



TECHNICAL BULLETIN

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Audience: Integrated SS7 Service Technicians
Product(s) Affected: Integrated SS7 Hardware
Distribution: ___ - Critical X - Standard ___ - Special

Purpose of Bulletin

When replacing the Integrated SS7 SPARC CPU card, remove the RTC/NVRAM chip from the old card and install it on the new card. This chip contains the serial number for the Integrated SS7 software license, which is used to validate your Integrated SS7 license each time the system boots. Without the correct serial number, the Integrated SS7 software will not operate.

Corrective Action

CAUTION: Observe antistatic precautions near circuit cards. Wear a ground strap connected to the equipment frame whenever servicing or cleaning circuit cards (ground points are indicated by labels on the system front).

To remove and replace the RTC/NVRAM, complete the following steps:

1. After you have removed the defective SPARC CPU/Sbus assembly from the Integrated SS7 system, place the assembly on an antistatic mat.
2. Locate the RTC/NVRAM chip on the CPU card. The location of the chip on the CPU5V card is shown in Figure 1. The location of the chip on the CPU2CE card is shown in Figure 2.

If you have a SPARC CPU2CE/Sbus Assembly with a modem card, you must remove the modem card before you can access the RTC/NVRAM chip.

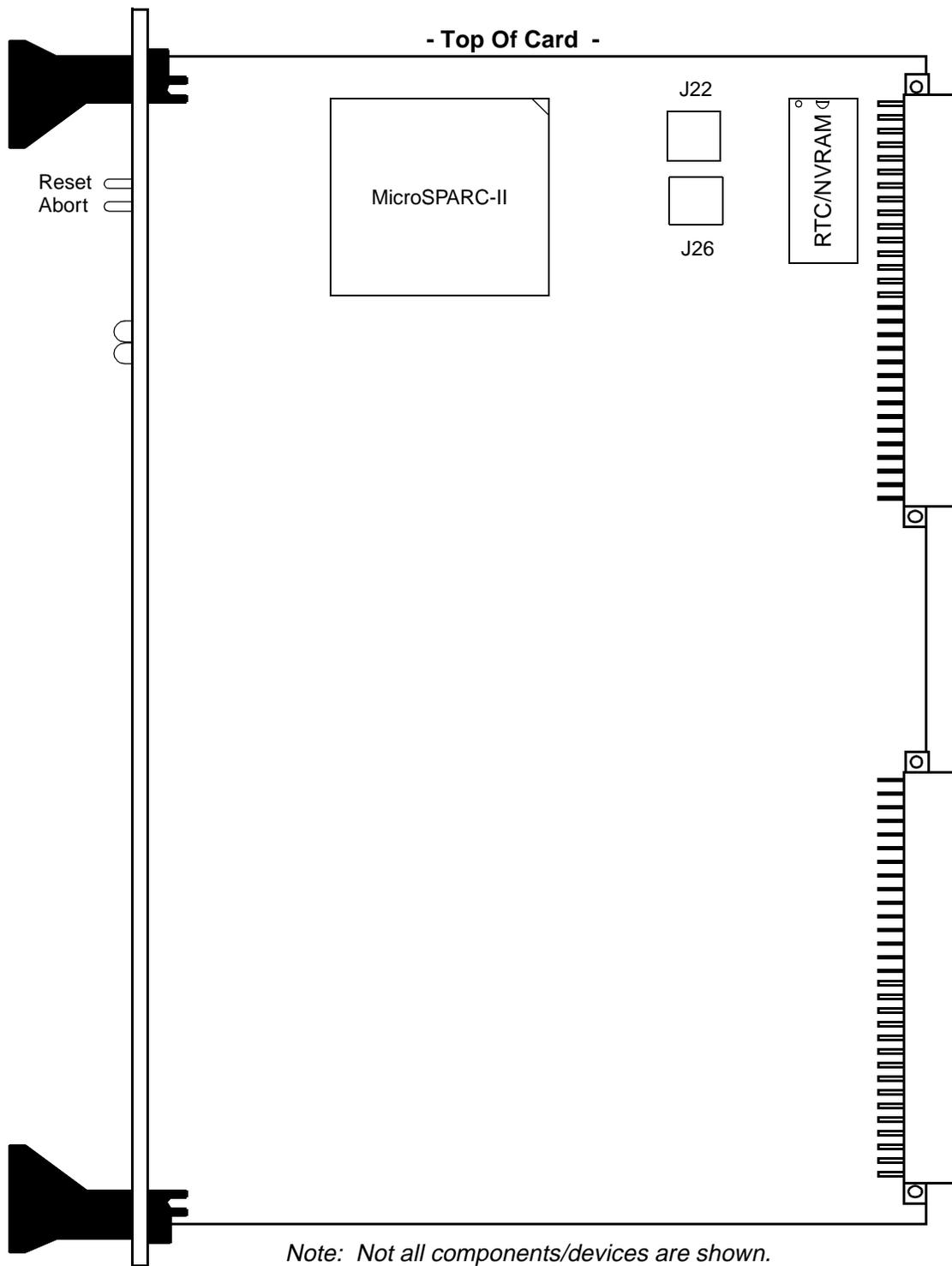


Figure 1: RTC/NVRAM Location on SPARC CPU5V

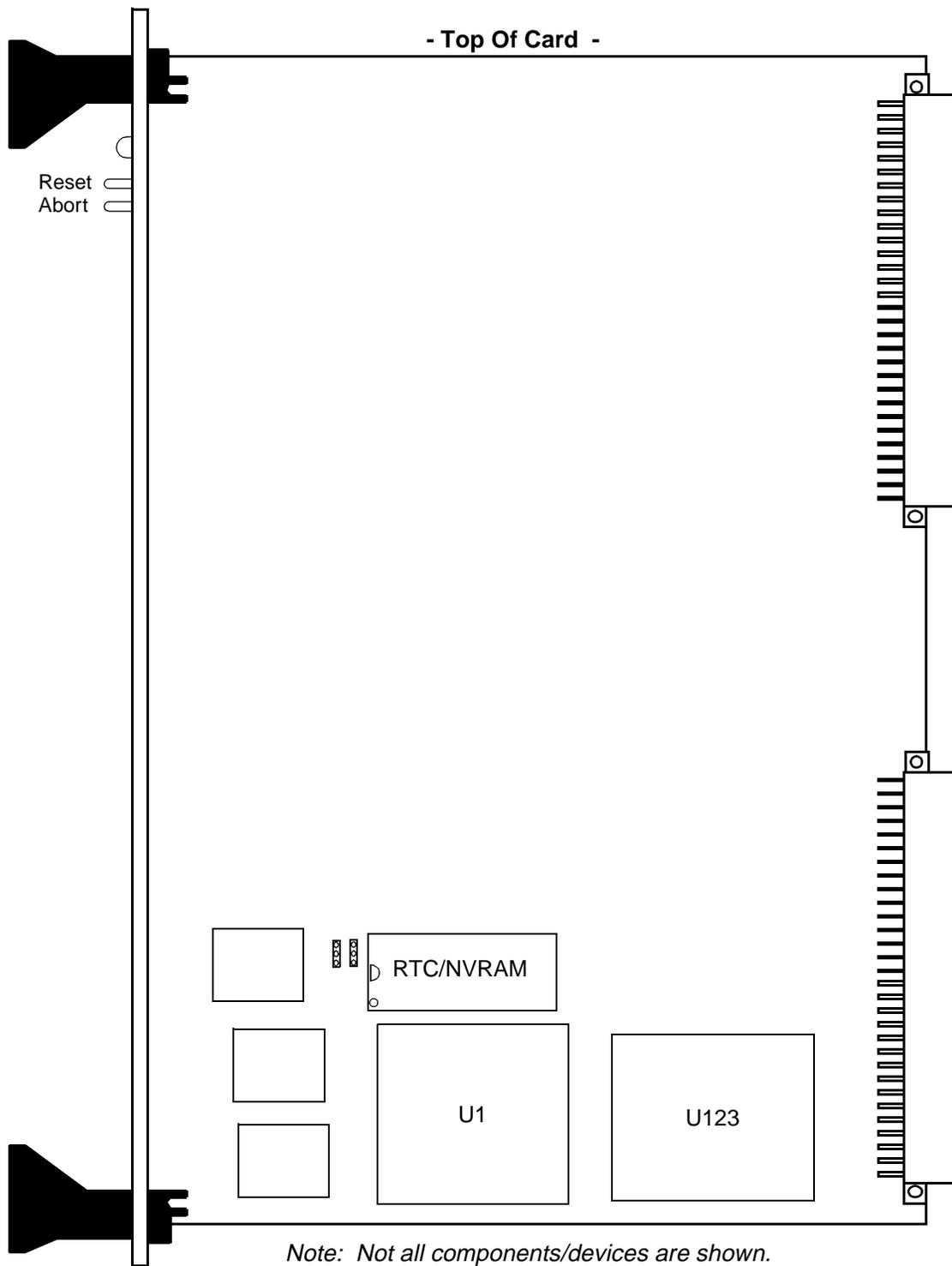


Figure 2: RTC/NVRAM Location on SPARC CPU2CE

3. Remove the chip using a PROM removal tool to grasp the chip and pull it straight up and away from the socket. Place the chip on the antistatic mat with the SPARC CPU/Sbus assembly.

CAUTION: Avoid using devices, such as screwdrivers, to remove PROMs. These devices can damage PROM pins and scratch the circuit card.

4. Remove the replacement SPARC CPU/Sbus assembly from its packaging and place it on an antistatic mat.

If your replacement SPARC CPU2CE/Sbus Assembly has a modem card, remove the modem card to access the RTC/NVRAM chip socket.

5. Before installing the RTC/NVRAM chip on the replacement SPARC CPU/Sbus assembly, verify that the chip's pins are all evenly spaced and vertically aligned. If necessary, align the pins with a commercially available pin-straightener tool, or lay the chip on its side and gently press the top edge, being careful not to press on the pins (Figure 3). Repeat this procedure for the other row of pins.

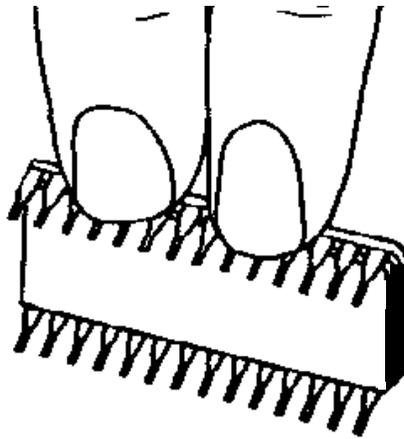


Figure 3: Aligning RTC/NVRAM Pins

6. Carefully insert the pins on one side of the RTC/NVRAM chip into holes on the correct side of the socket (see Figure 4).

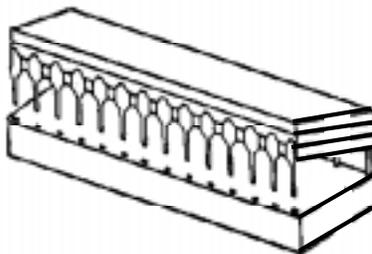


Figure 4: Inserting Pins in One Side of Socket

7. Insert the pins on the other side of the chip into holes on that side of the socket (see Figure 5).

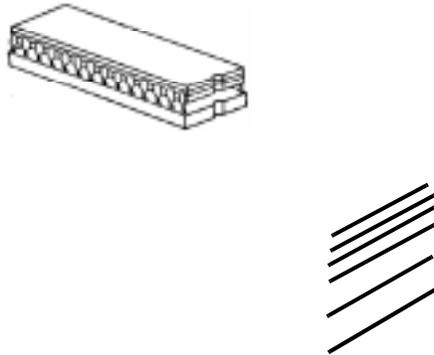


Figure 5: Inserting Pins in Other Side of Socket

NOTE: If the pins are not aligned with the socket holes, remove the RTC/NVRAM chip and straighten the pins (see Step 5). After realigning the pins, repeat Step 6 through Step 8.

8. Carefully examine all the pins on the chip. Be sure that none of the pins are bent or touching one another.
9. With all of the pins inserted into the socket holes, apply gentle and even pressure to the top of the chip until it is fully seated in the socket.
10. If you have a SPARC CPU2CE/Sbus Assembly with a modem card, re-install the modem card.
11. Install the replacement SPARC CPU/Sbus assembly in the Integrated SS7 system.

NOTE: The RTC/NVRAM chip from the CPU2CE is not interchangeable with the CPU5V chip and vice versa..