# Silicon Graphics® Zx10™ 6U Owner's Guide Addendum: Power Supply

Your system may have shipped with different power supplies than the ones described in the *Zx10 6U Rackmount/Deskside Owner's Guide*. This document contains information on connecting to, using, and replacing the new power supplies (shown in Figure 1).

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.

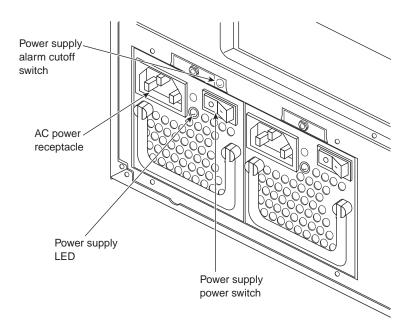


Figure 1 Power Supplies

### **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 1 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 1 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 procedure for replacing a power supply has been revised; see below.
- The power supplies are auto-ranging. You do not set the power supply voltage.
- See Figure 1 to locate the AC power receptacles and the power switches.

To replace a power supply:

- 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.

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.

- 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 down the entire system.

Both power supplies provide 300 Watts of power to the system. Each power supply is auto-ranging from 100-240 V AC (10 percent tolerance). The input frequency is 47-63 Hz, single phase. Input current is 6.0 A for the 115 V AC range and 3.0 A for the 230 V AC range. The typical efficiency is 65 percent at maximum output load.

 Table 1
 Combined Power Supplies DC Output Specifications

| Outputs                        | 1    | 2    | 3     | 4     | 5    | 6    |
|--------------------------------|------|------|-------|-------|------|------|
| Nominal Output Voltages (V DC) | +5.0 | +3.3 | +12.0 | -12.0 | -5.0 | +5.0 |
| Maximum Current Rating (A DC)  | 25   | 18   | 16    | 0.5   | 0.5  | 1    |

Standby +5.0 V DC 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 have two peripheral device connectors each. The other two device power cables have a peripheral device connector and a floppy disk drive connector each.

 Table 2
 System Board Power Connector Pinout

| 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 3** Floppy Disk Drive Connector Pinout

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

 Table 4
 Peripheral Device Connector Pinout

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

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