

## SunPCi™ II SODIMM Installation Guide



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# SunPCi II SODIMM Installation Guide

This guide contains reference, removal and replacement, and troubleshooting information about random access memory (RAM) small outline dual inline memory modules (SODIMMs).

The SunPCi II card uses SODIMMs as system memory, and supports 64-Mbyte, 128-Mbyte, and 256-Mbyte capacities. The SunPCi IIpro card also supports 512-Mbyte SODIMMs.

The following sections are contained in this guide:

- "Memory Overview" on page 2
- "What's In Your Memory Installation Kit" on page 3
- "Memory Installation or Replacement" on page 4
- "Troubleshooting SODIMM Installation" on page 11
- "Technical Assistance" on page 12

### **Memory Overview**

The SunPCi II card has two SODIMM slots. The card comes standard with a SODIMM installed in slot 1. Slot 2 is available to accommodate an optional SODIMM.

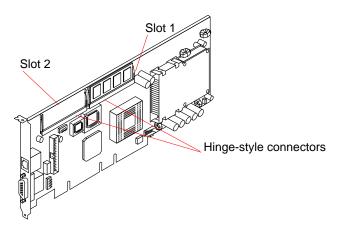


FIGURE 1 SODIMM Slots and Connectors

The SunPCi II card can operate with any capacity SODIMM in either slot, or with mixed capacities of SODIMMs in both slots. If desired, you can remove a SODIMM from slot 1 and install a larger capacity SODIMM in either or both slots (512-Mbyte for SunPCi IIpro only).

#### What's In Your Memory Installation Kit

The installation kit for your SunPCi II SODIMM(s) contains the following items:

- SODIMM in an antistatic bag
- Grounding wrist strap
- Instructions (this manual)

Remember to save the packaging that comes with your memory module. If you need to return a SODIMM or the SunPCi II card for service, you will need to return the card to its original configuration and ship it in its original packaging.

The following sections describe how to install and replace a SODIMM, how to troubleshoot SODIMM installation (if necessary), and how to obtain technical assistance.

#### Memory Installation or Replacement

To install or replace a SODIMM, use the following procedures.

#### Removing the SunPCi II Card From Your System

1. Take antistatic precautions: Attach and electrically ground the wrist strap.



**Caution** – Locate the wrist strap in the installation kit, unwrap it, and attach its adhesive copper strip to an unpainted area on the metal chassis of the system. Wrap the other end twice around your wrist with the adhesive side against your skin. Also ensure that when the system is powered off, the power cord is plugged into its receptacle to maintain a grounding path.

- 2. If your SunPCi II card has not yet been installed into your system, skip this procedure and see either "Removing a SODIMM" on page 7, or "Installing a SODIMM" on page 5.
- 3. If your SunPCi II card has already been installed into your system, power off your system and open the system unit.

  Refer to the documentation that accompanied your system for instructions on how to open and close the system unit.

- **4.** Remove the SunPCi II card from your system as described in the SunPCi II 2.2 Installation Guide.
- If you need to remove a SODIMM, see "Removing a SODIMM" on page 7; otherwise to install a SODIMM, see "Installing a SODIMM" on page 5.

#### Installing a SODIMM

**1.** Locate the SODIMM slots on the SunPCi II card. Select the slot(s) to use. FIGURE 2 shows the locations of the slots.



**Caution** – Do not remove the SODIMM from its antistatic container until you are ready to install it on the card. Handle the module only by its edges. Do not touch module components or metal parts. Always wear a grounded (see page 4) antistatic wrist strap when handling modules.

- 2. Remove the SODIMM from its protective packaging, holding the module only by the edges.
- 3. Holding the SODIMM at approximately a 20-degree angle to the card, insert the bottom edge of the SODIMM into the bottom of the slot's hinge-style connector (see FIGURE 2).

  With even pressure, push simultaneously on both upper corners of the SODIMM until its bottom edge (the edge with the gold fingers) is firmly seated in the connector.



**Caution** – Evenly engage the SODIMM in its hinge-style slot at the 20-degree angle; uneven contact can cause shorts that will damage the SunPCi II card. Do not rock the SODIMM into place. Ensure that all contacts engage at the same time. You will feel or hear a "click" when the SODIMM is properly seated in the connector.

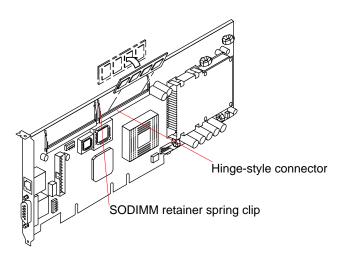


FIGURE 2 SODIMM Installation

4. Press the top edge of the SODIMM toward the card until the retainer clips click into place.

The small metal retainer clips on each side of the SODIMM slot are spring-loaded, and will click into place in the notches on the SODIMM sides.

- 5. Reinstall the SunPCi II card into your system as described in the SunPCi II 2.2 Installation Guide.
- **6. Detach the wrist strap and close the system unit.** See the documentation for your system for instructions on how to close the system unit.

#### Removing a SODIMM

You may need to remove a SODIMM from the SunPCi II card if you are returning the SODIMM or the SunPCi II card for service, or if you are replacing the module in slot 1 with another SODIMM.

**Note** – Safely store the original factory-shipped SODIMM (if removed from slot 1) and related SODIMM packaging. You may wish to store any removed SODIMM in the new SODIMM packaging, or use the packaging for service.

To remove a SODIMM from the SunPCi II card, perform the following steps:

1. Take antistatic precautions: Attach and electrically ground the wrist strap.



**Caution** – Locate the wrist strap in the installation kit, unwrap it, and attach its adhesive copper strip to an unpainted area on the metal chassis of the system. Wrap the other end twice around your wrist with the adhesive side against your skin. Also, ensure that when the system is powered off, the power cord is plugged into its receptacle to maintain a grounding path.

- If your SunPCi II card is installed in your system, power off your system and open the system unit.Refer to the documentation for your system for instructions on
  - how to open the system unit.
- 3. Remove the SunPCi II card and place it on an antistatic mat, or on the card's antistatic bag if you do not have a mat available.

4. For the SODIMM you wish to remove, simultaneously pull both SODIMM spring retainer clips outward from the slot.

The SODIMM will release outward at an angle of about 20 degrees.

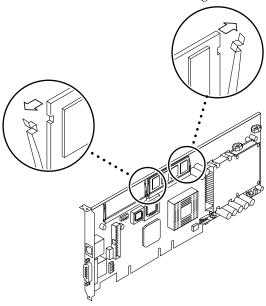


FIGURE 3 SODIMM Releases Outward

5. Grasp the SODIMM by the edges, and carefully pull it out of its connector. Place it in an antistatic bag.

Ensure that you pull the SODIMM out at an angle of about 20 degrees, or you may damage the SODIMM.

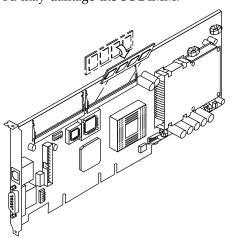


FIGURE 4 SODIMM Removal

6. If you are replacing the module you removed with a new SODIMM, install it as described in "Installing a SODIMM" on page 5.

#### **Troubleshooting SODIMM Installation**

If you see the following error message after you reinstall the SunPCi II card into your system and power it on, you may need to check that the hardware is installed properly:

Driver couldn't be loaded.

SunPCi cannot open the device.

This error message appears when the SunPCi II software cannot locate the card. Make sure that the card is securely seated in the PCI slot.

When you start the SunPCi II software and your installed version of Microsoft Windows, verify that the system shows the correct amount of installed memory. If you do not see the correct amount of memory, remove and reinstall the SODIMM.

If the SunPCi II software does not operate at all, the SODIMM may not be functioning. Make sure that each SODIMM is seated correctly in its slot. If each one is seated correctly and SunPCi II software still does not operate, you may need to return the module for service.

#### **Technical Assistance**

If you replaced the factory-shipped SODIMM, save the original factory-shipped SODIMM. If you ever need to return your SunPCi II card for service, you will need to reinstall the original factory-shipped SODIMM and return the card in its original configuration. Make sure that you remove all optional SODIMMs before shipping the card.

**Note** – After you install the SODIMM into your SunPCi II card, make sure to save all original packing materials for both the SunPCi II card and for the SODIMM.

If you have a problem with your SunPCi II SODIMM, contact your service provider or sales representative.

To speed service, have your system serial number and SunPCi II card sales order number available. Note that the benefits provided by your service provider may differ from those provided by the standard Sun factory warranty.

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