

1. Front Panel

The front panel is located in the front corner of the chassis and remains unchanged from the SC5100 server chassis. For the pedestal configuration, an exterior door allows full access to the front panel features. The front panel features the control buttons and LED indicators listed in *Figure 1*. Not shown (in the figure below) is a tool-activated Non-maskable Interrupt (NMI) switch located below the Status LED. The LEDs are visible with the pedestal exterior access door closed. The blue ID LED and ID toggle switch featured in the rack mount SC5200 chassis is used to indicate which particular chassis among several in a rack configuration is being serviced. There is a second blue ID LED mounted on the baseboard and visible from the rear of the chassis, which mimics the front ID LED.

A 34-pin Entry Ebay SSI (rev 3.0) front panel header is located on the back of the front panel. This allows for a 34-pin ribbon cable connection for use with SSI rev 3.0-compliant server boards, or a 24-pin ribbon connection for use with first generation SSI server boards.

When the hot-swap drive bay is installed, a bi-color hard drive LED is located on each drive carrier (five total) to indicate specific drive failure or activity. For pedestal systems, these LEDs are visible upon opening the front bezel door.

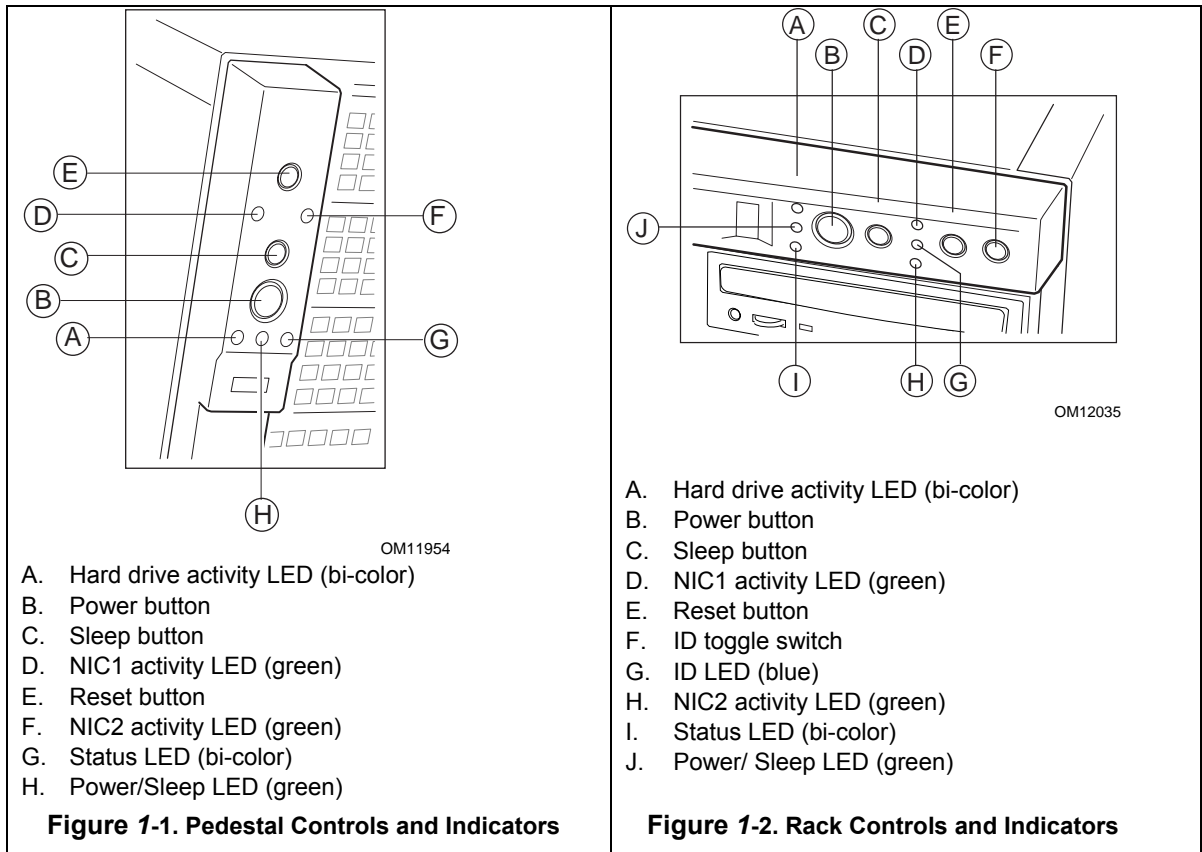


Figure 1. Front Panel Controls and Indicators

Table 1. Typical Front Panel LED Functions

LED Name	Color	Condition	Description
Power/Sleep LED	Green	ON	Power on
	Green	BLINK	Standby/Sleep (S1)
		OFF	Power off or Sleep (S4)
Status LED	Green	ON	System ready
	Green	BLINK	Processor or memory disabled
	Amber	ON	Critical temperature or voltage fault; CPU/Terminator missing
	Amber	BLINK	Power fault; Fan fault; Non-critical temperature or voltage fault
		OFF	Fatal error during POST
Hard drive activity	Green	BLINK	Hard drive activity
	Amber	ON	Fault
		OFF	No activity
NIC1 activity	Green	ON	Linked
	Green	BLINK	LAN activity
		OFF	Disconnected
NIC2 activity	Green	ON	Linked
	Green	BLINK	LAN activity
		OFF	Disconnected
ID LED	Blue	ON	Server identification; Toggled by ID button or software
		OFF	Server identification; Toggled by ID button or software

Further details of the front panel functions supported refer to the individual server board specifications.

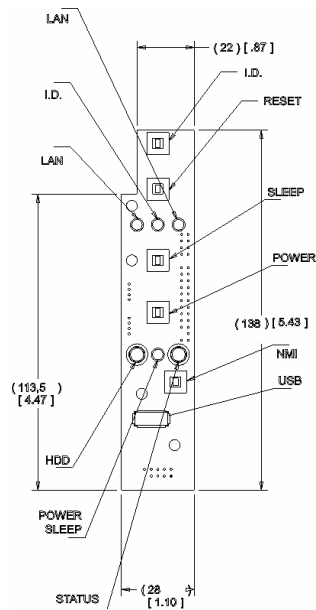


Figure 2. Front Panel, Showing Basic Layout

2. System Interconnection

2.1 Signal Definitions

The standard cable construction is briefly described following. The pin-out on the connectors referred to in this section is defined in the respective server board Technical Product Specification (TPS).

2.2 Interconnect Diagram

The figure below depicts cables that may be found in a fully integrated SC5200 system. Not all the cables shown below are provided with the system chassis or server board products.

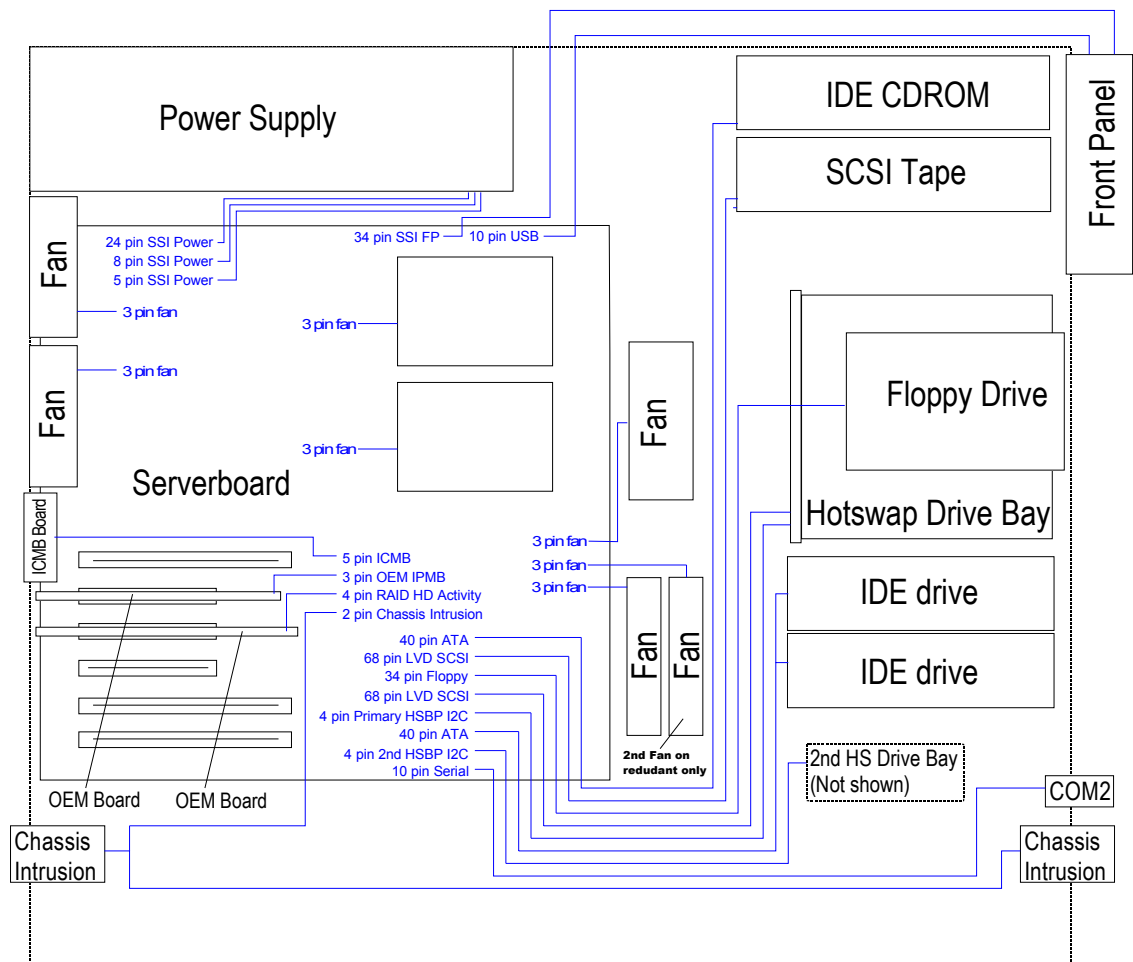


Figure 3. Chassis Interconnect Diagram

Note: Actual server board connections will vary by product. Consult the server board TPS for details. Cabled COM2 is normally routed to the rear of the chassis with front mounting as an option for rack version. Two hot-swap drive bays can be installed on the chassis with the 650-W 2+1 redundant power supply chassis. No hot-swap drive bays are shipped with the 450-W power supply chassis (see **Error! Reference source not found.**). Install hot-swap drive upgrade kit

(AXX2HSDRVUG). ICMB board kit is a separate option (AXX2ICMBKIT). Both power supplies have the 24-pin SSI and 8-pin power connectors, and the 650-W also has the 5-pin connector.

2.3 Chassis Internal Cables

The following cables are provided as part of the chassis kit:

2.3.1 Intrusion Alarm Switch cable

The intrusion alarm cable consists of two switches in a series which are normally open and are depressed by the access cover and front bezel. It is cabled to the server board by 22AWG twisted-pair wire terminated at a 2-pin connector.

2.3.2 Front Panel cable

A 34-conductor ribbon cable with 34-pin IDC* connectors links the front panel and SSI Revision 2.0-compliant server board (e.g., SHG2). Some boards may employ a 24-pin ribbon cable that does not fully support all the features of the front panel.

2.3.3 USB cable

A 10-conductor USB cable with 10-pin connectors is used for connecting the front panel-mounted USB connector to the server board

2.3.4 Fan Connectors

The installed system fans provide 3-pin connectors designed to mate with SSI (ATX*)-compatible fan headers. Hot-swap fans employ chassis-mounted adapter cables to provide a standard 3-pin connector for the server board.

The following cables are also provided as part of the HSRP chassis kit:

2.3.5 SCSI cable

A 68-conductor twisted-pair SCSI cable is provided to interface from the server board to the hot-swap backplane (HSBP).

2.3.6 I²C cable

A 4-pin cable connects the server board to the HBSP to communicate server management information, such as drive and fan status to the server board. Note that the server management features will vary by server board.

2.4 Server Board Internal Cables

Depending on the specific server board support of these features, some or all of the following cables may not be included as part of the boxed board kit:

2.4.1 IDE cable

One or two 40-pin, 80-conductor DMA33/66/100 IDE cable.

2.4.2 SCSI cable

One 68-pin, 68-conductor twisted-pair wide SCSI cable with terminator. Cable supports connection of up to four SCSI drives to the server board.

2.4.3 Floppy cable

One 34-conductor cable featuring two 34-pin IDC connectors (2x17) floppy cable.

2.4.4 Serial cable

One 8-conductor cable terminated in a 2x5 header at one end and a 9-pin panel mount Dsub connector on the other.

2.5 Accessory Cables

2.5.1 ICMB Interface Card cable

One 5-pin ICMB cable connects the server board to the ICMB interface card mounted on the chassis rear panel or add-in card slot (included in the ICMB Interface Card Kit (AXX2ICMBKIT))

2.5.2 External SCSI Cable

One 68-pin SCSI cable connects the server board or add-in SCSI card to the panel which mounts to the back of the chassis (see **Error! Reference source not found.**) (AXXEXTSCSICBL)

2.5.3 SCSI Y-Cable

A 68-conductor twisted-pair SCSI cable is provided to interface from the server board to two HSBPs. The server board uses the middle connector with an HSBP connected on each end. The server board or SCSI card utilized must support disabling termination on the board, as both backplanes will provide proper termination (see **Error! Reference source not found.**) (AHD3HSBPYCBL)

2.6 I/O Panel Connectors

The SC5200 chassis provides an ATX 2.03 and SSI E-bay 3.0 -compliant I/O aperture for the backside I/O. The specific panel used will be provided in the boxed server board kit. The following are typical panel connections:

- PS/2 keyboard connector
- PS/2 mouse connector
- 9-pin serial port(s)
- 25-pin parallel port
- USB port(s)
- 15-pin video port
- Ethernet RJ-45 connector(s)