

Upgrade Instructions for the Model 281xSA Ethernet Hub Boot Firmware

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Introduction

This guide provides instructions for installing boot firmware on a Bay Networks® Model 281xSA Ethernet Hub.

Installing the Model 281xSA firmware involves the following major steps:

- Removing the cover of the Model 281xSA Ethernet Hub
- Replacing the firmware
- Reinstalling the cover

This document describes each of these major steps in detail. For additional information about the Model 281xSA Ethernet Hub, refer to [“Related Publications”](#) later in this document.

Package Contents

In addition to this upgrade instruction guide, your upgrade kit should contain the following items:

- One PROM with the following part number: 119-216-x, where x represents the current revision of the PROM.
- A set of release notes for the current revision of the PROM to be installed. These release notes identify the revision letter of the current PROM.



Caution: Be sure to discharge any accumulated static or wear a wrist strap when handling boards and PROMs. Failure to do so can damage the components.

Required Tools

You need the following tools to install the PROM contained in this upgrade kit:

- A #1 Phillips screwdriver
- A 3/16-inch hex nut driver
- An antistatic mat
- An industry-standard IC extraction tool or equivalent
- An industry-standard grounding wrist strap

Preparation



Note: Only qualified technicians should install and service this equipment.

Before installing the PROM, take the necessary precautions to ensure that user sessions are not disrupted and that appropriate safety measures have been followed. Before beginning this upgrade, instruct network users to save their work and log out of active sessions. Bay Networks recommends that you perform this upgrade during a scheduled network maintenance period to reduce the impact on users. For ease of installation, you should plan to upgrade stacks of chassis during one upgrade session, installing one PROM into each chassis in the stack one unit at a time.

Removing the Cover

To gain access to the PROM, you must remove the cover from the Model 281xSA hub. To remove the cover, follow these steps:

1. Using the #1 Phillips screwdriver, remove three screws from each side and three screws from the rear of the hub (see [Figure 1](#)).
2. Using the 3/16-inch hex nut driver, remove all eight hex nuts from the four DB-25 connectors at the rear of the hub (see [Figure 1](#)).

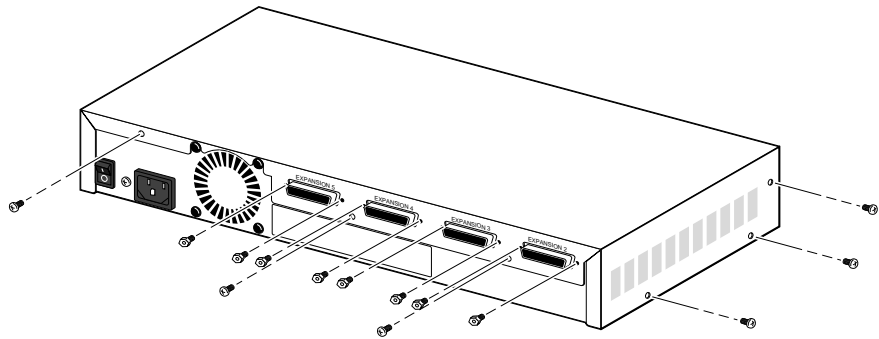
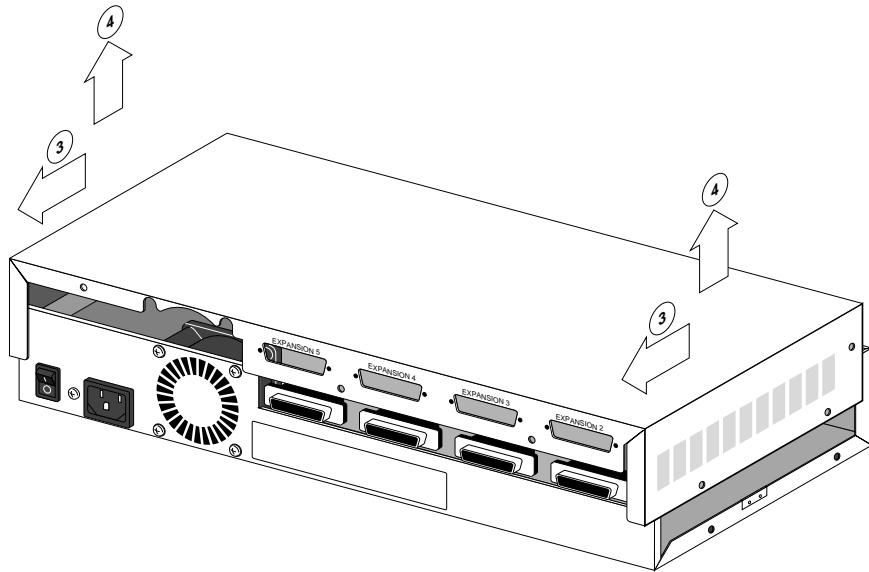


Figure 1. Cover retaining screws and nuts

3. **Holding the sides of the cover, slide the cover toward the rear of the hub approximately 1/2 inch (see [Figure 2](#)).**



3053.2

Figure 2. Removing the hub cover

4. **Lift the cover straight up (see [Figure 2](#)) and remove it from the hub. Set the cover aside.**

Replacing the Firmware

After you have removed the hub cover, you are ready to install the PROM on the Model 281xSA printed circuit board (PCB). The PROM socket is found slightly left of the center of the PCB as you face the unit. The silkscreen art identifies the PROM location as U28 (see [Figure 3](#)).

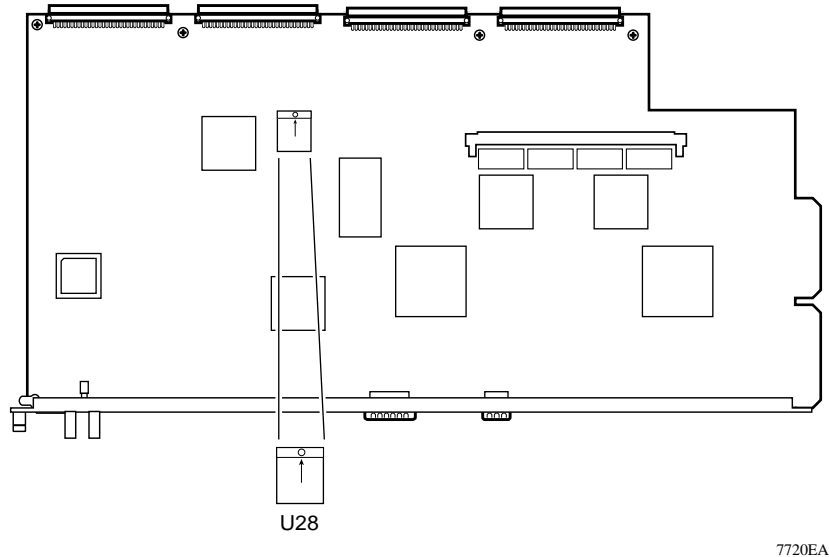


Figure 3. PROM location on the Model 281xSA Ethernet Hub PCB

To replace the firmware in a Model 281xSA hub, follow these steps:

1. **Locate the PROM to be replaced at location U28 (see [Figure 3](#)).**
2. **Remove the existing PROM using the IC extraction tool.**
3. **Install the new PROM (part number 119-216) in location U28; see the release notes that were shipped with the PROM for the current firmware revision level.**

4. Install the PROM correctly with the dot on the PROM toward the rear of the module (see [Figure 3](#)). Make sure the new PROM is installed correctly before reinstalling the cover on the hub.
5. Reinstall the cover on the hub as described in [“Reinstalling the Cover.”](#)

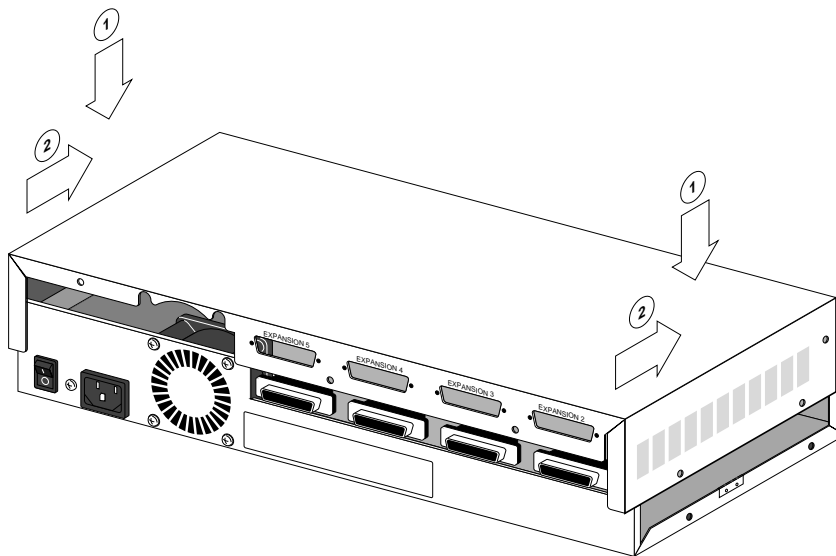


Caution: Applying power to an incorrectly installed PROM can cause damage to the electronic equipment.

Reinstalling the Cover

When you have installed the PROM, you must reinstall the cover on the Model 281xSA hub. To reinstall the cover, follow these steps:

1. Set the cover over the top of the hub, making sure the back edge of the cover clears the expansion ports on the rear panel of the hub (see [Figure 4](#)).



3053.1

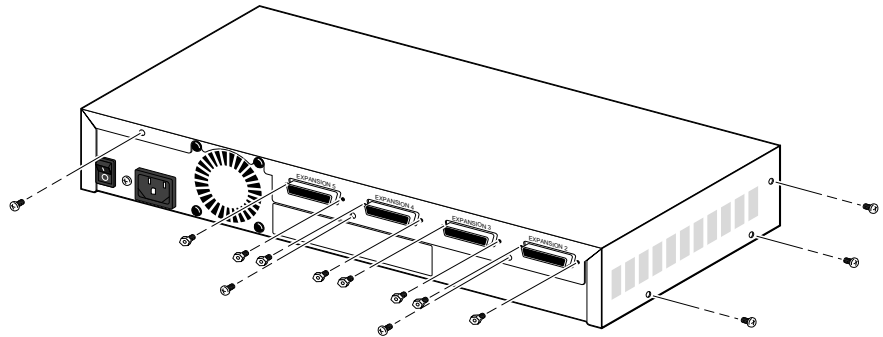
Figure 4. Reinstalling the cover

2. **Holding the sides of the cover, slide the cover toward the front of the hub until the cover engages with the chassis edges.**



Note: Be careful of the ribbon cables that run between boards at the side of the hub. If the ribbon cables interfere with the installation of the cover, gently push them to the inside of the hub as you lower the cover onto the hub.

3. **Using the #1 Phillips screwdriver, insert and tighten three screws on each side of the hub and three screws across the back (see [Figure 5](#)).**
4. **Using the 3/16-inch hex nut driver, insert and tighten eight hex nuts across the back (see [Figure 5](#)).**



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Figure 5. Cover retaining screws

Related Publications

For more information about using the Model 281xSA hub, refer to the following publications:

- *Using the Model 281xSA Ethernet Hub* (Bay Networks part number 893-743-A)

This guide describes how to install and use the Model 281xSA Ethernet Hub.

- *Release Notes for the Model 281xSA Ethernet Hub Version x Boot Firmware* (Bay Networks part number 896-055-x)

The actual value for the variable x in the preceding document reference depends on the current release of the firmware and release notes.

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