### INTERCHANGE TECHNOLOGY

#### **Product Overview**

The TX-8 is our high speed, top performing 9-track tape controller for the PC, XT, AT and 386, and compatible computers. The TX-8 is designed to work with any Cipher/Pertec formatted 9-track tape transport. The controller can be used with tape drives that have data transfer rates of over 900 kilobytes per second (KBS), allowing configurations with high performance drives. It thus allows drives with a selectable data rate to be set at a higher rate than a DMAbased controller. The TX-8 also makes fewer demands on the resources of the CPU, significantly improving the performance of low-cost streaming drives.

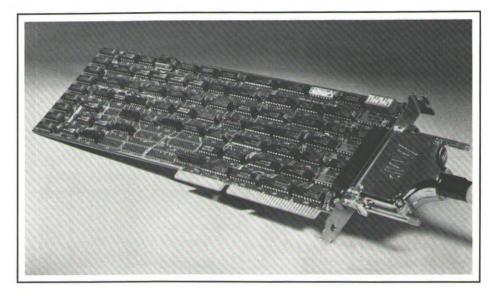
#### **Product Evaluation**

The TX-8 achieves such impressive throughput because of its innovative controller design. The TX-8 uses programmed I/O instead of the traditional DMA (Direct Memory Access) for data transfer. Therefore, its data transfer rate is not limited by the host computer's DMA clock rate, allowing data transfer rates to improve as the host CPU's clock speed increases. The block data I/O software uses the fastest assembly language instructions available

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#### **TX-8**

9-Track Tape Controller for IBM PC, XT, AT & 386



to the system processor. The 64 Kilobyte on-board cache allows efficient buffering of multiple data blocks to and from the tape drive. If the tape transport detects an error during a write operation, the data to rewrite is still in the cache and does not have to be resent by the processor.

The only system resources required by the TX-8 are 8 contiguous I/O ports. Specifically, the board does not require a DMA channel, or any special memory configuration. The TX-8 supports hardware interrupts, though they are not required under DOS.

In addition, the TX-8 includes the following features:

- Large data cache (64 Kilobytes)
- High-speed block I/O
- Performs additional error checking on tape reads
- Uses a "D" type connector for easy installation

- Uses a single, round, shielded cable for:
  - Easy cable routing
  - Reduced EMI

## Complete Package Including Software

The TX-8 package includes controller board, cable, user manual, and support software for one operating system. An installable device driver and numerous support utilities for hard disk backup or data interchange are included for:

MS-DOS/PC-DOS

or an installable device driver is included for either:

- XENIX 386/XENIX 286
- Microport System V/386

The device drivers are interrupt driven with multiple buffers for high-speed data transfer. Once installed the UNIX device drivers support the tape-oriented UNIX backup and interchange commands *tar*, *cpio* and *dd*.

#### Overland Data Inc.

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## **Overland** Data Inc.

### **TX-8**

#### First in Service

Overland Data Inc. manufactures 9track, half-inch magnetic tape controller cards for personal computers and writes all support software in-house. In addition, we stock and fully test a complete line of 9-track tape drives. Our customer service department is equipped to assist you with all phases of your subsystem integration, from initial installation to configuration/compatibility issues and operational questions.

#### Overland Data's Product Line

Overland Data Inc. is a San Diego-based company incorporated in 1980 that manufactures 9-track tape controller cards for the IBM PC/XT/AT/386 and compatibles, as well as the PS/2 Micro Channel. Overland Data offers complete 9-track tape subsystems including the controller card, a choice of tape drives, support software for MS-DOS, XENIX 286, XENIX 386, Microport System V/AT or System V/386, user manual, and cables. Compatible tape drives include any Cipher/Pertec formatted 9-track tape transport. Available recording densities are 800 bytes per inch (BPI), 1600 BPI, 3200 BPI, and 6250 BPI. Recording techniques supported are NRZI, PE, and GCR.

#### Warranty

Overland Data offers a two year parts and labor warranty for the TX-8 controller.

#### **TX-8** Specifications

- **Compatibility** All 100% IBM-PC, XT, AT hardware including 386.
- Tape Drives All Cipher/Pertec formatted 9-track tape transports.
- Input/Output Dip switch selectable I/O address (8 contiguous ports required). Driver automatically detects address.
- Block Length Supports block sizes up to 64 Kbytes.
- DMA Channel None required. Uses programmed I/O.
- Drives Supported 1 of 8
- Maximum Transfer Rates Over 900 Kilobytes/second depending on the clock speed of the host CPU and the data rate of the tape drive. Not limited by comparatively slow DMA transfer speed.
- Recording Modes 9-track: PE, NRZI and GCR.
- Recording Densities 800 bytes/inch (BPI), 1600 BPI, 3200 BPI, and 6250 BPI.
- Interrupts Jumper selectable interrupts provided for appropriate applications. Interrupts not required.

\*Specifications subject to change without notice.

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