

# Product Overview

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This chapter provides an overview of the Copper Distributed Data Interface (CDDI) and Fiber Distributed Data Interface (FDDI) Extended Industry Standard Architecture (EISA) Santa Cruz Operations, Inc. (SCO) adapters for EISA workstations. It contains information about the hardware and software required to run the EISA SCO adapters, and also important unpacking information.

High-performance Workgroup EISA SCO adapters connect workstations and servers to CDDI or FDDI networks. The adapters provide a single attachment or dual attachment connection that is fully compliant with Station Management (SMT) Revision 6.2 or 7.3.

The EISA SCO adapters ensure high performance by maximizing data throughput and minimizing network overhead on the host processor. You can download firmware for convenient upgrades and eliminate the need to swap programmable read-only memory (PROM) chips.

## Feature Summary

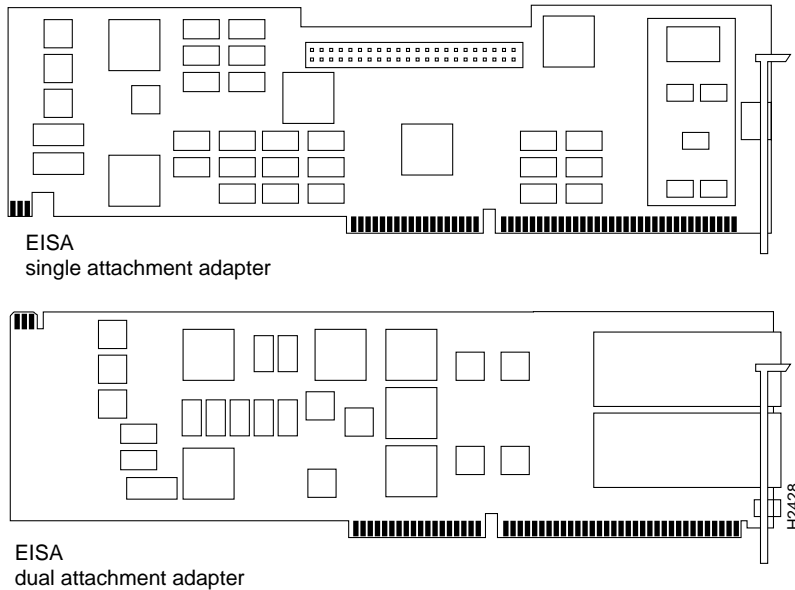
The EISA SCO adapters feature a highly integrated design. They contain several high-performance features to increase throughput and minimize overhead imposed on the host processor. To maximize throughput, the EISA SCO adapters support 32-bit-wide EISA burst-data transfers. Bus mastering via two specially designed direct memory access (DMA) channels and an onboard SMT processor minimize host processor intervention.

The EISA SCO adapters incorporate SMT 6.2 and 7.3 (the FDDI SMT specification). You can download the adapter firmware to enable you to easily update SMT versions.

## Hardware Overview

The CDDI and FDDI EISA SCO adapters are available as either single attachment or dual attachment. The single attachment adapter consists of a single adapter board with a CDDI or FDDI port. The dual attachment adapter has two CDDI or FDDI ports. See Figure 1-1.

Figure 1-1 CDDI/FDDI EISA SCO Adapters

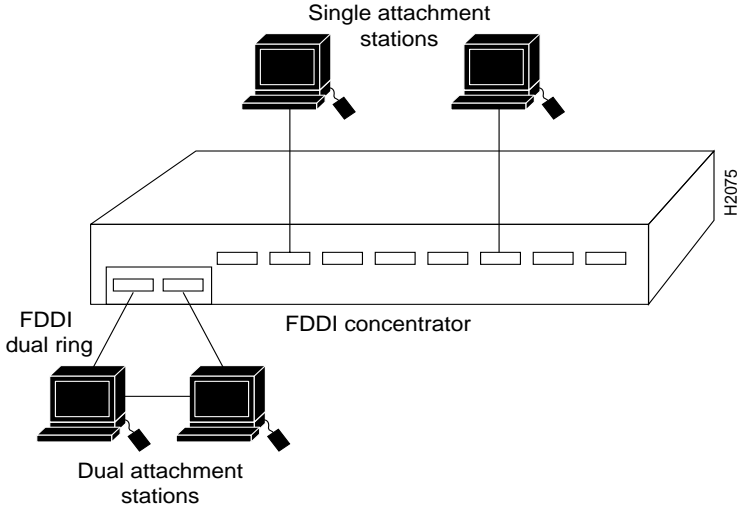


Single attachment EISA SCO adapters can connect to another station or to a concentrator, which in turn can connect to the dual ring of an FDDI network. A single attachment configuration consists of a single attachment adapter with a CDDI or FDDI port. The single attachment adapter is a slave (S) port. The workstation FDDI interface has one physical medium dependent (PMD), one physical (PHY), one media access control (MAC), and one SMT controller.

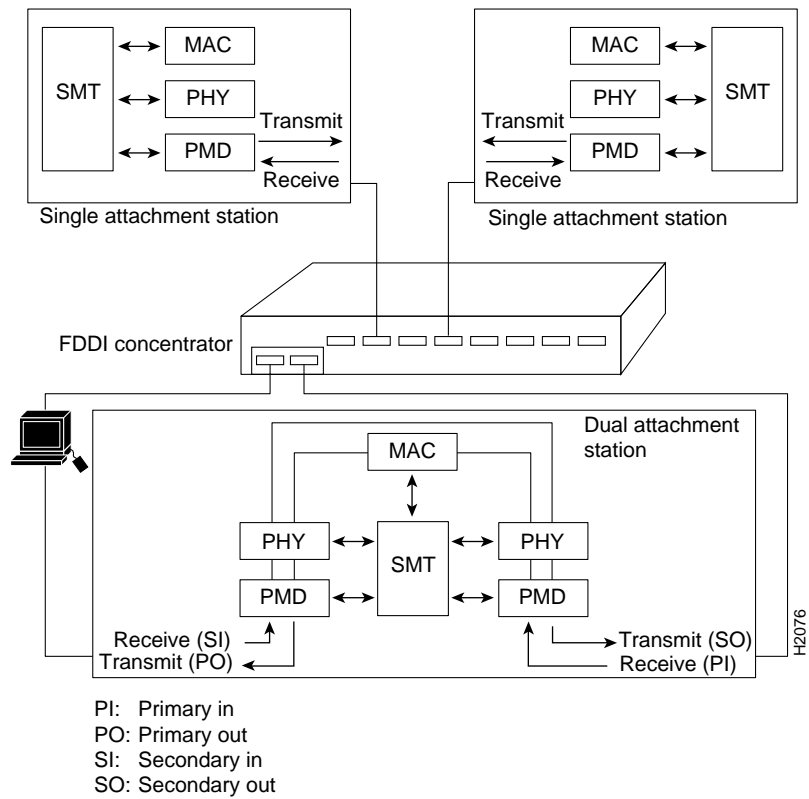
Dual attachment EISA SCO adapters include both A and B connectors. A workstation with the dual attachment configuration connects directly to the primary and secondary rings of an FDDI network. The workstation's FDDI interface has two PMDs, two PHYs, one MAC, and one SMT.

Figure 1-2 and Figure 1-3 show how single attachment stations and dual attachment stations are connected.

**Figure 1-2 Single Attachment Station and Dual Attachment Station Connections**

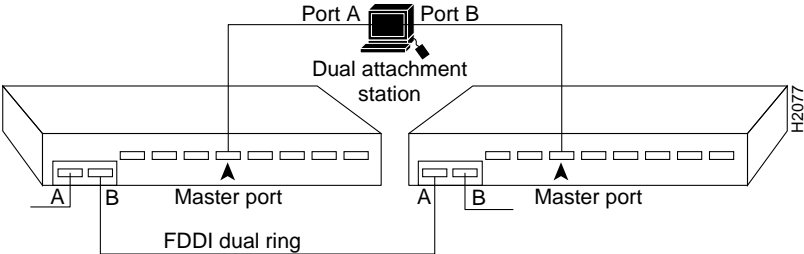


**Figure 1-3 Single Attachment Stations and Dual Attachment Stations—A Schematic**



You can also connect a dual attachment station in a redundant configuration called dual homing. In Figure 1-4, a dual attachment station is connected to two concentrators that are connected to the dual ring. Port A on the station is the backup connection and only becomes active if the primary connection (port B) fails.

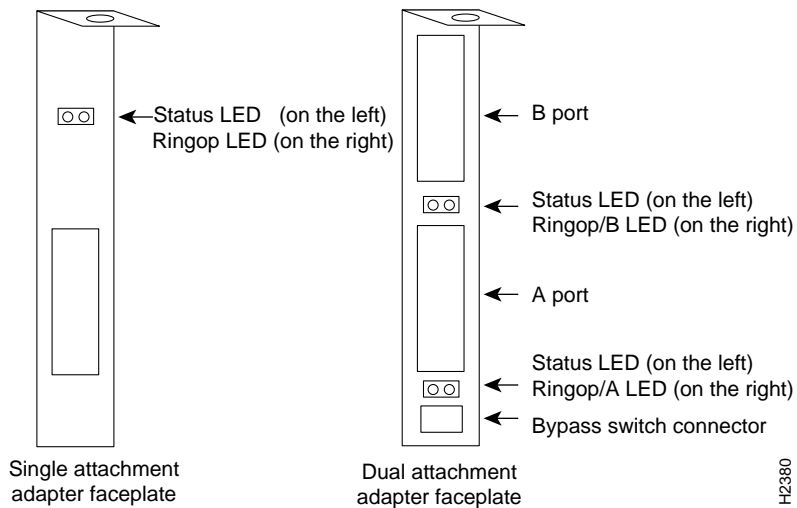
Figure 1-4 Dual Homing



## Adapter LEDs

Each EISA SCO adapter has two LED indicators on the faceplate, a status LED and ringop LED, so that you can easily monitor the adapter's internal status and the FDDI link. Figure 1-5 shows the adapter faceplates, including the LEDs.

**Figure 1-5 EISA SCO Adapter Faceplates**



## Status LED

The status LED monitors the adapter's status. If this LED is on, the adapter has passed its internal diagnostics test.

## Ringop LED

The ringop LED monitors ring operation. If this LED is on, the adapter is connected to the FDDI ring. See the chapter “Troubleshooting the Adapter” in the *Workgroup CDDI/FDDI EISA Adapter Hardware Installation* document for a complete description of the ringop LED.

## System Requirements

This section describes the hardware and software requirements for installing the EISA SCO adapter.

### Hardware Requirements

The EISA SCO single and dual attachment adapters are designed for installation in any available EISA slot in an EISA SCO-compatible workstation or server.

### Software Requirements

The SCO workstation or server where the adapters are installed requires Version 4.2 of SCO Unix System Release 3.2 or later operating system software.

## Unpacking Information

Please check your EISA SCO adapter and all contents of the package carefully to make sure no damage occurred during shipping. If damage did occur during shipping, notify your carrier.

### Package Contents

The EISA SCO adapter package contains the following items:

- Workgroup CDDI or FDDI EISA SCO single attachment or dual attachment adapter
- CDDI/FDDI EISA SCO adapter software driver diskette
- EISA PC driver configuration diskette

## Unpacking Information

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- *Workgroup CDDI/FDDI EISA SCO Adapter User Guide*
- *Workgroup CDDI/FDDI EISA Adapter Hardware Installation*

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**Note** To order UniverCD, Cisco's library of product information on CD-ROM or printed publications, refer to *Ordering Cisco Documentation*, which is in your warranty package.

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- Warranty registration information

Fill out the warranty registration sheet and mail or fax it to Cisco Systems, Inc. today. Report any missing parts and any damage not related to shipping to your customer service representative.

For instructions on unpacking and installing the EISA SCO adapter hardware, see the appropriate chapters in the *Workgroup CDDI/FDDI EISA Adapter Hardware Installation* manual.