

TruCluster Software Products

Hardware Configuration Technical Update for TZ887 Digital Linear Tape (DLT) Mini-library

December 1998

Product Version: TruCluster Production Server
Software Version 1.5 and TruCluster
Available Server Version 1.5

Operating System and Version: Compaq's DIGITAL UNIX Version
4.0D

This technical update describes how to configure the TZ887 Digital Linear Tape (DLT) Mini-library in a TruCluster Software Products environment.

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About This Technical Update

This technical update provides important information about using the TZ887 Digital Linear Tape (DLT) Mini-library with the TruCluster™ software products.

Audience

If you plan to use a TZ887 DLT Mini-library in a TruCluster hardware configuration, read this addendum to the TruCluster Software Products *Hardware Configuration* manual.

Organization

This technical update contains an introductory chapter and a chapter covering the use and configuration of the TZ887 DLT Mini-library in a TruCluster configuration.

TZ887 DLT Mini-library

This technical update to the TruCluster Software Products *Hardware Configuration* manual provides important information about support for the TZ887 Digital Linear Tape (DLT) Mini-library with the TruCluster Production Server Software Version 1.5 and TruCluster Available Server Software Version 1.5 products.

1.1 General Overview

The TZ887 DLT Mini-library was recently qualified for use with the TruCluster Production Server Software Version 1.5 and TruCluster Available Server Software Version 1.5 products.

There is no TruCluster Software Products software release that coincides with the availability of support for the TZ887, so this technical update provides the TZ887 configuration information that would appear in Chapter 4 of the TruCluster Software Products *Hardware Configuration* manual.

For more information on the TZ887 DLT Mini-library, see the *TZ887 Model 140/280 GB DLT 7-Cartridge Mini-library Owner's Manual* (EK-TZ887-OM).

1.2 Required Software and Firmware

Support for the TZ887 DLT Mini-library with the TruCluster Production Server Software and TruCluster Available Server Software Version 1.5 products with Compaq's DIGITAL UNIX Version 4.0D requires the following patches and firmware. The DIGITAL UNIX and TruCluster patches are included in one kit.

- Compaq's DIGITAL UNIX V4.0D/TCR 1.5 Patch Kit 3:
DUV40DAS00003-19981208.tar (or later)
- The TZ887 DLT Mini-library uses a TZ88 tape drive that requires the V100 firmware

The patch may be obtained from the Software Patch (ECO) Access Web site by going to the following URL:

<http://www.service.digital.com/patches/>

Contact your Compaq Services representative for tape drive firmware upgrades.

1.3 TZ887 Overview

The TZ887 DLT Mini-library is a cartridge tape subsystem combining a cartridge tape drive and an automatic cartridge loader. It uses a seven-cartridge (CompacTape IV) removable magazine, providing a mini-library with a total capacity of nearly 280 GB of compressed data. The TZ887 uses one TZ88N-AX single-ended tape drive. The SCSI bus connector is 50-pin low-density, single-ended.

The TZ887 DLT Mini-library is available in two versions:

- A tabletop model (TZ887-NT)
- A rackmount version suitable for mounting in SW500 or SW800 cabinets (TZ887-NE)

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Preparing the TZ887 DLT Mini-library for Cluster Use

The topics in this chapter provide information on preparing the TZ887 DLT Mini-library for use on a shared SCSI bus with the TruCluster Production Server Software Version 1.5 and TruCluster Available Server Software Version 1.5 products.

Note

Tape devices are supported only on those shared SCSI buses that use KZPSA-BB PCI SCSI adapters.

2.1 Preparing the TZ887 for Shared SCSI Bus Usage

The TZ887 Digital Linear Tape (DLT) Mini-library combines a cartridge tape drive (TZ88) and an automatic cartridge loader. It uses a seven-cartridge (CompacTape IV) removable magazine with a total capacity of nearly 280 GB compressed. It is capable of reading/writing at approximately 10.8 GB per hour.

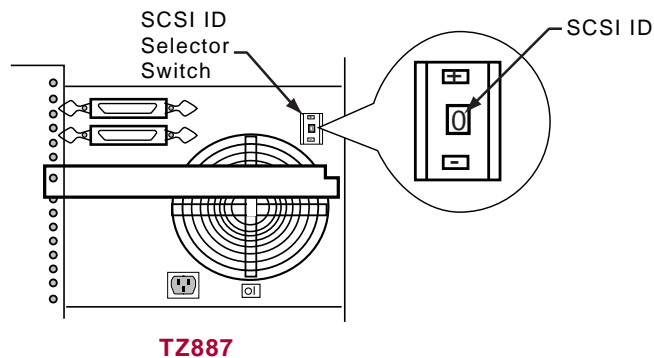
As with any of the shared SCSI devices, the TZ887 SCSI IDs must be set to ensure that no two SCSI devices on the shared SCSI bus have the same SCSI ID.

The following sections describe how to prepare the TZ887 in more detail.

2.1.1 Setting the TZ887 SCSI ID

The TZ887 SCSI ID is set with a push-button counter switch on the rear of the unit (see Figure 2-1). Push the button above the counter to increment the address; push the button below the counter to decrement the address until you have the desired SCSI ID selected.

Figure 2–1: TZ887 DLT Mini-library Rear Panel



ZK-1461U-AI

2.1.2 Cabling the TZ887 Tape Drive

The TZ887 is connected to a single-ended segment of the shared SCSI bus. It is connected to a differential portion of the shared SCSI bus with a DWZZB-AA. Figure 2–2 shows a configuration with a TZ887 for use on a shared SCSI bus. The TZ887 in this figure would have the SCSI ID set to 0. The member systems use SCSI IDs 6 and 7, and the disks are located in the BA356 slots at SCSI IDs 1 - 5.

To configure the shared SCSI bus for use with a TZ887, follow these steps:

1. You will need one DWZZB-AA for each shared SCSI bus with a TZ887 tape drive.
Ensure that the DWZZB-AA jumpers W1 and W2 are installed to enable the single-ended termination.
Remove the termination from the differential end by removing the five 14-pin SIP resistors.
2. Attach an H885-AA trilink connector or BN21W-0B Y cable to the differential end of the DWZZB-AA.
3. Connect the single-ended end of the DWZZB-AA to the TZ887 with a BN21M cable.
4. Install an H8574-A or H8890-AA terminator on the other TZ887 SCSI connector.
5. Connect the trilink on the DWZZB-AA to another trilink or Y cable on the differential shared SCSI bus with BN21K or BN21L cables. Ensure that the trilink or Y cable at both ends of the shared SCSI bus is terminated with an H879-AA terminator.

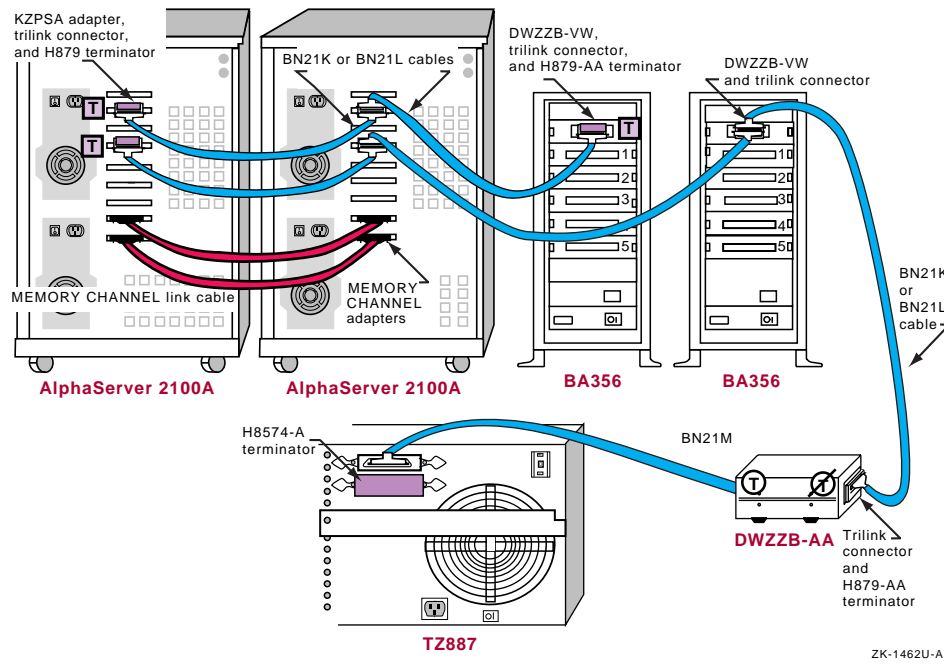
The single-ended SCSI bus may be daisy chained from one single-ended tape drive to another with BC19J cables as long as the SCSI bus maximum length is not exceeded and there are sufficient SCSI IDs available. Ensure that the tape drive on the end of the bus is terminated with an H8574-A or H8890-AA terminator.

You can add additional shared SCSI buses with TZ887 tape drives by adding additional DWZZB-AA/TZ887 combinations.

Note

Ensure that there is no conflict with tape drive, KZPSA-BB SCSI adapter, and disk SCSI IDs, and that you keep the number of SCSI devices on a SCSI bus to a maximum of eight.

Figure 2-2: Cabling a Shared SCSI Bus with a TZ887



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