

VXIpc-850 PENTIUM UPGRADE

This guide describes how to install the Pentium upgrade CPU card into the VXIpc-850 embedded computer.

With the Pentium upgrade CPU card, you can upgrade your VXIpc-850 Pentium system to faster performance. For example, you can install a 200 MHz Pentium upgrade CPU card into a VXIpc-850/100 and gain the same performance levels as the National Instruments VXIpc-850/200. There are no performance differences between an upgraded module versus a new one.

What You Need to Get Started

To install the Pentium upgrade CPU card, you will need the following items.

- Pentium upgrade CPU card
- Thermal interface pad
- 1/4 in. nut driver
- Phillips head screwdriver

Installation Procedure

Step 1. Remove the Original CPU Card

To remove the original CPU card, perform the following steps.

1. Remove the 12 screws from the cover of the VXIpc-850 module. There are five screws on the top side, three on the right side, and four on the bottom side. Keep these screws in a safe place.
2. Grasp the cover close to the front panel. Lift the cover upward slightly to dislodge it from the front panel and slide it backwards, freeing it from the VXI connectors on the back side.

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3. Remove the expansion card edge support by removing the single screw.
4. Remove any DRAM SIMMs that are installed in the card. Make sure to use proper antistatic precautions when handling the SIMMs.
5. Remove the three screws at the corners of the heat sink, but do not attempt to remove the heat sink yet. Do *not* remove the two screws in the middle of the heat sink. Keep the three screws in a safe place.
6. The heat sink is attached to the processor via an adhesive, heat-conducting pad. Rotate the heat sink back and forth in the plane of the CPU card to disconnect the thermal pad from the heat sink. If the thermal pad detaches from the processor instead of the heat sink, remove the pad from the heat sink. You will not need the thermal pad.
7. From the four corners of the card, remove the three 1/4 in. standoffs, three nylon washers, and the screw that attach the CPU card to the motherboard.
8. Remove the CPU card by pulling it gently and firmly from its connectors.

Step 2. Install the Upgrade CPU Card

To insert the new CPU card, perform the following steps.

1. Insert the CPU card firmly into the horizontal connectors.
2. Reattach the CPU card with the three 1/4 in. standoffs and three washers (which correspond to the holes in the corners of the heat sink), and the screw.
3. Remove the backing from one side of the new thermal pad and place it on the processor with the adhesive side down.
4. Remove the backing from the other side of the thermal pad and place the heat sink onto the processor, making sure to line up the mounting holes at the corners of the heat sink with the matching holes on the CPU card.
5. Reattach the heat sink to the CPU card using the three screws you previously removed.
6. Reinsert the DRAM SIMMs into the sockets in the new CPU card. If you have two SIMMs, you can install them in the two slots closest to the heat sink or in the two outermost slots.
7. Reinstall the expansion card edge support with the single screw.

8. Replace the cover on the VXIpc-850 module by sliding the back end over the VXIbus connectors and rotating the cover back down toward the front panel.
9. Reinstall the 12 screws into the module through the cover.

The Pentium upgrade CPU card is now installed.