

IPMIView for SuperBlade[®] Management User's Guide

Revision 2.18

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1 Introduction

SuperBlade Management is a newly added feature of IPMIView version 2.6. IPMIView sends messages to the CMM (Chassis Management Module) and receives messages in return. Here the messages represent the commands encapsulated in an RMCP+ (Remote Management Control Protocol) packet of the IPMI standard.

This feature is supported on Super CMM module (SBx-xxx-xxx). For example SBI-4129P-T3N and SBM-XEM-X10SM.

IPMIView monitors and reports on the status of a SuperBlade system, including the blade server, power supply, gigabit switch, InfiniBand and CMM modules. IPMIView presents the SuperBlade visually as a GUI for easy management. It is very practical in helping a user monitor and check the status of each blade module. IPMIView also supports remote KVM and Virtual Media.



Figure 1-1 SuperBlade

2 Controlling the Blade System

2.1 Adding a New CMM Module in IPMIView

A SuperBlade system has two CMM modules, with one as the master CMM and the other as the slave CMM. Only the master CMM provides full management of the SuperBlade system. For general SuperBlade management, you should connect to the master CMM. The slave CMM also operates when the SuperBlade is turned on. If the original master CMM is reset or hangs, the slave CMM will take over.

To add a new CMM module to the IPMI connection, follow these steps:

- 1. Start IPMIView.
- 2. In the IPMIView window, click File, select New, select System, and select Add a new system.
- 3. In the "Add a new system" dialog box, enter the name, IP address and description. Then click **OK**.

2.2Login

In the IPMIView device list (Figure 2-1), a SuperBlade icon (🗐) appears after a CMM device is added. Double-click the icon, and the login screen displays.

Diew ¥2.6.37 (build 071213) - Super Micro Computer, Inc.
File Edit Session Manage Help	
1 8 9 9 8	₽ 0
SUPERMICR•	SuperBlade
IPMI Domain ▲ マ 🖗 登 參 I SuperBlade	SuperBlade
	System Nume SuperBlade
	IP Address 192168.1.112 Description 192168.1.112
	Login ID: SIDER [] [Administrator] Pansvord: •••••
蹼 Groups 🛛 🖓 Å 渝 송 副 [FMI Domain (J7)]	Login
Get Virtual Media information done	Authentication Blade System Text Console KVM Console Event Log Logon Management Yurbal Media CMM Setting

Figure 2-1 Login to SuperBlade

- 1. Type your username and password, and then click Login.
- Once you log in, you will be redirected to the Blade System tab (Figure 2-2). Several tabs also appear at the bottom of the window, including Blade System, Text Console, KVM Console, Event Log, Logon Management, Virtual Media and CMM Setting.

2.3Blade System

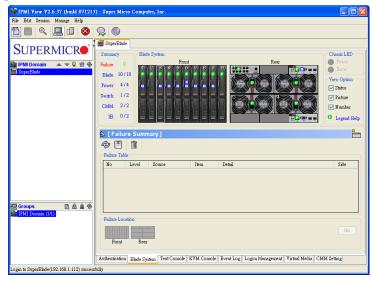


Figure 2-2 Blade System

On the Blade System tab you can manage and view the connected systems. The upper section displays the status of all blades being monitored. Any changes to the SuperBlade will be reflected in this view. For example, if blade module 1 is removed, the blade 1 icon here is grayed out. If blade module 10 is turned off, the power symbol for blade 10 turns amber.

Different types of blade modules can occupy the same blade system. If you install a different type of blade module, its icon in the Blade System View will likewise appear slightly different due to its type. In this way, the Blade System View reflects a real and current picture of the SuperBlade modules. Each module icon in the Blade System View can be clicked to show a detailed list of functions in the bottom (Module User Interface) window. The Summary section can be viewed here as well. The Module window allows a user to get more information and send additional commands to the blade modules.

Clicking the **Detach** button (**i**) will detach the window to a separate window (Figure 2-3). This is useful for continual monitoring of a specific blade module.

tatus			B7DBE Sensors			
ower Status:	🅘 On		Sensor	Reading	Low Limit	High Limit
VM:	Non-Selected	Request	CPU1	20C / 68F	N/A	80C / 176F
	_		CPU2	18C / 64F	N/A	80C / 176F
ID:	🔘 Off	Enable	📀 System Temp.	26C / 79F	N/A	75C / 167F
/stem Fault:	🚫 Normal		CPU1 Voltage	1.19 V	0.92 V	1.38 V
Siem Paul.	Moning.		CPU2 Voltage	1.2 V	0.92 V	1.38 V
MC:	192.168.1.68	📝 Update 💮	🚫 1.2V	1.18 V	1.08 V	1.32 V
att	300		1.5V	1.47 V	1.34 V	1.65 V
an	300		1.8V	1.74 V	1.62 V	1.98 V
ower Control			S.3V	3.26 V	2.96 V	3.63 V
ower control			🚫 12V	11.9 V	10.75 ¥	13.25 ¥
Power	r On	Reset	57	4.96 V	4.49 V	5.5 V
1040			5VSB	4.94 V	4.49 V	5.5 V
			Battery	3.28 V	2.96 V	3.63 V

Figure 2-3

2.3.1 Blade System View

The Blade System View (Figure 2-4) provides an overview of the SuperBlade.





There are four sections in the Blade System View:

- **Summary**: Shows a summary of failures and how many of each type of module have been installed. The Failure, Blade, Power and Switch items are shown in greater detail in the Module window.
- Blade System: The Blade System View shows both front and rear views of the blade system. The front view shows blade module status while the rear view shows the status of the power supply, gigabit switch, InfiniBand and CMM. A yellow rectangle appears around an icon when it is selected (Figure 2-4). Each module has symbols to display its current status. Each SuperBlade module may display one or more symbols. Refer to the Legend Help (Figure 2-4) to determine the meaning of a symbol. (Click Legend Help in the View Option window at the lower right area of the window to view the symbols and their meanings.)

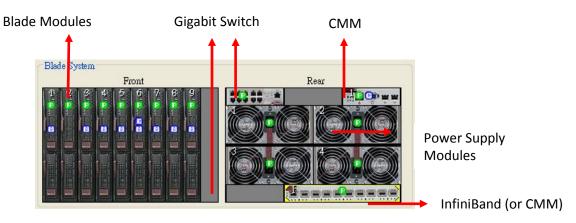


Figure 2-5 Blade Module Layout

	Summary Pailure: 0 Blade: 9/10 Power: 4/4 Switch: 1/2 CMM: 1/2 IB: 1/2	Front				Chassis LED Power Error View Option Status Picture Number Legend Ho
	Status		B7DBE Sensors			Ê
	Power Status: 💿 On		Sensor	Reading	Low Limit	High Limit
					N/A	
	KVM: Non-Sel	ected Request	CPU1	26C / 79F		80C / 1 6F
			CPU2	29C / 84F	N/A	80C / 1 6F
	UID: Off	Enable	CPU2 System Temp.	29C / 84F 25C / 77F	N/A N/A	80C / 1 6F 75C / 1 7F
	UID: Off System Fault: ON	Enable	CPU2 System Temp.	29C / 84F 25C / 77F 1.25 V	N/A N/A 0.92 V	80C / 1 /6F 75C / 1 /7F 1.38 V
_	UID: Off	Enable	CPU2 System Temp. CPU1 Voltage CPU2 Voltage	29C / 84F 25C / 77F 1.25 V 1.23 V	N/A N/A 0.92 V 0.92 V	80C / 1 6F 75C / 1 7F 1.38 V 1.38 V
→	UID: Off System Fault: ON	Enable	CPU2 System Temp. CPU1 Voltage CPU2 Voltage 1.2V	29C / 84F 25C / 77F 1.25 V 1.23 V 1.17 V	N/A N/A 0.92 V 0.92 V 1.08 V	80C / 1 75C / 1 1.38 V 1.38 V 1.32 V
→	UID: Off System Fault: Nor BMC: 192.166 Watt: 300	Enable	CPU2 System Temp. CPU1 Voltage CPU2 Voltage 1.2V 1.5V	29C / 84F 25C / 77F 1.25 V 1.23 V 1.17 V 1.47 V	N/A N/A 0.92 V 0.92 V 1.08 V 1.34 V	80C / 1 75C / 1 1.38 V 1.38 V 1.32 V 1.65 V
→	UID: Off System Fault: Nor BMC: 192.166	Enable	CPU2 System Temp. CPU1 Voltage CPU2 Voltage 1.2V 1.5V 1.8V	29C / 84F 25C / 77F 1.25 V 1.23 V 1.17 V	N/A N/A 0.92 V 0.92 V 1.08 V	80C / 1 75C / 1 1.38 V 1.38 V 1.32 V
→	UID: Off System Fault: O Nor BMC: 192.168 Watt: 300 Power Control	Enable mal 11.190 🗊 Update 🚸	CPU2 System Temp. CPU1 Voltage CPU2 Voltage 1.2V 1.5V 1.8V	29C / 84F 25C / 77F 1.25 V 1.23 V 1.17 V 1.47 V 1.47 V 1.74 V	N/A N/A 0.92 V 0.92 V 1.08 V 1.34 V 1.62 V	80C / 1 75C / 1 1.38 V 1.38 V 1.32 V 1.65 V 1.98 V
→	UID: Off System Fault: Nor BMC: 192.168 Watt: 300	Enable	CPU2 System Temp. CPU1 Voltage L2V 1.5V 1.5V 3.3V	29C / 84F 25C / 77F 1.25 V 1.23 V 1.17 V 1.47 V 1.47 V 1.74 V 3.21 V	N/A N/A 0.92 V 0.92 V 1.08 V 1.34 V 1.62 V 2.96 V	80C / 1 6F 75C / 1 7F 1.38 V 1.38 V 1.32 V 1.65 V 1.98 V 3.63 V 13.25 V 5.5 V
→	UID: Off System Fault: O Nor BMC: 192.168 Watt: 300 Power Control	Enable mal 11.190 🗊 Update 🚸	CPU2 System Temp. CPU1 Voltage CPU2 Voltage 1.2V 1.5V 1.8V 3.3V 2.2V	29C / 84F 25C / 77F 1.25 V 1.23 V 1.17 V 1.47 V 1.74 V 3.21 V 11.8 V	N/A N/A 0.92 V 0.92 V 1.08 V 1.34 V 1.62 V 2.96 V 10.75 V	80C / 1 75C / 1 1.38 V 1.38 V 1.32 V 1.65 V 1.98 V 3.63 V 13.25 V

Figure 2-6 Selected Blade Module and Corresponding Management Windows

Chassis LED: Displays the status of the power and error LEDs of a SuperBlade chassis. The Power option shows the current Blade System power status. The Error option indicates a system over temperature or fan failure condition.

View Option: Allows a user to to show or hide the status, picture and number of the module. Figure 2-7 and Figure 2-8 show the results of two different sets of View Options checked.

Ē	Blade System														
	Front									Rear					
	1	2	3	4	5	6	7	8	9	10	10				10
	•		•	•	•	0				0	1			2	
					•		•								•
	•						w.		•						
											-3			4	
															2 <mark>00</mark>
Ŀ															

Figure 2-7 Show Status and Number, Hide Picture

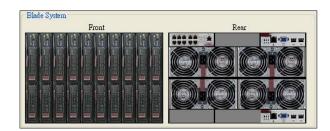


Figure 2-8 Only Show Picture

The Legend Help window also shows the various states. Note that the Fan Failure symbol turns red and blinks if a fan fails.

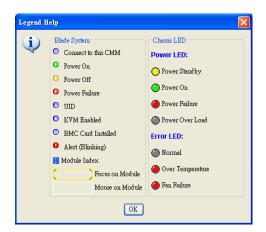


Figure 2-9 Legend Help

Popup Menus Supported: Allows a user to right-click a blade module to enable a popup menu to perform certain actions.



Figure 2-10 Blade Popup Menu

2.3.2 Blade

Status			B7I	BE Sensors			
Power Status:	🥑 On			Sensor	Reading	Low Limit	High Limit
KVM:	Non-Selected	Request	0	CPU1	19C / 66F	N/A	80C / 176F
UID:	Off Off	- Enclo		CPU2	18C / 64F	N/A	80C / 176F
UID:	U UI	Enable		System Temp.	25C / 77F	N/A	75C / 167F
System Fault: 👘	🐼 Normal			CPU1 Voltage	1.19 V	0.92 V	1.38 V
BMC:	192.168.1.68	📝 Update 🍲		CPU2 Voltage	1.2 V	0.92 V	1.38 V
BMC:	192.100.1.00	Ly Opulate -		1.27	1.18 V	1.08 V	1.32 V
Watt:	300			1.57	1.47 V	1.34 V	1.65 V
			1 📀	1.87	1.74 V	1.62 V	1.98 V
Power Control			1 📀	3.3V	3.26 V	2.96 V	3.63 V
Power		Reset		127	11.9 V	10.75 V	13.25 V
Fower		Reset	0	57	4.96 V	4.49 V	5.5 V
			Ō	5VSB	4.94 V	4.49 V	5.5 V
Graceful S	butdown	Power Down	l Ō	Battery	3.28 V	2.96 V	3.63 V

Figure 2-11 Blade

Click a blade module. The Blade window (Figure 2-11) appears in the Module section at the bottom of the screen. It contains the following:

Status

- **Power Status**: Shows the current power status. Indications include power on, power off and power fail status.
- KVM: Shows whether KVM is selected or not. Click the **Request** button to request KVM on this blade.
- **UID**: Shows the status of the UID LED. Check the "Enable" checkbox to enable or disable the UID. Once the UID is enabled, the UID LED on the blade panel will flash.
- **System Fault**: Indicates the system fault status.
- BMC: Shows BMC status. If a BMC is installed, the BMC IP address will appear here. Use the Update button (^U Update) to update the BMC IP address (Figure 2-12). Click the Refresh button (^(w)) to reload the BMC IP address. If a BMC is not installed, the message "not installed" appears, and the Update and Refresh buttons are both disabled.

Management IP					
(į)	BMC IP: 192.168.10.243				
	OK Cancel				

Figure 2-12 Updating the BMC IP Address

• **Watts**: Shows the estimated power consumption (wattage) of this blade. This is a static value supplied by BIOS.

Power Control

- **Power On**: Powers on the blade.
- **Reset**: Resets the blade.
- Graceful Shutdown: Performs a graceful shutdown on the blade.
- **Power Down**: Powers down the blade.

Power Control	
Power On	Reset
Graceful Shutdown	Power Down

Figure 2-13 Power Control Buttons

Sensors

The header of the sensor table (Figure 2-14) displays the name of the blade motherboard. The sensor table shows the CPU(s), system temperature and voltages of the currently selected blade. The table headers indicate the status, sensor name, reading and the low and high limits. If the status reading of a sensor is normal, the reading is shown in blue and the symbol \bigcirc appears. If a sensor status is out of range, the reading is shown in red and the symbol \bigotimes appears. If the sensor is not present, the reading will be displayed as "N/A" and no symbols appear.

	Sensor	Reading	Low Limit	High Limit
Ø	CPU1	35C / 95F	N/A	80C / 176F
_	CPU2	N/A	N/A	80C / 176F
Ø	System Temp.	36C / 97F	N/A	75C / 167F
9	CPU1 Voltage	1.2 V	0.92 V	1.38 V
_	CPU2 Voltage	N/A	0.92 V	1.38 V
Ø	1.27	1.18 V	1.08 V	1.32 V
0	1.57	1.47 V	1.34 V	1.65 V
ō	1.87	1.76 V	1.62 V	1.98 V
Ō	3.37	3.26 V	2.96 V	3.63 V
Ō	127	11.9 V	10.75 V	13.25 V
Ō	57	4.94 V	4.49 V	5.5 V
9	5VSB	4.89 V	4.49 V	5.5 V
5	Battery	3.29 V	2.96 V	3.63 V

Figure 2-14 Blade Sensor Table

2.3.3 Power Supply

[Power Supply 1]	3
Status	Power Control
Power Status: 🥥 On	Power On Power Off
Fan 1 Status: 🛛 🐼 Normal	
Fan 2 Status: 🛛 🚫 Normal	Power Supply Temperature
Watts: 1400	
DC current: 89.0 A	39C / 102F 85
AC RMS current: 3.0 A	Temperature
Firmware Ver: 1.0	Power Supply Fan
FRU Version: 01	(PER)
Centralized Power Fan Speed Co	
 Automatic 	◆7557◇ ◆7871◇
🔿 Manual Speed Level: 🌗	1 1 2 1 Fan 1 Fan 2

Figure 2-15 Power Supply

Clicking a power supply module displays the Power Supply UI in the Module window (Figure 2-15). This window includes the following:

Status

- Power Status: Shows the current power status: either power on, power off or power failure.
- Fan 1 Status: Shows the status of power supply fan 1 as normal or abnormal.
- Fan 2 Status: Shows the status of power supply fan 2 as normal or abnormal.
- Watts: Shows the total wattage provided by this power supply.
- DC current: Shows the DC current. (Only supported for 1400W power supplies.)
- AC RMS current: Shows the AC RMS current. (Only supported for 1400W power supplies.)
- Firmware Ver: Shows the power supply's firmware version.
- **FRU Version**: Shows the power supply's FRU version.

Centralized Power Fan Speed Control

Centralized Power Fan Speed Control is used to manage all power supply fans in the SuperBlade. The default is automatic fan speed control. When in automatic mode, the CMM will monitor system loading and optimize all fan speeds accordingly. The manual speed fan control mode allows a user to manually alter the speed of the power supply fans by clicking one of the arrow icons. Set to minimum speed by clicking the icon numbered "1" and to maximum speed by clicking the icon numbered "4". The icons numbered "2" and "3" are for incremental increases between the minimum and maximum settings. After changing the fan speed, you should see the fan rpm change in the status screen. These settings affect all fans simultaneously; you cannot control the speed of individual fans.



Figure 2-16 Centralized Power Fan Speed Control

Power Control

- **Power On**: Powers on the power supply.
- Power Off: Powers off the power supply.

Power Control			
	Power On	Power Off]
L			

Figure 2-17 Power Supply Control

Power Supply Temperature and Power Supply Fans

This displays the current power supply temperature and fan rpm. Please note that when one power supply is powered off, its fans will be driven by the other power supplies.

Power Supply Temperature					
Power Supply Fan					
	Fen 1	7671 Fan 2			

Figure 2-18 Power Supply Temperature and Fans

2.3.4 Gigabit Switch

🔊 [GB Switch 1]		<mark>.</mark>
Status	WebSuperSmart Configuration	
Fower Status: O On Error LED: Normal	Username and Password:	Reset
Initialized: OK	WSS IP:	192.168.1.66
Switch Temp: 🚫 Normal 2.5V Status: 🚫 Normal	Netmask:	255.255.255.0
1.25V Status: Normal	Gateway:	192.168.1.1
	Datetime:	12/19/2007 08:58:47
Power Control Power On Power Off Reset	Get	Update Web
Temperature 42C/102F 80 Switch	1.025 1.2081.375 1.25 V	2.25 2.46 2.75 2.5 V

Figure 2-19 Gigabit Switch

Clicking a gigabit switch module will display the gigabit switch (Figure 2-19). This window includes the following:

Status

- Power Status: Shows the current power status of the selected gigabit switch: power on or power off.
- Error LED: Indicates a gigabit switch error.
- Initialized: Indicates that the gigabit switch has been initialized.
- Switch Temp: Shows the gigabit switch temperature status.
- **2.5V Status**: Shows the status of the 2.5 voltage level.
- **1.25V Status**: Shows status of the 1.25 voltage level.

Power Control

- **Power On**: Powers on the gigabit switch.
- **Power Off**: Powers off the gigabit switch.
- **Reset**: Resets the gigabit switch.

Power Control		
Power On	Power Off	Reset

Figure 2-20 Gigabit Switch Power Control

Temperature

This shows the current temperature of the gigabit switch.



Figure 2-21 Gigabit Switch Temperature

Voltage

This shows the current voltage levels for the 1.25V and 2.5V voltages on gigabit switch.



Figure 2-22 Gigabit Switch Voltages

WebSuperSmart Configuration

WebSuperSmart is a web interface used to manage the gigabit switch (Figure 2-23). With WebSuperSmart, a user can set the following gigabit switch data:

- **WSS IP**: IP address of the WebSuperSmart web engine.
- Netmask: Netmask address of the gigabit switch
- **Gateway**: Gateway address of the gigabit switch
- Datatime: Date and time settings for the gigabit switch

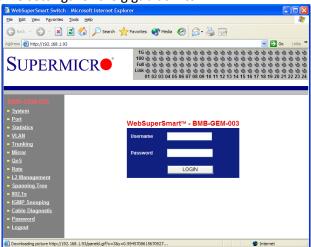


Figure 2-23 WebSuperSmart Web Interface

The "Get" button is used to immediately reload the gigabit switch settings. Clicking the **Update** button applies any address changes to the gigabit switch. Clicking the **Web** button will open a browser linked directly to the WSS IP (Figure 2-24).

WebSuperSmart Configuration Username and Password:	Reset
WSS IP:	192.168.1.66
Netmask:	255.255.255.0
Gateway:	192.168.1.1
Datetime:	12/19/2007 08:58:47
Get	Update Web

Figure 2-24 WebSuperSmart Configuration

Click the **Reset...** button and a dialog box (Figure 2-25) appears to allow you reset the username and password. Input the Username, Password and Password Confirm and click **OK** to apply the changes to the gigabit switch. This only resets the username and password; it does not affect the gigabit switch login in IPMIView.

Usernan	Username and Password Reset			
(j)	Username			
v	Password			
	Password Confirm			
	OK Cancel			

Figure 2-25 Username and Password Reset



Note: Except for the WebSuperSmart configuration and Error LED, the interface for the gigabit Pass Thru module is the same as that for the gigabit switch. All modules are located at the same position in the SuperBlade enclosure.

🖄 [GB Swit	ch 2]			
Status Power Status: Error LED: Initialized: Switch Temp: 2.5V Status: 1.25V Status:	On N/A OK Normal Normal Normal Normal	[GB Pass Thru]		
Power Control Power On Temperature	Power Off 330:7100F Switch	Reset	Voltage 1.025 1.2 (37) 1.25 V 2.5 V	

Figure 2-26 GB Pass Thru

2.3.5 CMM

🔊 [CMM 1]		5 			
Status		Flash Firmware			
IP:	192.168.1.112	Instruction:			
Master/Slave:	Master	1.Close session			
Status:	🕗 Normal	2.Select CMM from device list			
Firmware Version:	2.2.23 build 5420	3.Select [File] -> [Update Firmware]			
Firmware Tag:	Dec-5-2007				
CMM Time:	12/18/2007 18:14:14 Set Get				
Command					
Reset * This will reset CMM					
Web Managemer	nt				
You are connec	sting to this Mester CMM now.				

Figure 2-27 CMM

Click one of CMM modules, and the CMM window (Figure 2-27) appears. This window includes the following:

Status

- **IP**: Shows the CMM IP address.
- **Master/Slave**: Shows the CMM master/slave status. A master CMM has full management of the SuperBlade. A slave CMM is a backup to the master CMM.
- **Status**: Shows the CMM status.
- **Firmware Version**: Shows the CMM firmware version.
- Firmware Tag: Shows the CMM firmware tag.
- **CMM Time**: Shows the CMM time. The CMM time shown in the text field may not match the current time. Click the **Get** button to reload the CMM time immediately. Click **Set** to set the CMM time.

Setting the CMM Time

There are two way to set the CMM time: specifying the exact time and synchronizing with NTP server time. The User Specific Time option allows the user to enter time values for the CMM internal real-time clock. The Synchronizing with the NTP Server option allows your CMM real-time clock to synchronize with the NTP (Network Time Protocol) server. Enter the IP address for either the primary or secondary NTP server. The UTC Offset allows you to offset the UTC timer. Please note that daylight savings time cannot be automatically adjusted. Please manually set up the UTC offset twice a year to compensate for daylight savings time.

Time Se	tting				
💿 User :	Specified tin	ne			
Date	12 /	18	1	2007	(mm/dd/yyyy)
Time	19 :	42	:	48	(hh:mm:ss)
O Syncl	nronize with	NTP S	Server		
Pr	imary Time se:	rver	time-a.n:	ist.gov	
Seco	ndary Time se	rver	time.win	dows.com	
	UTC O	ffset	-8h	*	
* Dayligh	t saving is not	automa	atically ca	lculated in t	ne UTC offset.
					Reload
		OK		Cancel)

Figure 2-28 CMM Time Setting

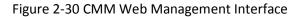
Command and Information

- **Reset**: Resets the CMM. Once reset is clicked, IPMIView will automatically close the session.
- Web Management: Opens a browser that is linked to the CMM web interface (Figure 2-30).
- **CMM type**: Shows if the currently running CMM is a master or slave.

·
Command Reset * This will reset CMM
Web Management
You are connecting to this Master CMM now.

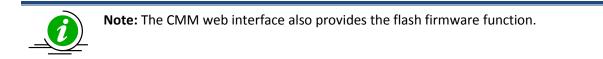
Figure 2-29 Command and Information

🗿 Authentication - Microsoft Internet Explorer	
Ele Edit View Favorites Iools Help	<i>.</i>
🚱 Back 👻 😥 🐇 😰 🏠 🔎 Search 👷 Favorites 🔮 Media 🤣 🎰 😓	
Address 💩 http://192.168.1.112/auth.asp 🔽 🄁 Go Lin	nks »
SUPERMICR	
Authenticate with Login and Password!	
Username	
Password	
Login	
Cone Internet	~



Flashing Firmware

This section shows the steps to flash the firmware. Please refer to *Appendix F: ASPEED X10 Firmware Update* in the *Supermicro IPMIView User's Guide*.



Slave CMM

The Slave CMM provides less information on the CMM. Only IP, Master/Slave and Status information is shown.

Status	R
IP: 192.168.1.119 Master/Slave: Slave [Redundant]	
Status: 📀 Normal	

Figure 2-31 Slave CMM

2.3.6 InfiniBand

🕸 [InfiniBan	1d 1]		4
Status		Voltage and Temperature	
Power Status:	🅑 On		
Initialized:	📀 ок		
VVDD:	📀 Normal	Board 1.44 1.52 1.76	
3.3V AUX:	📀 Normal	VVDD	
1.2♥:	🕗 Normal		
1.8V:	📀 Normal	2.97 3.31 3.63 1.08 1.19 1.32	
3.3∀:	📀 Normal	2.971 3.31 13.63 1.081 1.191 1.32 3.3V Aux 1.2 V	
Temperature:	📀 Normal		
Power Control			
Power	On Power Off Reset	1.62 1.78 1.98 2.97 3.91 3.63 1.8 ♥ 3.3 ♥	



Click one of InfiniBand modules and the InfiniBand window (Figure 2-32) appears. The options include the following:

Status

- Power Status: Shows the current InfiniBand power status: power on or power off. •
- Initialized: Indicates that the InfiniBand has been initialized. •
- **VVDD**: Shows the VVDD status of the InfiniBand.
- 3.3V Aux: Shows the 3.3V aux. status.
- 1.2V: Shows the 1.2V status. •
- 1.8V: Shows the 1.8V status.
- 3.3V: Shows the 3.3V status.
- Temperature: Shows the temperature status. •

Power Control

- Power On: Powers on the InfiniBand module.
- **Power Off:** Powers off the InfiniBand module.
- **Reset:** Resets the InfiniBand module.



Figure 2-33 InfiniBand Power Control

Voltage and Temperature

This shows the readout of the current InfiniBand voltages and temperature. Specifically, these are VVDD, 3.3V aux, 1.2V, 1.8V, 3.3V and board temperature.

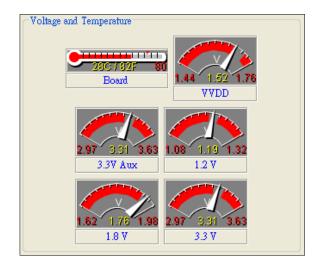


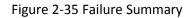
Figure 2-34 InfiniBand Temperature and Voltages

2.3.7 Failure Summary

The Failure Summary (Figure 2-35) is a list of failures that occurred in the SuperBlade system. The failure table shows the failure level, source, item, details and side info of the failure item. The failure location is a graph that shows the exact module and position. Click **Go** to switch the window to the failed module that is highlighted in the Failure table.

Click the **Refresh** (P) button to refresh the failure table. Click the **Save** (P) button to save the current failure table as a CSV text file. Click the **Clear** (III) button to clear the failure items in the current table.

[Failure	Summa	ry]			R.	
6	🤣 🗒	Î					
ſ	Failure Tab	le					
	No	Level	Source	Item	Detail	Side	
	1	8	Power Supply 3	Fan 1	Fan speed out of range	Rear	
	2	8	Power Supply 3	Fan set	Fan speed out of range	Rear	
	3	8	Power Supply 3	Fan set	Fan speed out of range	Rear	
]	
	Failure Loc	ation					
	Power Supply 3:Fan set Go						
	Front	Rea	r Fan speed out o	of range			
ų	pdate: 12/19	/2007 13:4	0:29 Wed				





Note: If a failure still exists, it will be displayed again the next time you refresh the table.

2.3.8 Blade Summary

The Blade Summary (Figure 2-36) provides an overview of all installed blades in the server. The summary table includes symbols for Power Status, KVM Selected, UID, System Fault and BMC status for users to quickly understand the overall blade status. A group management feature is also included. You can select multiple blades and send commands to perform power on, graceful shutdown, power down, reset, UID on and UID off functions by clicking the corresponding buttons. Note that you may only select one blade at a time for KVM.

lade Summary					
KVM 🔘 Pov	ver On 🔘 Graceful S	Shutdown 🔘 Power D	own 🔘 Reset 🌘	🛢 UID On 🔵 UID Off	
Blade Index	Power Status	KVM Selected	UID	System Fault	BMC
	0				Optimized (1997)
	0				
	0				Ø
	0				- Ö
	0				- Ō
	0	Optimized in the second sec			- Ö
	0				- Ō
	0				- Ō
	0				- Ö
)	0				

Figure 2-36 Blade Summary

2.3.9 Power Supply Summary

The Power Supply Summary (Figure 2-37) provides an overview of all installed power supplies. You can view the fans and temperatures of all power supplies in a single view. This is useful to observe the cooling status of a blade system. The Power Consumption section provides an estimation of power (wattage) use. Total Power indicates the total power provided by all installed power supplies that are currently turned on. Power Reserved indicates an estimation of the possible power usage consumed by the blades. Available is the amount of power that remains available to the system. If the available power wattage is insufficient, a blade may not be powered on.

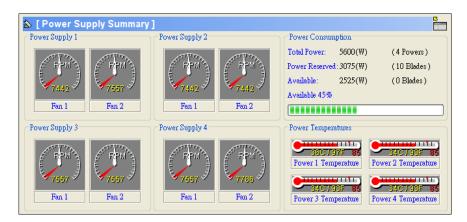


Figure 2-37 Power Supply Summary

2.3.10 Gigabit Switch Summary

The Gigabit Switch Summary (Figure 2-38) gives an overview of up to two installed gigabit switch (or GB pass thru) modules. Here, a user can see all the voltages, temperatures and switch status in a single view. Clicking the Web Management button will open a browser that is linked directly to the WSS IP.

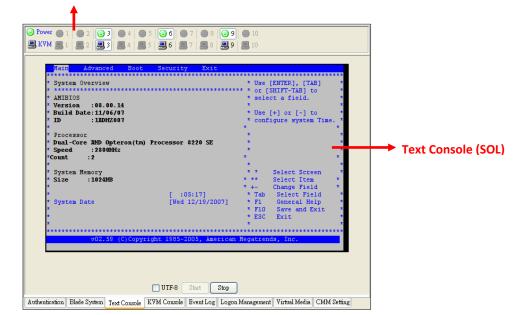
🔊 [Switch Summary]		₽ •
Switch 1 Temperature	Switch 1 Voltage	Switch 1 Information
		Power Status: 🕘 On
40C/104F 80		Error LED: 📀 Normal
Switch	1.025 1.192 1.375 2.25 2.44	
	1.25 V 2.5 V	Web Management
Switch 2 Temperature	Switch 2 Voltage	Switch 2 Information
		Power Status: 🕑 On
39C/102F 80		Error LED: N/A
Switch	1.025 1.2 1.375 2.25 2.51	2.75 Initialized: 📀 OK
	1.25 V 2.5 V	Web Management

Figure 2-38 Gigabit Switch Summary

2.4Text Console

The Text Console (SOL) is a basic function of IPMI and is provided by SuperBlade as well. Click the **Text Console** tab to show the window. Click the **Start** button at the bottom to initialize the text console connection. The UTF-8 checkbox allows the user to select a different UTF-8 character set to support multiple languages. Click the **Stop** button to stop the text console.

At the top are the Power and KVM control panels for the blades. You can click the **Power** button to power on, reset, initiate a graceful shutdown and power down the selected blade. The Power icons show the current blade power status. When the power is on, they turn green; when the power if off, they turn amber. The KVM icon shows the selected blade KVM. Click another KVM icon to switch to a blade you want to connect the text console.



Blade Power and KVM Control

Figure 2-39 Text Console

When a blade is in a power on state (ex: 3), click the **Power** button and a dialog box (Figure 2-40) will appear. Here, the user can select the desired type of power control: Reset, Graceful Shutdown and Power Down. When a blade is in a power off state (ex: 3), clicking the power button will power on that blade immediately.

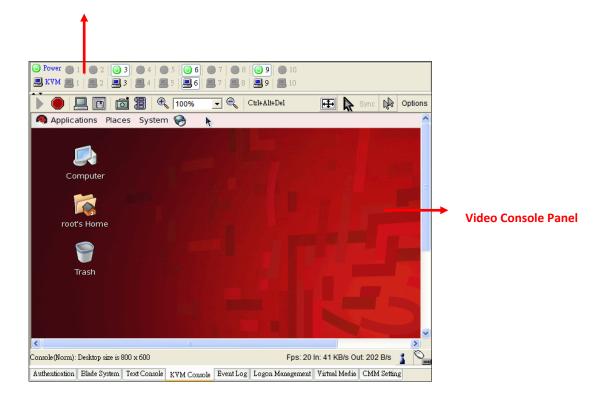
Power Control			
2	Select power control for Blade 3 • Reset		
	🔿 Graceful Shutdown 🔿 Power Down		
	OK Cancel		

Figure 2-40 Power Control Dialog Box (in Power and KVM Control Panel)

2.5 KVM Console

The KVM Console provides a remote desktop for the user. This feature allows you manipulate a blade remotely. The KVM Console tab has the blade power and KVM control panels as well. These offer the same functions as those in the Text Console tab.

In the video console panel, you will see the remote desktop of the selected blade. By clicking on another blade in the control panel, the video console panel will switch the display to the selected blade. For more video console detail, please refer to *Chapter 10 KVM Console (KVM-OverIP for Video Direction)* chapter in the *Supermicro IPMIView User's Guide*.



Blade Power and KVM Control Panel

Figure 2-41 KVM Console

2.5.1 Changing the Keyboard/Mouse Settings

The keyboard/mouse may behave differently on different OS's. Select **Options**, then select **Keyboard/Mouse Setting** ... to change the keyboard and mouse settings.

Generic 109-Key PC
enabled
Timeout after 50 v mæc
Enable key release timeout if you experience duplicated
keystrokes during poor network performance.
Windows >=2000, Mac OS X 💙
Auto
Fixed scaling 1: 1.00 🗸
OK Cancel

Figure 2-42 Keyboard/Mouse Settings

- **Keyboard Model**: Click the arrow to specify the type of keyboard from the pull-down menu.
- Key Release Timeout: Select this option to set a time limit for a key being pressed.
- **Timeout**: If the "Key Release Timeout" checkbox is selectd, click the arrow to select the timeout setting in the pull-down menu.
- **USB Mouse Type**: For a USB mouse to function properly, click the arrow to select the correct operating system for your system from the pull-down menu. The options include Windows, Mac and Other Operating System. For Linux OS, please select **Other Operating System**.
- Mouse Speed
 - Auto: Allows your system to automatically set your mouse speed.
 - **Fixed scaling**: Allows you to manually set the mouse speed with the pull-down menu.

2.6Event Log

The SuperBlade logs system events in the standard IPMI format. To see the event log (Figure 2-43), click the **Event Log** tab. At first, only SEL information will be loaded, which consists of Total Entries, SEL Version, Free Space, Recent Entry Added and Recent Entry Erased. In the Parameter for getting SEL window, the default is "All" to get the entire SEL log. This may be changed to From ______ to End ______ or to the last number of the SEL. After entering the parameters, click the **GET SEL** (Get SEL) button on the tool bar to start loading SEL.

The SEL events table categorizes events according to Time Stamp, Type, Sensor and Event Type. The maximum number of SEL table entries is 512. If this number is exceeded, you may click the **Save** (Save) button to save it as a backup file. Clicking the **Delete** (Delete) button will delete all SEL events.

SEL Events	m: 01		L a			
Event	Time Stamp	Туре	Sensor	Event Type		
1	12/05/1999 00:14:50 Sun	Power Supply	Power Suppl	Assertion: Power Supply 3, Event = Fan error		
2	12/05/1999 00:18:59 Sun	Power Supply	Power Suppl	Assertion: Power Supply 3, Event = Fan error		
3	12/05/1999 00:20:14 Sun	Power Supply	Power Suppl	Assertion: Power Supply 3, Event = Fan error		
4	12/05/1999 00:41:25 Sun	Power Supply	Power Suppl	Assertion: Power Supply 3, Event = Fan error		
5	12/03/2007 07:41:28 Mon	Power Supply	Power Suppl	Assertion: Power Supply 3, Event = Fan error		
6	12/12/2007 09:13:56 Wed	Blade	Blade 1	Assertion: Blade 1, Event = overheat		
7	12/12/2007 09:14:00 Wed	Blade	Blade 1	Assertion: Blade 1, Event = overheat		
8	12/12/2007 09:14:01 Wed	Blade	Blade 1	Assertion: Blade 1, Event = overheat		
9	12/12/2007 09:23:34 Wed	Blade	Blade 1	Assertion: Blade 1, Event = overheat		
10	12/12/2007 09:23:36 Wed	Blade	Blade 1	Assertion: Blade 1, Event = overheat		
11	12/12/2007 09:23:37 Wed	Blade	Blade 1	Assertion: Blade 1, Event = overheat		
12	12/12/2007 09:23:38 Wed	Blade	Blade 1	Assertion: Blade 1, Event = overheat		
13	12/12/2007 09:23:42 Wed	Blade	Blade 1	Assertion: Blade 1, Event = overheat		
14	12/12/2007 09:23:43 Wed	Blade	Blade 1	Assertion: Blade 1, Event = overheat		
15	12/12/2007 09:23:43 Wed	Blade	Blade 1	Assertion: Blade 1, Event = overheat		
16	12/12/2007 09:23:49 Wed	Blade	Blade 1	Assertion: Blade 1, Event = overheat		
17	12/12/2007 09:23:50 Wed	Blade	Blade 1	Assertion: Blade 1, Event = overheat		
18	12/12/2007 09:23:51 Wed	Blade	Blade 1	Assertion: Blade 1, Event = overheat		
19	12/12/2007 09:24:03 Wed	Blade	Blade 1	Assertion: Blade 1, Event = overheat		
SEL Informatio	on		Parame	eter for getting SEL		
Total Entries:	21		- A 11			
SEL Version:	1.5		() All			
Free Space: 7856 bytes			🚫 Fra	O From To		
Recent Entry Added: Pre-Init 00:00:00						
Recent Entry E	rased: Pre-Init 00	00.00	🔵 La:	st event(s)		

Figure 2-43 System Event Log



Note: The Refresh (^{W Refresh}) button only refreshes the SEL information. To reload SEL, please click the **Get SEL SEL** (^{Get SEL}) button.

2.7Logon Management

ser List		Update User Data				
Sequence	User Name	Privilege Level	Enable		Sequence	2
2	ADMIN	Administrator	Yes	<u>^</u>	User Name	ADMIN
3					0.001 1103100	
					Privilege	Administrator
5					🔽 Enable User	
i					Mana Change Coser	
1					Update	
3						
)					Update Password -	
10					User Name	ADMIN
11					Coor Mane	IIDDIIN
12					Password	
13					Password Confirm	
14					Password Confirm	
15					Update Passwor	a
16				_		=
17					Verify Login	
18				_		
19 20				_		
20				_		
22				_		
22				_		
23				_		
14 25				_		
15 16						
20						

Click the Logon Management tab to manage users. A 63 maximum of user accounts can be listed.

Figure 2-44 Logon Management Tab

Click the **Get User** (Get User) button to retrieve the current user list. Each user has a Username, a Privilege Level and an Enable field. There are four types of Privilege Levels:

- Administrator: Accesses full functions.
- **Operator**: Accesses full functions except for logon management.
- **User**: Accesses less functions. Unavailable functions will be hidden or disabled.
- **CallBack**: This is a reserved level. No functions are available.

If the Enable field is "No", it means the user currently cannot login to the blade system. The administrator can change the Enable field to "Yes" to allow a user to log on.

To create a new user, click the **New User** (^{Mew User}) button. A new user dialog box (Figure 2-45) appears.

Add Nev	w User	X
(i)	Sequence	3
\checkmark	UserName	jack
	Password	••••
	Password Confirm	••••
	Privilege	Operator 🗸 🗸
	ОК	Cancel

Figure 2-45 Add New User Dialog Box

The sequence specifies the order in the user list. Input the username, password, password confirmation and privilege level. A new user will then be listed in the table (Figure 2-46).

User List					Update User Data	
Sequence	User Name	Privilege Level	Enable		Sequence	3
2	ADMIN	Administrator	Yes	~	User Name	jack
3	jack	Operator	Yes		0001 10010	Joiota
4					Privilege	Operator 💊
5					Enable User	
6					Mable 0361	
7					Update	
8						
9					Update Password	
10						1
11					User Name	jack
12					Password	
13						
14					Password Confirm	
15					TT-1-t-D-	
16					Update Password	
17					Verify Login	
18						

Figure 2-46 Creating a New User

To delete a user, select a user in the user list table and click the **Delete** (🗍 Delete) button.

To edit the user data, select a user in the user list table. The user data will be shown in the right panel. In the Update User Data section, you can edit the username and privilege level. The Enable User option is used to enable or disable a user.

In the Update Password section, you can update the user's password. Click **Update Password** after you type and confirm a new password. It is suggested that the **Verify Login** button be clicked to check if the password update is successful. It is also helpful to check if the new user has been created.

A dialog box (Figure 2-47) appears after clicking **Verify Login**. Input the desired username and password. If the information is verified, a message "Login successfully" appears. If the verification fails, a message "Login failed" appears.



Figure 2-47 Verify Login

2.8Virtual Media

The CMM module supports the use of two virtual drives. The function is the same as with a SIM IPMI device. Please refer to *Chapter 11 Virtual Media* in the *Supermicro IPMIView User's Guide*.

⊂Virtual Media Status			
Drive 1	Drive 2		
Type : Drive Redirection	Empty		
Read / Write mode: Read-Only			
IP : 192.168.10.115 (522764288 bytes)			
Floppy Image Upload	CD-ROM Image on Windows Share		
Drive: 2 🖌 🚭 Open Upload	Drive: 2 🗸 Set		
Floppy Image file:	Share host:		
C.\floppy.img	Share name:		
	Path to image:		
Upload floppy image done	User (optional):		
	Password (optional):		
Drive Redirection			
Drive Redirection			
Drive 1: Connect Drive	Connect ISO Using cd1.iso		
ISO Drive Redirection establish	ned (cdl.iso).		
Drive 2: Connect Drive	Connect ISO Not connected		
Drive Redirection disconnected	l –		
Stop Drive 1	Stop Drive 2 Refresh		
Authentication Blade System Text Console KVM Console Eve	nt Log Logon Management Virtual Media CMM Setting		

Figure 2-48 Virtual Media



Note: The virtual drive in the CMM module will be dedicated to the KVM selected blade. For example, if KVM is currently selected on blade 3, the virtual drive will be dedicated to blade 3 as a USB device. Once KVM switches to blade 6, the virtual drive in CMM will be dedicated to blade 6.

2.9CMM Settings

The CMM Setting tab provides the LAN configuration, SNMP setting and CMM information (Figure 2-49). The LAN Configuration shows the current CMM IP, Gateway and Subnet Mask addresses. The CMM IP type can be set as a DHCP or static address.

The SNMP setting allows you specify the SNMP destination address to receive the SNMP trap from the CMM. Once the CMM detects a failure, it logs into SEL and immediately sends the SNMP trap to the desired destinations. Update the SNMP destinations by selecting from the SNMP list. The selected SNMP will then appear in the text field of the Selected IP. Update the SNMP destination by clicking the **Update** button. The Community String of the SNMP trap also can be updated. For more information on receiving traps, please refer to *Chapter 13 Trap Receiver* in the *Supermicro IPMIView User's Guide*.

The CMM Info shows the firmware version and tag. The Reset button can be clicked to reset the CMM. You may also see these commands and information in the CMM module in the Blade System tab.

🤣 Refresh					
-LAN Configu	ration				
IP Address Source Type:				IP Address:	192.168.10.196
O DHCP					
📀 Static Add:	ress			Gateway:	192.168.10.250
				Subnet Mask:	255.255.255.0
					Update
SNMP					
SNMP Destinat	ion List:				
Sequence	IP				
1	192.168.1	0.115	~	Selected IP:	192.168.10.115
2	0.0.0.0				Update
3	0.0.0.0				
4	0.0.0.0				
5	0.0.0.0				
6	0.0.0.0		≡		
7	0.0.0.0				
8	0.0.0.0				
9	0.0.0.0				
10	0.0.0.0			Community String:	public
11	0.0.0.0				-
12	0.0.0.0		~		Update
CMM Info					
Firmware Version: 2.2.23 build 5420					
Firmware Tag:		Dec-12-07-snmp2		Reset * Thi	is will reset CMM
Authentication	Blade System	Text Console KVM Console	Eve	ent Log 🛛 Logon Management 🖉 Vir	tual Media CMM Setting

Figure 2-49 CMM Settings

3 Connecting to the Slave CMM

If you have installed two CMMs in one blade system, one CMM should be assigned as the master CMM and the other as the slave. You should connect to the master CMM for full-function management. However, you may also connect to the slave CMM to check the event log, manage the logon and change the CMM settings.

After logging in, you see fewer UIs in the slave CMM (Figure 3-1). These only include the Event Log, Logon Management and CMM Settings.

A yellow message at the bottom shows that the slave (Redundant) CMM is currently connected and displays a note to connect to the master CMM. Refer to the master CMM IP address given to connect to the master CMM.

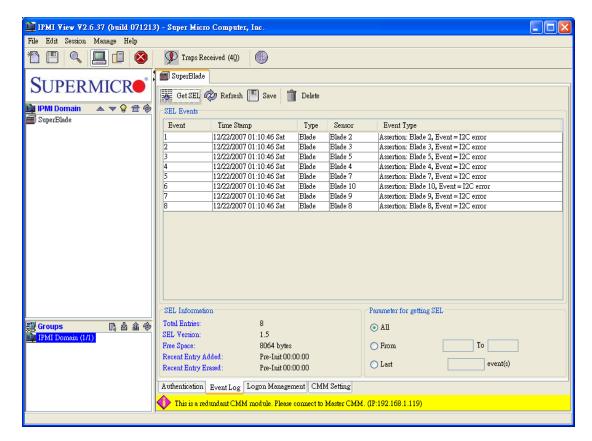


Figure 3-1 Connecting to Slave CMM

Contacting Supermicro

Headquarters

Address:	Super Micro Computer, Inc. 980 Rock Ave. San Jose, CA 95131 U.S.A.
Tel:	+1 (408) 503-8000
Fax:	+1 (408) 503-8008
Email:	marketing@supermicro.com (General Information)
	support@supermicro.com (Technical Support)
Website:	www.supermicro.com
Europe	
Address:	Super Micro Computer B.V.
	Het Sterrenbeeld 28, 5215 ML
	's-Hertogenbosch, The Netherlands
Tel:	+31 (0) 73-6400390
Fax:	+31 (0) 73-6416525
Email:	sales@supermicro.nl (General Information)
	support@supermicro.nl (Technical Support)
	rma@supermicro.nl (Customer Support)
Website:	www.supermicro.com.nl
Asia-Pacific	
Address:	Super Micro Computer, Inc.
	3F, No. 150, Jian 1st Rd.
	Zhonghe Dist., New Taipei City 235
	Taiwan (R.O.C)
Tel:	+886-(2) 8226-3990
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Email:	support@supermicro.com.tw
Website:	www.supermicro.com.tw