Supermicro Intelligent Management

Featuring IPMI 2.0 Server Remote Management

IPMI (Intelligent Platform Management Interface) is a hardware-level interface specification that defines a common, abstract message-based interface to platform monitoring and control functions. Providing peace of mind to customers, SIM (Supermicro Intelligent Management) module implements IPMI 2.0 technology to provide remote access, monitoring and administration for Supermicro server platforms. With SIM, server administrators can view a server's hardware status remotely, receive an alarm automatically if a failure occurs, and power cycle a system that is non-responsive.

AOC-SIMLP-3(+)



AOC-SIMLP-B(+)



AOC-SIMSO(+)



AOC-SIMLC(+)



AOC-SIM1U(+)



AOC-SIM1U-3B(+)



AOC-SIM1U-3D



SIM1U-3B & SIM1U-3D



Specifications

How does it work?

IPMI defines the protocols used for interfacing with an embedded service processor. This service processor - also known as Baseboard Management Controller (BMC) - resides on a server motherboard or in the chassis of a blade server or telecom platform. The BMC links to a main processor and other onboard elements via a simple serial bus.

What does it do?

Supermicro Intelligent Management (SIM) module monitors onboard instrumentation such as temperature sensors, power status, voltages and fan speed, and provides remote power control capabilities to reboot and/or reset the server. It also includes remote access to the BIOS configuration and operating system console information via SOL (Serial over LAN) or embedded KVM capabilities. Because the controller is a separate processor, the monitoring and control functions work regardless of CPU operation or system power-on status.

Anytime and Anywhere

An administrator accesses the BMC by using an IPMI-compliant management application loaded on a PC or via a web interface on a management appliance that includes IPMI management and KVM. The IPMI protocol leverages an out-of-band network (typically dedicated for server monitoring and management), which provides a flawless and secure path for mission-critical applications when regular in-band connectivity is lost or is unresponsive. IPMI messages follow the same format whether they are received through an operating system or are sent and received out-of-band.

Key Features

- IPMI with KVM Over LAN **
- Serial Over LAN (SOL)
- VSC 2.0 supports Video Solutions up to 1024 x 768 @ 60Hz **
- Virtual Media Over LAN (Virtual USB Floppy/CD and Drive Redirection) **
- LAN Alert-SNMP Trap
- Event Log
- OS Independent
- Hardware Health Monitor
- Remote Power Control
- Management Tools - IPMIView, CLI (Command Line Interface)
- Support RMCP & RMCP+ Protocols

Additional Features

SIM featuring the IPMI 2.0 specification supports Serial over LAN to redirect serial console functionality into IPMI over IP. Administrators can then gain full remote access to text-based system information and control for BIOS, utilities, operating systems and applications. IPMI 2.0 also offers major security enhancements. In summary, SIM includes the following key features.

- Embedded microprocessor providing optional out-of-band KVM capabilities, extending the use of a single keyboard/monitor/mouse to the entire network.
- Enhanced authentication support that provides stronger processes for establishing secure remote sessions and authenticating users.
- Enhanced encryption support that allows for secure remote password configuration and protects sensitive system data when transferred over the network.

	AOC-SIMLP-3(+)	AOC-SIMLP-B(+)	AOC-SIMSO(+)	AOC-SIMLC(+)
Description	IPMI 2.0 with Virtual Media Over LAN & Dedicated LAN & 3rd Data LAN Port	IPMI 2.0 with Virtual Media Over LAN & Dedicated LAN	IPMI 2.0 with Virtual Media Over LAN & Dedicated LAN	IPMI 2.0 with Virtual Media Over LAN
Connector on Card	Dedicated LAN & 3rd Data LAN Ports	Dedicated LAN	Mini USB with 8" Cable for Dedicated LAN (+)	N/A
Dimensions	5.1" x 2.7"	5.1" x 2.7"	2.7" x 1.7"	4.6" x 1.3"
(+): Optional Advanced Feature	KVM-Over-LAN *	KVM-Over-LAN *	KVM-Over-LAN *	KVM-Over-LAN *
Compatible Motherboard	X7DA3, X7DA8, X7DAE, X7DB3, X7DB8, X7DBE, X7DB8+, X7DBE+, X7DBi+, X7DB8-X, X7DBE-X, X7DBN, X7DVA-8, X7DVA-E, H8DM3-2, H8DMi-2, H8DA3-2, H8DAi-2, H8DA8-2, H8DAE-2, H8SMi-2, H8SMA-2		PDSMU, X7DBR-3, X7DBR-8, X7DBR-8+, X7DBR-E, X7DBR-i, X7DBR-i+, X7DBT, X7DBT-INF, X7DBU, H8QM8-2, H8QME-2, H8QM8-2+, H8QME-2+, H8DMU+, H8SMU	X7DCL, X7DCL-3, X7DA3, X7DA8, X7DAE, X7DB8+, X7DBE+, X7DB8, X7DBE, X7DB8-X, X7DBE-X, X7DB3, X7DBN, X7DVA-8, XDVA-E, X7DVL-3, X7DVL-E, X7DVL-i, H8QM3-2, H8QMi-2
Optimized Chassis	2U and Above	2U and Above	1U and Above	1U and Above
Bracket	Standard & Low-Profile	Standard & Low-Profile	-	-
Downloads	[User's Guide] [Driver] [Driver CD Image]	[User's Guide] [Driver] [Driver CD Image]	[User's Guide] [Driver] [Driver CD Image]	[User's Guide] [Driver] [Driver CD Image]

	AOC-SIM1U(+)	AOC-SIM1U-3B(+)	AOC-SIM1U-3D	AOC-SIMSO-HTC AOC-SIMLC-HTC
Description	IPMI 2.0 with Virtual Media Over LAN & Dedicated LAN	IPMI 2.0 with Virtual Media Over LAN	Dedicated LAN & 3rd Data LAN Ports; Works in Conjunction with AOC-SIM1U-3B(+)	IPMI 2.0 Over LAN (and Serial Over LAN)
Connector on Card	Mini USB with 8" Cable for Dedicated LAN (+)	PCI-E x8 (for AOC-SIM1U-3D Only)	-	
Dimensions	4.6" x 1.3"	4.4" x 1.3"	3.2" x 2.4"	2.7" x 1.7" (SIMSO-HTC) 4.6" x 1.3" (SIMLC-HTC)
(+): Optional Advanced Feature	KVM-Over-LAN *	KVM-Over-LAN *	-	-
Compatible Motherboard	PDSM4+, PDSME+, X7DA3, X7DA8, X7DAE, X7DB3, X7DB8+, X7DBE+, X7DB8, X7DBE, X7DB8-X, X7DBE-X, X7DBN, X7DVA-8, X7DVA-E, X7DVL-E, H8SMi-2, H8QM3-2, H8QMi-2, H8DM8-2, H8DME-2	X7DBP-8, X7DBP-i, X7DBX-8, X7DBX-i, H8DMR-82, H8DMR-i2	X7DBP-8, X7DBP-i, X7DBX-8, X7DBX-i, H8DMR-82, H8DMR-i2	**AOC-SIMSO-HTC**: X7SBA, X7SBi, X7SBi-LN4, X7SBU **AOC-SIMLC-HTC**: X7SB4, X7SBE, X7SBL-LN2
Optimized Chassis	1U and Above	SC814, SC816, SC819	SC814, SC816, SC819	1U and Above
Bracket	Standard & Low-Profile	-	-	-
Downloads	[User's Guide] [Driver] [Driver CD Image]	[User's Guide] [Driver] [Driver CD Image]	[User's Guide] [Driver] [Driver CD Image]	[User's Guide] [Driver] [Driver CD Image]

* **NOTE:** KVM-Over-LAN is supported on select motherboards. Please refer to the product spec page for support details.
** **NOTE:** Not Available with AOC-SIMSO-HTC or AOC-SIMLC-HTC

	X7 Series UP Motherboards with 82573 LAN	X7 Series DP Motherboards with 82573 LAN	X7 Series DP Motherboards with 82563 LAN	X7 Series DP Motherboards with 82575 LAN
SIM Series	✓ (For KVM support with Dedicated LAN)	✓ (For KVM support with Dedicated LAN)	✓	✓
SIM-HTC Series	✓ (For non-KVM support)	✓ (For non-KVM support)	-	-

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