Netra™ CP2140 CompactPCI Board Product Note

Sun Microsystems, Inc.
4150 Network Circle
Santa Clara, CA 95054 U.S.A.
650-960-1300

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Send comments about this document to: docfeedback@sun.com

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Netra CP2140 CompactPCI Board Product Note

This product note is written for users of the Netra™ CP2140 CompactPCI board. The Netra CP2140 boards are designed as host processors for application processing in High Availability CompactPCI carrier-grade systems. The Netra CP2140 boards can function as system host or satellite host boards.

The latest versions of the product documentation for the Netra CP2140 board are available at:

`http://www.sun.com/products-n-solutions/hardware/docs/CPU_Boards`

Check the Contents of Your Netra CP2140 CompactPCI Board Shipment

Be sure to check the contents of your package.

Please keep the Sun Microsystems packaging, as this will be required for the return of any failed units for repair. If any of the items are missing or damaged, contact your Sun Microsystems Field Application Engineer.

This document is shipped with one of the following CP2140 boards (see FIGURE 1):

- Assembly, CP2140S-650
  - part no. 501-6403-*xx* (2x512MB memory CP2140 board)
  - part no. 501-6416-*xx* (2x1GB memory CP2140 board)

Additional documentation in the ship kit includes:

- A Certificate of Paid Royalty for Embedded Use of Solaris™ Operating Environment (816-2663-10, Revision A)
- *Important Safety Information for Sun Hardware Systems* (816-7190-*xx*)

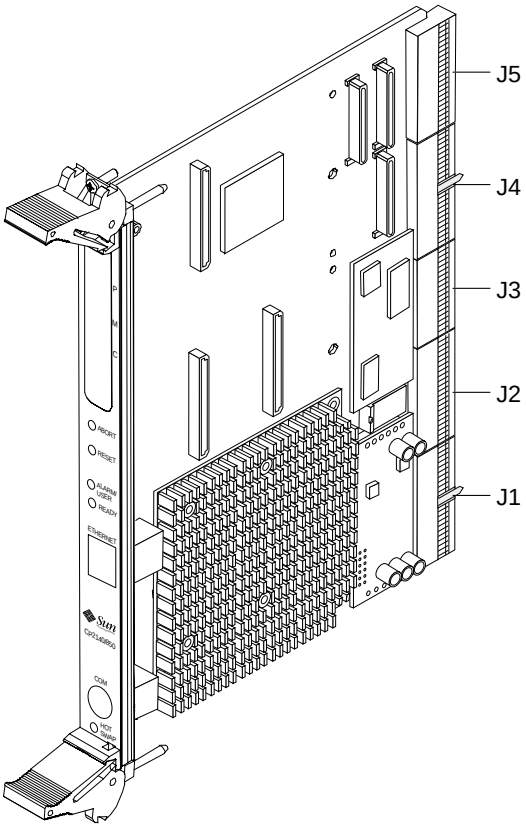

FIGURE 1 Illustration of a Typical Netra CP2140 Board

Note – The Netra CP2140 board part number and board serial number are identified on labels. Please see FIGURE 2 for their locations.

Safety Considerations

For information on safety considerations, refer to the *Important Safety Information for Sun Hardware Systems* (816-7190-*xx*), which is included the board ship kit and the *Netra CP2140 Technical Reference and Installation Manual* (816-4908-*xx*), which is located on the CP2140 documentation web site (see “Related Documentation” on page 3).

Software Information

The Solaris™ 8 2/02 operating environment is supported by the Netra CP2140 board. The *CP2000 Supplemental CD 4.0 for Solaris 8* contains additional features for the Netra CP2140 board. *CP2000 Supplemental CD 3.1 for Solaris 8* can also be used with the Netra CP2140 board, but will not contain all of the features of CD 4.0. For information on how to obtain the CD, contact your Field Application Engineer.

Hardware Information

The SMC module, the heatsink, the power module, and the front panel are an integral part of the CP2140 board. Any attempt to remove these components from the board will void your warranty. See the *Netra CP2140 Technical Reference and Installation Manual* (816-4908-*xx*) to determine the location of these components.

Related Documentation

For all related documentation on Netra CP2140 boards, go to the documentation web site. Refer to the *Netra CP2140 Technical Reference and Installation Manual* (816-4908-*xx*) for comprehensive technical details. You can obtain a copy from your local Field Application Engineer or from the following documentation web site:

`http://www.sun.com/products-n-solutions/hardware/docs/CPU_Boards`

If you are unable to find the product documentation at that web site, go to the following web site and search for documentation for the Netra CP2140 board:

`http://www.sun.com/documentation`

Specific Netra CP2140 product information is available at:

`http://www.sun.com/products-n-solutions/nep/hardware/boards/cp2140/`

Technical Support

If you have any technical questions or technical support issues that are not addressed in the Netra CP2140 documentation set or you need to return the CP2140 board, please read the details below and contact your local Field Applicatiion Engineer.

Please have the board identification information ready (see FIGURE 2). The Netra CP2140 board part number, board serial number, product part number, product dash, date code and MAC address can be found on labels located on the board labels. For proper identification of the board, please see the list below and FIGURE 2:

The Sun barcode label provides the following information:

- Board part number (for example, 5016358) which is the first seven digits on the barcode label. The next six digits are the board serial number (for example, 000230).

The Subcon label provides the following information:

- Product part number (for example, 6403), product dash (for example, 04) and revision number (for example REV 09).

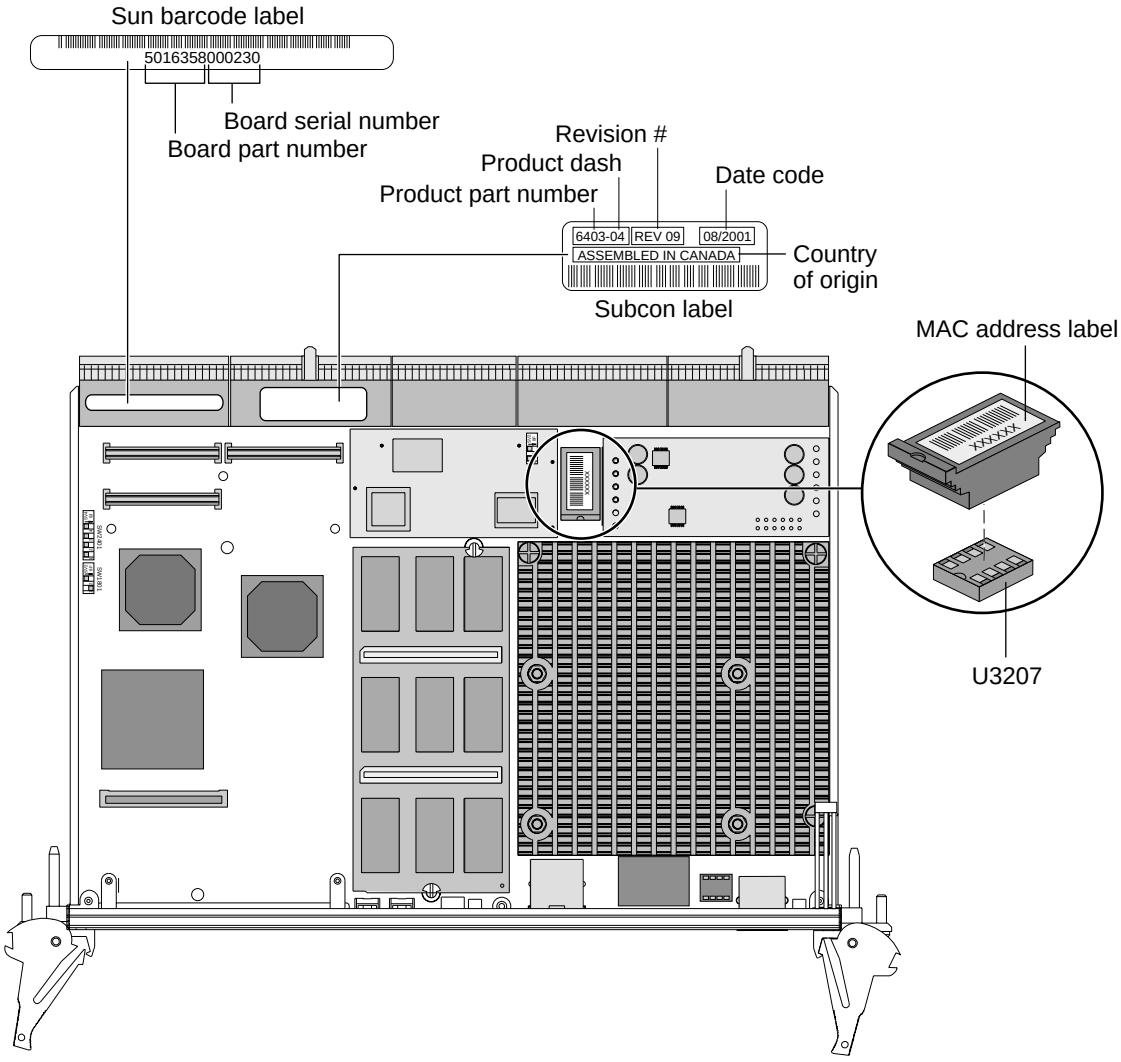

FIGURE 2 Identification Labels and Serial I²C EEPROM on a Typical Netra CP2140 Board

Replacing the Serial EEPROM

The Serial I^2C EEPROM is the MAC address carrier and it stores the backup copy of the board MAC address and Host ID information. The CP2140 board supports the Serial I^2C EEPROM.

If you need to replace the CP2140 board, remove the Serial I^2C EEPROM from the original board and install it on the new CP2140 board. To correctly position the Serial I^2C EEPROM and to precisely install it on the CP2140 board, see FIGURE 2.

Installation of the Board into a Non-High Availability (Non-HA) Chassis

Note – The CP2140 board is configured for operation in a non-HA chassis by default. If you are unsure of your settings, follow the procedure below.

Before Installing the Board in a Chassis

If you have a non-HA chassis, set the SMC module switch settings (on SW0501) as follows *before* powering on the board (see FIGURE 3 and FIGURE 4):

- SW0501.Switch1 ---> Closed (switch is set in direction of arrow)
- SW0501.Switch2 ---> Closed (switch is set in direction of arrow)

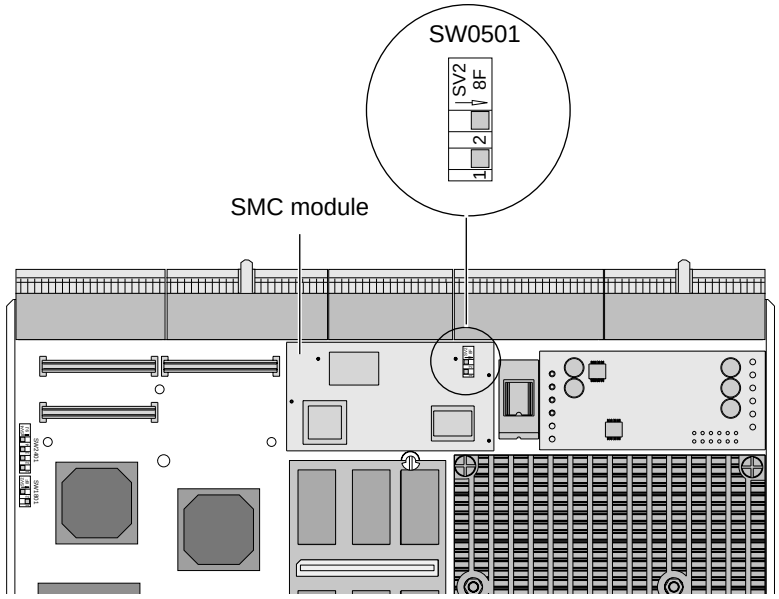

FIGURE 3 Location of SW0501 on SMC Module

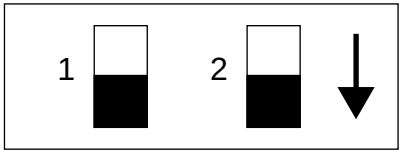

FIGURE 4 Switch SW0501 in Closed Position (Default) for Non-HA Operation

Installation of the Board into a High Availability (HA) Chassis

Note – The CP2140 board is configured for operation in a non-HA chassis by default. If you need to change the settings for HA operation, follow the procedure below.

Before Installing the Board in a Chassis

If you are installing the board into an HA chassis, set the SMC module switch settings (on SW0501) as follows *before* powering on the board (see FIGURE 5 and FIGURE 6):

- SW0501.Switch1 ---> Open (switch is set *opposite* to arrow direction)
- SW0501.Switch2 ---> Closed (switch is set in direction of arrow)

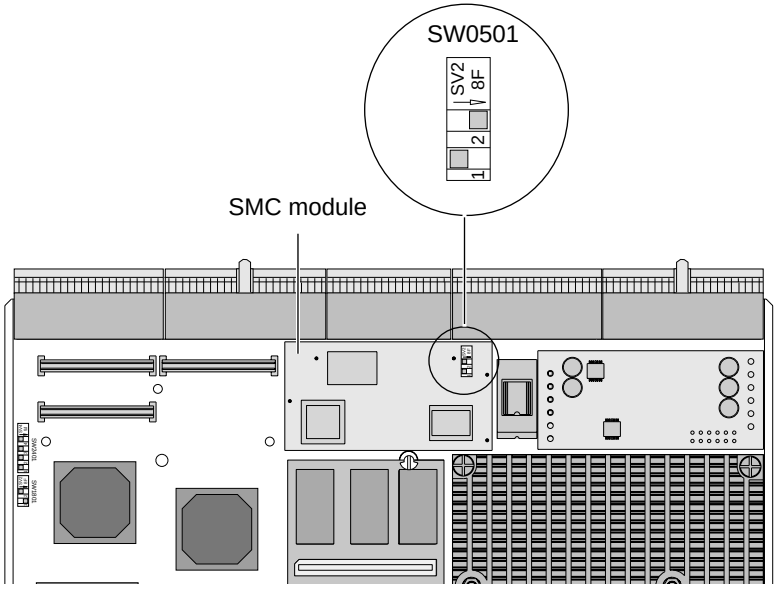

FIGURE 5 Location of SW0501 on SMC Module

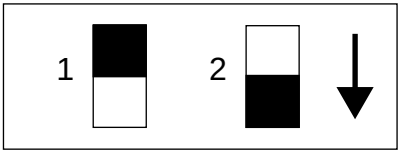

FIGURE 6 Switch SW0501 Setting for Operation in HA Chassis