

## **Installing the Version 1 of the BusLogic SCSI Adapter Device Driver for NEXTSTEP Release 3.2 for Intel Processors.**

These instructions show you how to install version 1 of the BusLogic SCSI adapter device driver on an Intel-based computer running NEXTSTEP™ Release 3.2. The driver is distributed in an Installer package file named **BusLogicSCSIDriver.pkg**.

The BusLogic SCSI driver is designed to support BusLogic's BT445C (VL), BT545C (ISA), and BT747C (EISA) series SCSI adapters for Intel-based computers. This driver is specifically designed to support the 32bit extended modes supported by these adapters. In comparison to the Adaptec 154x compatible mode previously used to support the 747S and 445S adapters, these extended modes provide additional performance and remove the double buffering required by the 16MB address limitation.

**Note:** This driver may work with other versions of BusLogic SCSI adapters such as the 545C, 747S and 445S. Because these adapters

are supported in Adaptec compatibility mode with the existing Adaptec 154x driver, this driver will only be tested and supported on the latest generation, higher performance 747C and 445C series adapters. In general this driver was designed to work with any BusLogic bus master SCSI adapter except the PCI versions (940 Series).

## Installing the Device Driver

1. If you received the **BusLogicSCSIDriver.pkg** file via NeXTmail™ or another electronic source, place a copy of the file in a location where you can access it when you log in as **root**.
2. Log in as **root**.  
Only the superuser, **root**, can install the device driver. If you're not sure how to log in as **root**, see your system administrator.
3. If you received the **BusLogicSCSIDriver.pkg** file on a floppy disk, insert the disk in the floppy disk drive and choose Check for Disks from the Workspace Manager™ application's Disk menu. When the disk

icon appears in the File Viewer, double-click it to open it.

4. Double-click the **BusLogicSCSIDriver.pkg** file.
5. Click the Install button in the Installer package window. When the panel asks you to confirm that you want to install software for Intel-based computers, click Install. Then if a panel warns you you're about to overwrite existing files, click Continue.
6. When the installation is complete, choose Quit from the Installer menu, then follow instructions in the next section "Configuring the Device Driver."

## **Configuring the Device Driver**

1. After you have installed the BusLogic SCSI Adapter device driver, start up the Configure application by double-clicking **Configure.app** (it's in **/NextAdmin**).
2. Click the SCSI icon at the top of Configure's Summary window. If "BusLogic SCSI Adapter" is in the list of devices at the top of

Configure's SCSI Devices window, and if the BusLogic SCSI adapter is already installed in your computer, choose Quit from the Configure menu and skip to the last section, "Removing the Install Package and Restarting the Computer."

3. If you're planning to use the BusLogic SCSI adapter in place of another adapter named in the list at the top of Configure's SCSI Devices window, select the other adapter's name in the list, and click Remove.
4. Click Add in Configure's SCSI Devices window, and in the Add SCSI Devices panel that opens, select the "BusLogic SCSI Adapter" in the list, and click Add.
5. Select the appropriate DMA, IRQ, and Port settings.

**Note:** The EISA version of the BusLogic SCSI adapter does not use a DMA channel, so Configure won't let you select one.

**Note:** BusLogic ships the adapter set up for port 0x330.

**Note:** If you plan to install NEXTSTEP from CD-ROM directly onto the disk connected to the BusLogic adapter, be sure to set the port to 0x334 or the NEXTSTEP installation process will fail. If you're installing the board into an already configured system, you can use any

port Configure presents as available.

6. Click Done then click Save.
7. Choose Quit from the Configure menu.

## **Installing the Adapter**

Refer to the user's manual that comes with the adapter. This manual contains other information that you should read before using the adapter.

If you have another floppy disk controller in the motherboard, disable it by setting switch 8 off.

If your computer's startup disk isn't connected to the BusLogic SCSI adapter, you don't need to enable an ISA I/O port address in the ECU (leaving you an "extra" I/O port address to use for other purposes).

To install an ISA or VL adapter, you must set the I/O port address to match

the slot in which you install the adapter. The BusLogic SCSI Adapter device driver defaults to ports 0x334 to 0x337. You will have to change switch settings to change the port setting of the adapter to match those that Configure presents as valid. For ISA and VL adapters use the following correspondences between ports and switch settings

<b>Port</b>	<b>Sw1</b>	<b>Sw2</b>	<b>Sw3</b>
0x330	on	on	on
0x334	off	on	on
0x230	on	off	on
0x234	off	off	on
0x130	on	on	off
0x134	off	on	off

To install an EISA adapter, note the number of the EISA slot in which you installed the adapter. For EISA adapters the I/O port you select with Configure is in the form 0xz334, where z is the EISA slot number. For example, if you install the adapter in slot 4, the I/O port address is 0x4334.

Remember to run the EISA Configuration Utility (ECU). This standalone program comes with every EISA-bus-based PC. You have to run the ECU every time you add or change the configuration of an EISA adapter, eliminating the need for configuration jumpers on EISA adapters.

## **Removing the Install Package and Restarting the Computer**

1. If you had created a copy of the **BusLogicSCSIDriver.pkg** file (step 1 in the section "Installing the Device Driver"), drag the copy to the recycler.
2. Choose Log Out from the Workspace menu and then click the Restart button in the login window  
**Note:** You must restart your computer after installing and configuring the device driver. The next time you start up your computer, it will use the new driver.
3. During the boot process, the computer will issue the BusLogic BIOS

banner with a message to "Hit Ctl-b to enter AutoSCSI." The AutoSCSI setup program lets you adjust SCSI termination, SCSI ID, sync enable, and other features of the adapter.

For information about logging in and out, the Workspace Manager application, and the Installer application, see the *NEXTSTEP User's Guide*. For information about the Configure application, see *Installing and Configuring NEXTSTEP Release 3.2 for Intel Processors*. For information concerning compatibility issues and bugs, refer to NeXTanswers.

NeXT, the NeXT logo, NEXTSTEP, NeXTmail, and Workspace Manager are trademarks of NeXT Computer, Inc.

BusLogicSCSIDriver.ReadMe.rtf, Update 1, 08-17-94