
- Interfaces LSI-11, 11/2 and 11/23 computers to the Kennedy 6450 1/4" DC 300 type cartridge tape drive.
- Low cost microprocessor based intelligent coupler is completely contained on one quad size printed circuit module.
- Emulates DEC TM-11, TS-03 software drivers in RT-11 and RSX-11 operating systems.
- Controls up to two each Kennedy Model 6450 1/4" cartridge tape drives with read after write Serpentine Heads, with up to 17 megabytes of storage in a cartridge containing 450 feet of tape.
- FIFO buffer for DMA latency.
- Automatic self-test with status indicator.
- Transfers data via the DMA facility of the Q-BUS.
- Memory addressing capabilities to 128K words.
- On-board LED indicators provide visual display of coupler status.

### DESCRIPTION

The Distributed Logic Corporation (DILOG) Model DQ330 1/4" Magnetic Tape Coupler interfaces up to two each Kennedy Model 6450 1/4" cartridge tape drives to the Q-BUS of the Digital Equipment Corporation (DEC) LSI-11, 11/2 or 11/23 based computer systems.

The Model DQ330 emulates the DEC TM-11, TS-03 software driver supported in the DEC RT-11 and RSX-11 operating systems.

The Model DQ330 Coupler is completely contained on one quad printed circuit module that plugs into a single quad slot in any LSI-11 or LSI-11 equivalent backplane. A complete tape storage subsystem is comprised of a single Model DQ330 quad printed circuit module, one or two cartridge tape drives and interconnecting ribbon cables. No specially wired connectors or bus converters are required.



## **TAPE DRIVE COMPATIBILITY**

The Model DQ330 can interface up to two each Kennedy 6450 cartridge tape drives.

## **SOFTWARE**

The Model DQ330 operates with LSI-11, 11/2 or 11/23 based computer systems operating under control of RT-11 and RSX-11 based software systems. The coupler runs standard DEC TM-11, TS-03 software drivers and is supplied with a diagnostic routine. The factory should be consulted for other operating system capabilities.

## **AUTOMATIC SELF-TEST FEATURE**

The Model DQ330 is supplied with an automatic self-test feature which causes on-board microdiagnostics to be run on the coupler each time the Q-Bus is initialized. A green card-edge LED indicator is lit and remains lit after each successful completion of the microdiagnostics. Should the microdiagnostics fail, the LED indicator is extinguished and a data protect feature is invoked which disallows any communications between the CPU and the magnetic tape unit, thus protecting critical data base areas from the overwriting of erroneous information. Additional LED indicators provide for monitoring of the controller data transfer and bus activity.

## **FULL SYSTEM SUPPORT**

Distributed Logic Corporation also supplies fully integrated and tested tape subsystems including the tape drives themselves. For the customer that wishes to purchase drives directly from the manufacturer, they can be drop-shipped to our facility where they will be integrated, tested, and shipped as a complete system with the Model DQ330.

## **DOCUMENTATION**

Each DQ330 is supplied with an Instruction Manual.

## **OPTIONS**

Cartridge tape drives. Tape drive I/O cables. Factory integration of customer supplied drive.

## **TAPE DRIVES SUPPORTED**

The Model DQ330 will accommodate up to two each Kennedy 1/4" cartridge tape drives with the following characteristics:

**DRIVE TYPE** — Kennedy 6450

**FORMAT/DENSITIES** — 6400 Bits Per Inch

**CARTRIDGE TYPE** — 3M DC300A type Isoelastic data cartridge

**READ/WRITE SPEED** — 30 ips

**DATA TRANSFER RATE** — 192,000 bits/sec.

## **CONTROLLER SPECIFICATIONS**

**Mechanical** — The Model DQ330 is completely contained on one quad module 10.44 inches wide by 8.88 inches deep and plugs into 1 slot in any DEC LSI-11, 11/2, 11/23 or equivalent quad back-plane.

## **Computer I/O**

### **Register Addresses**

- Status (MTS) 772 520
- Command (MTC) 772 522
- Byte Record Counter (MTBRC) 772 524
- Current Memory Address (MTCMA) 772 526
- Data Buffer (MTD) 772 530
- Tape Read Lines (MTRD) 772 532

### **Address Ranges**

- Computer memory to 128K words
- Tape drives to 2 units

### **Interrupt Vector Address**

- PROM selectable (factory set at 224, priority level BR5)

### **Tape Drive I/O**

- 34 pin 3M type connector, part 3414-7050 or equivalent.

**Signal** — Kennedy PICO BUS I/O

**Environment** — Operating temperatures 40°F. To 140°F, humidity 10-95% non-condensing.

**Shipping Weight** — 5 pounds includes documentation.

†Specifications subject to change without notice.



12800-G Garden Grove Blvd.  
Garden Grove, CA 92643  
Phone: (714) 534-8950  
Telex: 681 399 DILOG GGVE

