Sun Integrated Lights Out Manager Supplement for Sun Fire™ X2250 Server

Sun Microsystems, Inc.
www.sun.com

Part No. 820-4596-10, Rev. A
May 2008

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Contents

Preface

The *Sun Integrated Lights Out Manager Supplement for Sun Fire X2250 Server* provides information about using the Sun Integrated Lights Out Manager (ILOM) with the Sun Fire X2250 Server.

ILOM Documentation

ILOM documentation is divided into two categories:

- Generalized ILOM information, located in the *Sun Integrated Lights Out Manager 2.0 User's Guide* (820-1188) and the *Addendum to the Sun Integrated Lights Out Manager 2.0 User's Guide* (820-4198).
- Information specific to the Venus server, located in this supplement.

Server Module Documentation

This section describes the documentation and updates that are available for the Sun Fire X2250 Server.

Hardware Installation Documentation

Refer to the *Sun Fire X2250 Server Installation Guide (*820-4591) for instructions on installing the hardware, cabling, and powering on your system.

Related Documentation

For a description of the document set for the Sun Fire X2250 Server, see the *Where to Find Documentation* sheet that is shipped with your server and also posted at the product's documentation site. Go to the following URL, then navigate to the Sun Fire X2250 product documentation web site:

`http://docs.sun.com`

Translated versions of some of these documents are available at the web site described above in French, Simplified Chinese, Traditional Chinese, Korean, and Japanese. English documentation is revised more frequently and might be more up-to-date than the translated documentation.

Using UNIX Commands

This document might not contain information about basic UNIX® commands and procedures such as shutting down the system, booting the system, and configuring devices. Refer to the following for this information:

- Software documentation that you received with your system
- Solaris™ Operating System documentation, which is at:

  `http://docs.sun.com`

Typographic Conventions

Typeface	Meaning	Examples
`AaBbCc123`	The names of commands, files, and directories; on-screen computer output	Edit your `.login` file. Use `ls -a` to list all files. `% You have mail.`
`AaBbCc123`	What you type, when contrasted with on-screen computer output	`% su` `Password:`
AaBbCc123	Book titles, new words or terms, words to be emphasized. Replace command-line variables with real names or values.	Read Chapter 6 in the *User's Guide*. These are called *class* options. You *must* be superuser to do this. To delete a file, type `rm` *filename*.

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ILOM Supplement for Sun Fire X2250 Server (820-4596-10).

ILOM Supplement for Sun Fire X2250 Server

This supplement contains information for using Integrated Lights Out Manager (ILOM) with the Sun Fire™ X2250 Server.

This document provides information about the following topics:

Hardware Information

This section provides information about the system hardware.

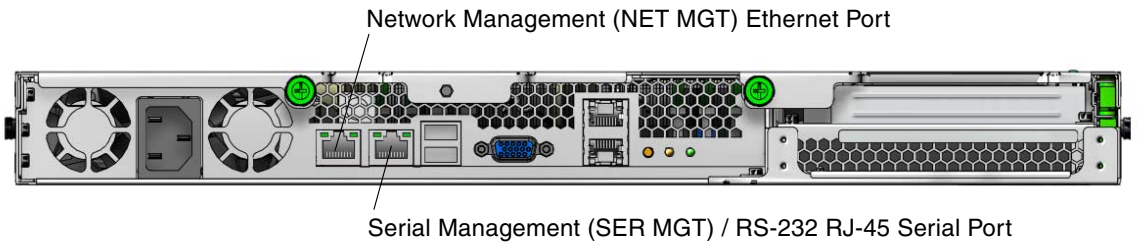
Server Locator Indicator

The Server Locator indicator is a pair of small lights that you turn on to help you identify a specific server among many in a data center. One light is positioned on the front of the server in the upper-left corner, and the other light is on the back of the server in the lower-center section.

Hardware Port Locations

ILOM communicates through the server's serial management port and through a network management Ethernet port. FIGURE 1 shows the location of the serial port and the network management Ethernet port on the Sun Fire X2250 server.

FIGURE 1 Sun Fire X2250 Rear Panel with Service Processor Port Locations



How to Reset the Service Processor and BIOS Passwords

You can reset the service processor (SP) password and clear the BIOS password by resetting a jumper on the Sun Fire X2250 motherboard. This jumper procedure is described in the *Sun Fire X2250 Server Service Manual* (820-4593). When you perform this procedure, the service processor Administrator password is reset and the BIOS password is cleared.

- The Administrator (root) password becomes `changeme`.
- The BIOS password is cleared, so that when you attempt to access the BIOS Setup utility, it does not prompt for a password.

Sensors

The Venus server includes a number of sensors that generate entries in the system event log (SEL) when the sensor crosses a threshold. Many of these readings are used to adjust the fan speeds and perform other actions, such as illuminating LEDs and powering off the chassis.

These sensors can also be configured to generate IPMI PET traps as described in the *Sun Integrated Lights Out Manager 2.0 User's Guide* (820-1188).

Caution – Do not use any interface other than the Integrated Lights Out Manager (CLI) or web interface to alter the state or configuration of any sensor or LED. Doing so could void your warranty.

This section describes the sensors and provides details about their operation.

Temperature and Voltage Readings

The system monitors two temperature sensors and fourteen voltage sensors. They all generate IPMI events that are logged in to the system event log (SEL) when an upper threshold is exceeded. The temperature sensor readings are used to adjust the fan speeds. Any sensor outside a threshold will cause the SP to illuminate the service LEDs and possibly power off the chassis.

The sensors and their respective thresholds are as follows:

- Ambient temperature
  - Upper noncritical - 30 degrees C
  - Upper critical - 45 degrees C
  - Upper nonrecoverable - 52 degrees C
- Voltage
  - Upper noncritical - +/-10% V
  - Upper critical - +/-20% V
  - Upper nonrecoverable - +/-25% V

List of Sensors

TABLE 1 lists the sensors. TABLE 2 provides more detailed information about individual sensors.

TABLE 1 List of Sensors

Sensor Name
ACPI
MB/P0/PRSNT
MB/P1/PRSNT
MB/T_AMB0
MB/T_AMB1
MB/V_+12V
MB/V_VTT
MB/V_+1V5
MBV_/V_+1V5_ESB
MB/P0/V_VCC

TABLE 1 List of Sensors *(Continued)*

Sensor Name
MB/P1/V_VCC
MB/V_+3V3
MB/V_+5V
MB/V_+1V5_FBD
MB/V_+1V8
MB/V_+1V2_NIC
MB/V_+1V8_NIC
MB/V_+0V9
MB/V_+3V3_STBY
F0/TACH
F1/TACH
F2/TACH
F3/TACH

TABLE 2 provides detailed information about individual sensors.

TABLE 2 Sensor Details

Sensor	Data
Sensor ID	**ACPI (0x0)**
Entity ID	7.0
Sensor Type (Discrete)	System ACPI Power State
States Asserted	System ACPI Power State [S0/G0: working]
Sensor ID	**MB/P0/PRSNT (0x1)**
Entity ID	3.0
Sensor Type (Discrete)	Entity Presence
States Asserted	Availability State [Device Present]
Sensor ID	**MB/P1/PRSNT (0x2)**
Entity ID	3.1
Sensor Type (Discrete)	Entity Presence
States Asserted	Availability State [Device Absent]
Sensor ID	**MB/T_AMB0 (0x3)**
Entity ID	7.1
Sensor Type (Analog)	Temperature
Sensor Reading	30 (+/- 0) degrees C
Status	ok
Lower Non-Recoverable	na
Lower Critical	na
Lower Non-Critical	na
Upper Non-Critical	50.000
Upper Critical	55.000
Upper Non-Recoverable	60.000
Assertions Enabled	unc+ ucr+ unr+

TABLE 2 Sensor Details *(Continued)*

Sensor	Data
Deassertions Enabled	unc+ ucr+ unr+
Sensor ID	**MB/T_AMB1 (0x4)**
Entity ID	7.2
Sensor Type (Analog)	Temperature
Sensor Reading	31 (+/- 0) degrees C
Status	ok
Lower Non-Recoverable	na
Lower Critical	na
Lower Non-Critical	na
Upper Non-Critical	50.000
Upper Critical	55.000
Upper Non-Recoverable	60.000
Assertions Enabled	unc+ ucr+ unr+
Deassertions Enabled	unc+ ucr+ unr+
Sensor ID	**MB/V_+12V (0x5)**
Entity ID	10.0
Sensor Type (Analog)	Voltage
Sensor Reading	12.096 (+/- 0) Volts
Status	ok
Lower Non-Recoverable	na
Lower Critical	9.576
Lower Non-Critical	10.773
Upper Non-Critical	13.167
Upper Critical	14.364
Upper Non-Recoverable	na
Assertions Enabled	lnc- lcr- unc+ ucr+
Deassertions Enabled	lnc- lcr- unc+ ucr+

TABLE 2 Sensor Details *(Continued)*

Sensor	Data
Sensor ID	**MB/V_VTT (0x6)**
Entity ID	10.1
Sensor Type (Analog)	Voltage
Sensor Reading	1.091 (+/- 0) Volts
Status	ok
Lower Non-Recoverable	na
Lower Critical	0.995
Lower Non-Critical	1.079
Upper Non-Critical	1.314
Upper Critical	1.438
Upper Non-Recoverable	na
Assertions Enabled	lnc- lcr- unc+ ucr+
Deassertions Enabled	lnc- lcr- unc+ ucr+
Sensor ID	**MB/V_+1V5 (0x7)**
Entity ID	10.2
Sensor Type (Analog)	Voltage
Sensor Reading	1.490 (+/- 0) Volts
Status	ok
Lower Non-Recoverable	na
Lower Critical	1.193
Lower Non-Critical	1.349
Upper Non-Critical	1.646
Upper Critical	1.794
Upper Non-Recoverable	na
Assertions Enabled	lnc- lcr- unc+ ucr+
Deassertions Enabled	lnc- lcr- unc+ ucr+
Sensor ID	**MBV_/V_+1V5_ESB (0x8)**
Entity ID	10.3

TABLE 2 Sensor Details *(Continued)*

Sensor	Data
Sensor Type (Analog)	Voltage
Sensor Reading	1.490 (+/- 0) Volts
Status	ok
Lower Non-Recoverable	na
Lower Critical	1.193
Lower Non-Critical	1.349
Upper Non-Critical	1.646
Upper Critical	1.794
Upper Non-Recoverable	na
Assertions Enabled	lnc- lcr- unc+ ucr+
Deassertions Enabled	lnc- lcr- unc+ ucr+
Sensor ID	**MB/P0/V_VCC (0x9)**
Entity ID	10.4
Sensor Type (Analog)	Voltage
Sensor Reading	1.140 (+/- 0) Volts
Status	ok
Lower Non-Recoverable	na
Lower Critical	0.970
Lower Non-Critical	1.096
Upper Non-Critical	1.336
Upper Critical	1.462
Upper Non-Recoverable	na
Assertions Enabled	lnc- lcr- unc+ ucr+
Deassertions Enabled	lnc- lcr- unc+ ucr+
Sensor ID	**MB/P1/V_VCC (0xa)**
Entity ID	10.5
Sensor Type (Analog)	Voltage
Sensor Reading	1.607 (+/- 0) Volts

TABLE 2 Sensor Details *(Continued)*

Sensor	Data
Status	ok
Lower Non-Recoverable	0.844
Lower Critical	0.844
Lower Non-Critical	0.895
Upper Non-Critical	1.544
Upper Critical	1.594
Upper Non-Recoverable	na
Assertions Enabled	lnc- lcr- unc+ ucr+
Deassertions Enabled	lnc- lcr- unc+ ucr+
Sensor ID	**MB/V_+3V3 (0xb)**
Entity ID	10.6
Sensor Type (Analog)	Voltage
Sensor Reading	3.371 (+/- 0) Volts
Status	ok
Lower Non-Recoverable	na
Lower Critical	2.632
Lower Non-Critical	2.958
Upper Non-Critical	3.629
Upper Critical	3.956
Upper Non-Recoverable	na
Assertions Enabled	lnc- lcr- unc+ ucr+
Deassertions Enabled	lnc- lcr- unc+ ucr+
Sensor ID	**MB/V_+5V (0xc)**
Entity ID	10.7
Sensor Type (Analog)	Voltage
Sensor Reading	5.096 (+/- 0) Volts
Status	ok
Lower Non-Recoverable	na

TABLE 2 Sensor Details *(Continued)*

Sensor	Data
Lower Critical	3.978
Lower Non-Critical	4.498
Upper Non-Critical	5.486
Upper Critical	5.980
Upper Non-Recoverable	na
Assertions Enabled	lnc- lcr- unc+ ucr+
Deassertions Enabled	lnc- lcr- unc+ ucr+
Sensor ID	**MB/V_+1V5_FBD (0xd)**
Entity ID	10.8
Sensor Type (Analog)	Voltage
Sensor Reading	1.436 (+/- 0) Volts
Status	ok
Lower Non-Recoverable	na
Lower Critical	1.197
Lower Non-Critical	1.348
Upper Non-Critical	1.638
Upper Critical	1.789
Upper Non-Recoverable	na
Assertions Enabled	lnc- lcr- unc+ ucr+
Deassertions Enabled	lnc- lcr- unc+ ucr+
Sensor ID	**MB/V_+1V8 (0xe)**
Entity ID	10.9
Sensor Type (Analog)	Voltage
Sensor Reading	1.664 (+/- 0) Volts
Status	ok
Lower Non-Recoverable	na
Lower Critical	1.438
Lower Non-Critical	1.617

TABLE 2 Sensor Details *(Continued)*

Sensor	Data
Upper Non-Critical	1.974
Upper Critical	2.153
Upper Non-Recoverable	na
Assertions Enabled	lnc- lcr- unc+ ucr+
Deassertions Enabled	lnc- lcr- unc+ ucr+
Sensor ID	**MB/V_+1V2_NIC (0xf)**
Entity ID	10.10
Sensor Type (Analog)	Voltage
Sensor Reading	1.219 (+/- 0) Volts
Status	ok
Lower Non-Recoverable	na
Lower Critical	0.959
Lower Non-Critical	1.076
Upper Non-Critical	1.265
Upper Critical	1.295
Upper Non-Recoverable	na
Assertions Enabled	lnc- lcr- unc+ ucr+
Deassertions Enabled	lnc- lcr- unc+ ucr+
Sensor ID	**MB/V_+1V8_NIC (0x10)**
Entity ID	10.11
Sensor Type (Analog)	Voltage
Sensor Reading	1.936 (+/- 0) Volts
Status	ok
Lower Non-Recoverable	na
Lower Critical	1.438
Lower Non-Critical	1.617
Upper Non-Critical	1.974
Upper Critical	2.153

TABLE 2 Sensor Details *(Continued)*

Sensor	Data
Upper Non-Recoverable	na
Assertions Enabled	lnc- lcr- unc+ ucr+
Deassertions Enabled	lnc- lcr- unc+ ucr+
Sensor ID	**MB/V_+0V9 (0x11)**
Entity ID	10.12
Sensor Type (Analog)	Voltage
Sensor Reading	0.884 (+/- 0) Volts
Status	ok
Lower Non-Recoverable	na
Lower Critical	0.719
Lower Non-Critical	0.808
Upper Non-Critical	0.987
Upper Critical	1.076
Upper Non-Recoverable	na
Assertions Enabled	lnc- lcr- unc+ ucr+
Deassertions Enabled	lnc- lcr- unc+ ucr+
Sensor ID	**MB/V_+3V3_STBY (0x12)**
Entity ID	10.13
Sensor Type (Analog)	Voltage
Sensor Reading	3.302 (+/- 0) Volts
Status	ok
Lower Non-Recoverable	na
Lower Critical	2.632
Lower Non-Critical	2.958
Upper Non-Critical	3.629
Upper Critical	3.956
Upper Non-Recoverable	na
Assertions Enabled	lnc- lcr- unc+ ucr+

TABLE 2 Sensor Details *(Continued)*

Sensor	Data
Deassertions Enabled	lnc- lcr- unc+ ucr+
Sensor ID	**F0/TACH (0x13)**
Entity ID	29.0
Sensor Type (Analog)	Fan
Sensor Reading	6750 (+/- 0) RPM
Status	ok
Lower Non-Recoverable	540.000
Lower Critical	na
Lower Non-Critical	1080.000
Upper Non-Critical	na
Upper Critical	na
Upper Non-Recoverable	na
Assertions Enabled	lnc- lnr-
Deassertions Enabled	lnc- lnr-
Sensor ID	**F1/TACH (0x14)**
Entity ID	29.1
Sensor Type (Analog)	Fan
Sensor Reading	6750 (+/- 0) RPM
Status	ok
Lower Non-Recoverable	540.000
Lower Critical	na
Lower Non-Critical	1080.000
Upper Non-Critical	na
Upper Critical	na
Upper Non-Recoverable	na
Assertions Enabled	lnc- lnr-
Deassertions Enabled	lnc- lnr-

TABLE 2 Sensor Details *(Continued)*

Sensor	Data
Sensor ID	**F2/TACH (0x15)**
Entity ID	29.2
Sensor Type (Analog)	Fan
Sensor Reading	3240 (+/- 0) RPM
Status	ok
Lower Non-Recoverable	540.000
Lower Critical	na
Lower Non-Critical	1080.000
Upper Non-Critical	na
Upper Critical	na
Upper Non-Recoverable	na
Assertions Enabled	lnc- lnr-
Deassertions Enabled	lnc- lnr-
Sensor ID	**F3/TACH (0x16)**
Entity ID	29.3
Sensor Type (Analog)	Fan
Sensor Reading	2970 (+/- 0) RPM
Status	ok
Lower Non-Recoverable	540.000
Lower Critical	na
Lower Non-Critical	1080.000
Upper Non-Critical	na
Upper Critical	na
Upper Non-Recoverable	na
Assertions Enabled	lnc- lnr-
Deassertions Enabled	lnc- lnr-