Silicon Graphics[®] Zx10[™] 6U Rackmount/Deskside Owner's Guide Addendum

This document is an addendum to the *Silicon Graphics Zx10 6U Rackmount/Deskside Owner's Guide* (P/N 007-4329-002). This addendum discusses the following topics:

- "Before Mounting a Rackmount System" on page 1
- "Preparing a Deskside System for Rack Mounting" on page 1
- "Power Supplies" on page 3

Before Mounting a Rackmount System

When observing the safety precautions associated with mounting a system in an equipment rack (in Chapter 1 of the owner's guide), include the following:

• Ensure that heavier equipment is installed at the bottom of the equipment rack to prevent the rack from becoming top-heavy.

Preparing a Deskside System for Rack Mounting

A Zx10 6U system is delivered in a deskside configuration. If you purchased an optional rackmount kit, follow these instructions to prepare a deskside system for rack mounting:

- 1. Remove the three screws that secure the top-and-right-side panel (see Figure 1 on page 2) to the back of the system.
- 2. Slide the panel toward the back of the system and lift it away.
- 3. Facing the front of the system, lay the system on its right side.
- 4. Remove the screws securing one side of the front panel to the system.



Figure 1 Top-and-Right-Side Panel

- 5. Place a handle bracket against the side of the front panel (see Figure 2 on page 3). Make sure the holes in the bracket align with the holes in the side of the front panel. Also make sure the bracket is flush with the front panel.
- 6. Secure the handle bracket to the side of the front panel with M4 x 5-mm Phillips screws (supplied). Put the screws through the bracket and into the side of the front panel.
- 7. Repeat steps 4 through 6 to attach the remaining handle bracket to the system.
- 8. Secure a handle to each handle bracket with #10-32 x .25-in. Phillips screws (supplied).
- 9. Rotate the emblem on the system's front panel 90 degrees to orient it correctly.

See the owner's guide for instructions on mounting a system in an equipment rack.



Figure 2 System with Handle Brackets and Handles Attached

Power Supplies

Your system may have shipped with different power supplies than the ones described in the owner's guide. The following text contains information on connecting, using, and replacing the new power supplies (shown in Figure 3 on page 4).

Warning: The Zx10 6U is a user-serviceable system. However, servicing the power supplies is restricted to authorized service personnel. There are no user-serviceable parts in the power supplies; return them to the manufacturer for repair.



Figure 3 Power Supplies

Connecting to AC Power

The information on connecting to AC power (in Chapter 1 of the owner's guide) applies to the new power supplies, except as follows:

• The power supplies are auto-ranging. You do not set the power supply voltage.

See Figure 3 to locate the AC power receptacles and the power switches

Responding to a Power Supply Alarm

The information on responding to a power supply alarm (in Chapter 4 of the owner's guide) applies to the new power supplies. See Figure 3 to locate the alarm cutoff switch.

Replacing a Power Supply

The information on replacing a power supply (in Chapter 9 of the owner's guide) applies to the new power supplies, except as follows:

- The steps to replace a power supply have changed; see the following instructions.
- The power supplies are auto-ranging. You do not set the power supply voltage.

See Figure 3 on page 4 to locate the AC power receptacles and the power switches.

Warning: When AC power is applied to the system, a power supply has a high energy level on the exposed contacts of the printed circuit board edge fingers. Use caution when handling a removed power supply.

Caution: Support the power supply as you remove it from or push it into the base unit. Do not let it fall, or damage to internal components may result.

To replace a power supply, follow these steps:

- 1. On the power supply to be replaced, set the power switch to the OFF (0) position, and then disconnect the AC power cord from the AC power receptacle.
- 2. On the power supply to be replaced, remove the screw that secures the power supply to the back of the base unit.
- 3. On the power supply to be replaced, grasp the handle and pull the power supply out of the base unit.
- 4. Push the new power supply into the base unit until it seats in its connector. Make sure the new power supply is fully inserted and firmly seated before proceeding.
- 5. Secure the new power supply to the base unit with the screw removed previously. Make sure the power supply is firmly secured to the base unit before proceeding.
- 6. On the new power supply, set the power switch to the OFF (0) position, and then connect the system's AC power cord to the AC power receptacle.
- 7. On the new power supply, set the power switch to the ON (|) position. The power supply LED lights when the power supply is operating.

Power Supply Information

The system has two power supplies for increased power supply reliability. Both must be connected to AC power for the system to operate correctly. However, if one power supply fails, you can replace it without shutting down the other power supply. This hot-swap capability lets you handle a power supply failure without shutting down and powering off the entire system.

Both power supplies provide 300 W of power to the system. Each power supply is auto-ranging from 90-264 VAC (10 percent tolerance). The input frequency is 47-63 Hz, single phase. Input current is 6.0 A for the 115 VAC range and 3.0 A for the 230 VAC range. The typical efficiency is 65 percent at maximum output load.

Table 1 shows the DC output specifications for the combined power supplies.

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Outputs	1	2	3	4	5	6
Nominal output voltages (VDC)	+5.0	+3.3	+12.0	-12.0	-5.0	+5.0 (Standby)
Maximum current rating (ADC)	25	18	16	0.5	0.5	1

Table 1DC Output Specifications for Combined Power Supplies

Standby +5.0 VDC output voltage is always on. Maximum +5.0 V and +3.3 V combined output is 35 A.

The combined power supplies have a single ATX system board power cable and four peripheral device power cables. Two of the device power cables each have two peripheral device connectors. The other two device power cables each have a peripheral device connector and a floppy disk drive connector.

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	+3.3 V	6	+5.0 V	11	+ 3.3 V (+ Sense)	16	Ground
2	+3.3 V	7	Ground	12	-12.0 V	17	Ground
3	Ground	8	Power Good	13	Ground	18	-5.0 V
4	+5.0 V	9	5.0 V Standby	14	Remote On	19	+5.0 V
5	Ground	10	+12.0 V	15	Ground	20	+5.0 V

Table 2 shows pinouts for the system board power cable connector.

System Board Power Connector Pinouts

Table 3 shows pinouts for the floppy disk drive power cable connectors.

Table 3	Floppy Disl	c Drive Co	onnector	Pinouts

Pin	Signal	Pin	Signal
1	+5.0 V	3	Ground
2	Ground	4	+12.0 V

Table 2

Table 4 shows pinouts for the peripheral device power cable connectors.

 Table 4
 Peripheral Device Connector Pinouts

Pin	Signal	Pin	Signal
1	+12.0 V	3	Ground
2	Ground	4	+5.0 V

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