digital

Configuration Guidelines

Consider the following guidelines prior to installing a SCSI repeater module:

- All DIGITAL application and enterprise servers with Ultra Wide SCSI disk drives require a SCSI repeater module.
- Each Ultra SCSI bus requires its own SCSI repeater module.
- The SCSI or RAID Configuration Utility must be used to *enable* Ultra SCSI transfers.
- Digital recommends that you use all Ultra SCSI capable devices (drives, controllers, host adapters, etc.) on the SCSI bus for maximum server performance.
- If possible, connect DLT drives and CD-ROM drives on a separate channel.

NOTE: The SCSI repeater module is for use within a DIGITAL application and enterprise server chassis only. Connecting external SCSI devices at Ultra SCSI speeds requires an Ultra SCSI capable cabinet and a dedicated SCSI channel.

Non-RAID SCSI Channel

To enable Ultra SCSI transfers on a non-RAID SCSI channel, perform the following:

1. Boot your server.
2. When the message "Press Ctrl/A for the SCSI Select Utility" appears on your monitor screen, press Ctrl/A.
3. Select "Configure/View Host Adapter Settings."
4. Select "Advanced Configurations."
5. In the "Support for Ultra SCSI Speed" option, select "Enabled."
6. Press the [Esc] key three times.
7. At the "Exit Utility ?" prompt, select "Yes."
8. Press any key to reboot your server.

RAID SCSI Channel

To enable Ultra SCSI transfers on a RAID SCSI channel, perform the following:

1. Insert the Mylex DAC Configuration Utility in drive A and boot your server.
2. At the MS-DOS prompt type: CD DACCFG [Enter], then type DACCF [Enter], to invoke the RAID Configuration Utility.
3. Select 09 "Advanced Functions."
4. Select "SCSI Xfr Parameters."
5. Type the channel number (0, 1, 2) and press Enter, or press Enter to accept the default.
6. Select the "Data Transfer Rate (MHz)", press the Enter key to change the value until "20 MHz" is displayed.
7. Press the [Esc] key two times.
8. Select "Yes" to save the configuration.
9. Reboot your server.

Ultra SCSI Bus Repeater Module

Installation Guide

Kit Contents

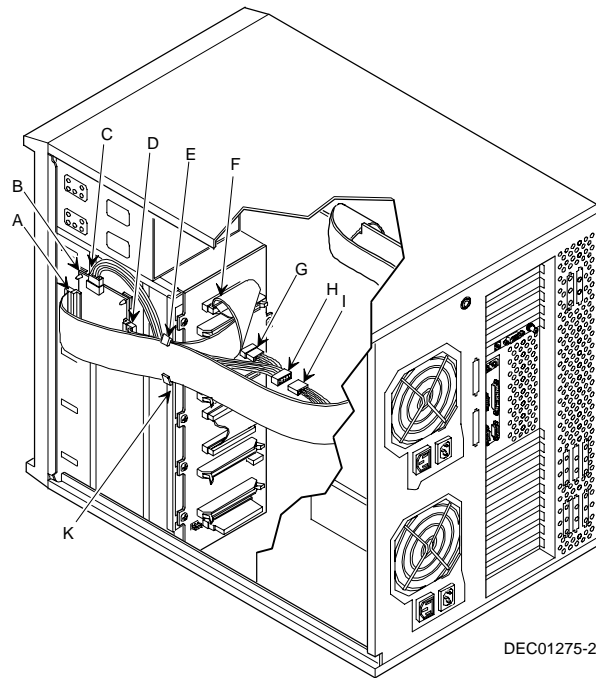| ITEM	DESCRIPTION	FR-PCSBR-AA	FR-PCSBR-AB
A	Standoffs	4	8
B	One Ultra SCSI bus repeater module	1	2
C	Power supply harness	1	2
D	SCSI repeater to backplane cable	1	2
E	SCSI replacement cable*	1	1
F	This Installation Guide	1	1
G	Cable clamps	2	4

* If your SCSI cable is not long enough to reach the installed SCSI bus repeater module, use the longer cable **E**.

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Module Layout

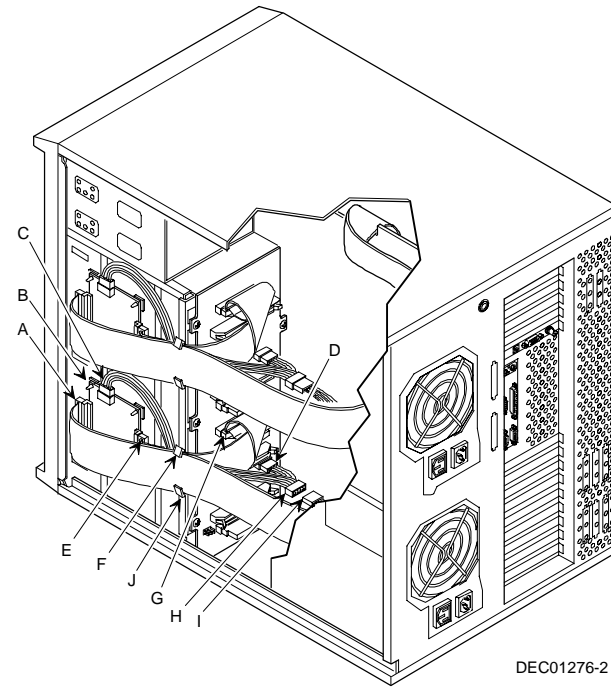| ITEM	DESCRIPTION
A	J3, 68-pin SCSI connector (SE-B)
B	CR3, (yellow) B-side TERMPWR LED
C	CR5, (green) A-side BUSY (SCSI active on side A) LED
D	CR6, (yellow) A-side TERMPWR LED
E	J2, 68-pin SCSI connector (SE-A)
F	J1, power connector

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Connecting a SCSI Repeater Module (Single SCSI Bus)

To connect a SCSI repeater module to a single SCSI bus configuration, perform the following:

1. Power down the server.
2. Disconnect all peripheral devices from the server.
3. Unlock and remove the right side panel.
4. Install four corner standoffs onto the SCSI repeater module.

*NOTE: The adhesive on the SCSI repeater module's standoffs is very strong. We recommend you follow the procedures below and connect the SCSI cables to the SCSI repeater **before** attaching it to the chassis. Orient the module with the power connector (J1) at the top.*

5. Disconnect the SCSI cable from the backplane and attach it to J2 on the SCSI repeater module (A).
6. Connect the supplied SCSI cable to J3 on the SCSI repeater module (D) and to the backplane (F).
7. Remove the backing from the adhesive pads on the module's four corner standoffs (B).
8. Align the module as shown above. Mount the module to the drive cage with the module's power connector at the top.

9. Clean the surface (K) at the cable clamp location. Allow the surface to dry.
10. Remove the backing from the cable clamp's adhesive pad and attach the clamp (E) to the drive cage as shown applying constant, firm pressure for 3 to 5 seconds.
11. Connect the supplied power harness to J1 on the SCSI repeater module (C). Remove the bottom power connector (I) from the backplane and connect it to the other end of the supplied power harness (H).
12. Connect the loose end of the power harness to the top power supply connector on the backplane (G).
13. Align the cables to the clamp (E) starting with the power harness cables first, the SCSI cable from (D) next, then the SCSI cable from (A) last. Fold the ends of the clamp over to secure the cables.
14. Connect any other devices, replace the side panel, and power on your server.
15. Run the SCSI or RAID configuration utility to enable Ultra SCSI I/O.

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Connecting SCSI Repeater Modules (Dual SCSI Bus)

1. Follow the procedures for "Connecting a SCSI Repeater Module (Single SCSI Bus)" previously described.
2. Install four corner standoffs to the SCSI repeater module.
3. Disconnect the SCSI cable from the backplane and attach it to J2 on the SCSI repeater module (A).
4. Connect the supplied SCSI cable to J3 on the SCSI repeater module (E) and to the backplane (G).
5. Remove the backing from the adhesive pads on the module's four corner standoffs (B).
6. Align the module as shown above. Mount the module to the drive cage with the module's power connector at the top.
7. Clean the surface (J) at the cable clamp location. Allow the surface to dry.
8. Remove the backing from the cable clamp's adhesive pad and attach the clamp (F) to the drive cage as shown applying constant, firm pressure for 3 to 5 seconds.

9. Connect the supplied power harness to J1 on the SCSI repeater module (C). Remove the bottom power connector (I) from the backplane and connect it to the other end of the supplied power harness (H).
10. Connect the loose end of the power harness to the bottom power supply connector on the backplane (D).
11. Align the cables to the clamp (F) starting with the power harness cables first, the SCSI cable from (E) next, then the SCSI cable from (A) last. Fold the ends of the clamp over to secure the cables.
12. Connect any other devices, replace the side panel, and power on your server.
13. Run the SCSI or RAID configuration utility to enable Ultra SCSI I/O.