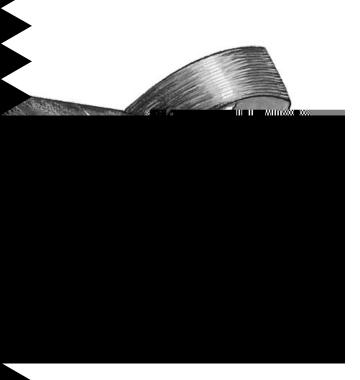# Installation Guide

AHA-1640
Micro Channel-to-SCSI Host Adapter

Ⓒadaptec®

1 Installation Checklist

Be sure to complete these steps when you install your AHA™-1640 Micro Channel®-to SCSI host adapter. Check each item before you turn ON the power to your computer:

1 If you are using internal SCSI devices, connect the 50-pin internal SCSI cable to the host adapter with proper pin-1 orientation.

2 Seat the AHA-1640 host adapter firmly in an available 16-bit slot.

3 Assign correct SCSI addresses to all SCSI devices. Assign SCSI ID 0 to the boot SCSI disk drive. Assign SCSI ID 1 to the second SCSI disk drive, if there is one.

4 Select the correct operating modes on all attached SCSI devices. Refer to the documentation for each device.

5 Set termination correctly on the AHA-1640 host adapter and attached SCSI devices. Leave the terminators installed if either an internal or an external SCSI cable is attached to the host adapter. Remove terminators if both an internal and an external SCSI cable are attached.

6 Check all external SCSI devices to be sure they are properly installed and cabled.

2 Host Adapter Configuration

You must load initialization parameters into the host computer's CMOS RAM when you first install the AHA-1640 host adapter. You must also update the initialization parameters whenever you make other host adapter configuration changes or when you replace the computer's standby battery. The host adapter is automatically initialized with these parameters every time you boot your computer.

The computer reads the initialization parameters from the Adapter Descriptor File (ADF)[1], which is

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[1] The actual file name of the ADF is *@0f1f.adf*.

usually included on the System Reference Diskette (SRD). Follow these steps if the ADF is not on the SRD:

1 Make a copy of the SRD.

2 Copy the ADF from an AHA-1640 Configuration Diskette to the copy of the SRD.

   You cannot use the original copy of the SRD, because it is probably write-protected.

> **Note:** If you do not have the ADF, you can download it free of charge from Adaptec's Bulletin Board Service (BBS). The BBS telephone number is listed on page 4.

Follow these steps to load the initialization parameters into CMOS RAM after you have installed the host adapter. You may need a special configuration if you install more than one AHA-1640 host adapter.

1 Insert the copy of the SRD in floppy drive *A* and close the drive door.

2 Turn ON the power to the computer. If the power is already ON, reboot the computer by pressing the **Del** key while holding down the **Ctrl** and **Alt** keys.

   After the computer has booted, an Error 165 message (Invalid Configuration Information) may appear on the screen. This occurs when the computer detects the newly-installed host adapter.

3 Some SRD programs ask you in the error text if you want the computer to perform an automatic configuration.

   a If the SRD allows automatic configuration, press the indicated key and wait until the configuration is completed. Then continue with step 7.

   b If the SRD does not allow automatic configuration, press the indicated key to load the SRD files. A menu appears when the files have been loaded.

4 Select the menu option to set the configuration parameters from the SRD. Another menu appears when this process is completed.

5 Select the menu option to control or perform the configuration process automatically.

The program analyzes the ADF and selects address spaces and parameter values that do not conflict with values already in use. Then it loads the values into CMOS RAM. A message appears when the automatic configuration is complete.

6 Press the indicated key to continue. The host adapter is now ready for normal operation.

7 Install the operating system software and boot your computer.

If you remove the AHA-1640 host adapter from your computer in the future, you must run automatic configuration again to update the parameters.

The following table lists the values that should be entered for various AHA-1640 configuration options. Some of the option values vary, depending on whether you boot your computer from a SCSI disk drive connected to the host adapter.

Configuration Option	Value when Booting from Host Adapter	Value when Not Booting from Host Adapter
Port I/O Address	Lowest slot number of 330h, 230h, 130h	Nonconflicting
Arbitration Level	5	Nonconflicting
Interrupt Level	Nonconflicting	Nonconflicting
Host Adapter BIOS Address	Enable only one BIOS	Disable all other BIOS's
Host Adapter SCSI ID	7 (or as required)	7 (or as required)
SCSI Parity Checking	**On** if all devices support parity; **Off** if any device does not support parity	**On** if all devices support parity; **Off** if any device does not support parity

Synchronous Data

3 Adaptec Customer Support Services

- For information on software upgrades, new releases, technical advice, and other topics, call Adaptec's Electronic Bulletin Board Service (BBS) 24 hours a day at 408-945-7727; 1200/2400/9600/14400 baud, 8 data bits, 1 stop bit, no parity.

- For the latest online information about Adaptec products and services, call the Interactive Fax Service 23 hours a day, 7 days a week, at 408-957-7150.

- For technical assistance, call Adaptec's Technical Support Hot Line at 800-959-SCSI (7274), or 408-945-2550. M–Th: 6:00 a.m.– 5:00 p.m., F: 6:00 a.m.–3:00 p.m., Pacific Time.

- To order Adaptec software and SCSI cables, call 800-442-SCSI (7274), M–F: 6:00 a.m. to 5:00 p.m., Pacific Time. If you are calling from outside the U.S. and Canada, the number is 408-957-7274.

- To request additional documentation for Adaptec products, call 800-934-2766, M–F: 5:00 a.m. to 6:00 p.m., Pacific Time.

FCC Compliance Statement

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television equipment reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

*   Reorient or relocate the receiving antenna
*   Move the equipment away from the receiver
*   Plug the equipment into an outlet on a circuit different from that to which the receiver is powered
*   If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions

CAUTION: Only equipment certified to comply with Class B (computer input/output devices, terminals, printers, etc.) should be attached to this equipment, and must have shielded interface cables.

Finally, any change or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the user's authority to operate such equipment.

Each host adapter is equipped with an FCC compliance label which shows only the FCC Identification number. The full text of the associated label follows:

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.