



Asus ASMB-LE User Manual

Server management board

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Server Management Board



ASMB-LE

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Asus asmb2 server management board (62 pages)

[Server Board Asus ASMB3-SOL User Manual](#)

Server management board (70 pages)

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[Server Board Asus ASMB4-iKVM User Manual](#)

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[Server Board Asus ASMB7-iKVM User Manual](#)

Server management board (98 pages)

[Server Board Asus ASMB9-iKVM User Manual](#)

Server management board (70 pages)

[Server Board Asus AAEON ARES-WH10 User Manual](#)

(76 pages)

Summary of Contents for Asus ASMB-LE

[Page 1](#) Server Management Board...

[Page 2](#) Product warranty or service will not be extended if: (1) the product is repaired, modified or altered, unless such repair, modification or alteration is authorized in writing by ASUS; or (2) the serial number of the product is defaced or missing.

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[Page 5](#) Federal Communications Commission Statement Federal Communications Commission
Statement Federal Communications Commission Statement Federal Communications
Commission Statement Federal Communications Commission Statement This device complies
with Part 15 of the FCC Rules. Operation is subject to the following two conditions: • This device
may not cause harmful interference, and •...

[Page 6](#) Electrical safety Electrical safety Electrical safety Electrical safety Electrical safety •
To prevent electrical shock hazard, disconnect the power cable from the electrical outlet before
relocating the server. • When adding or removing devices to or from the server, ensure that the
power cables for the devices are unplugged before the signal cables are connected.

[Page 7](#) A S U S w e b s i t e s A S U S w e b s i t e s The ASUS website provides updated
information on ASUS hardware and software products. Refer to the ASUS contact information.

[Page 8](#) Conventions used in this guide Conventions used in this guide Conventions used in
this guide Conventions used in this guide Conventions used in this guide To make sure that you

perform certain tasks properly, take note of the following symbols used throughout this manual.
DANGER / WARNING : DANGER / WARNING : DANGER / WARNING : ...

[Page 9](#) ASUS Host Management Controller Utility (DOS-based) Specifications are subject to change without notice. i x i x i x i x i x...

[Page 10](#) x x x x x...

[Page 11](#) This chapter describes the server management board features and the new technologies it supports.

[Page 12](#) ! b o a r d ! The ASUS ASMB-LE is an Intelligent Platform Management Interface (IPMI) 1.5-compliant board that allows you to monitor, control, and manage a remote server from the local or central server in your local area network (LAN).

[Page 13](#) The ASUS ASMB-LE comes in a BMC package. The illustration below shows the major components of the server management board. B M C h e a r t b e a t L E D B M C h e a r t b e a t L E D...

[Page 14](#) The ASMB-LE server management board installed on the remote host connects to a local/central server via direct LAN connection or through a network hub. Below are the supported server management configurations. Direct LAN connection Direct LAN connection Direct LAN connection Direct LAN connection Direct LAN connection R J - 4 5 c a b l e...

[Page 15](#) This chapter provides instructions on how to install the board to the server system and install the utilities that the board supports.

[Page 16](#) Take note of the following precautions before you install the server management board to the server system. • Unplug the server system power cord from the wall socket before touching any component. • Use a grounded wrist strap or touch a safely grounded object or to a metal object, such as the power supply case, before handling components to avoid damaging them due to static electricity.

[Page 17](#) Carefully push the board to the socket until its connectors (golden fingers) are fully-inserted to the socket. Press the board firmly until the BMC socket retaining clips snap back and secure the board in place. When installed, the board appears as shown. Re-install the server system cover, then connect the power plug to a grounded wall socket.

[Page 18](#) To uninstall the board: Simultaneously press the BMC socket retaining clips outward until the board tilts up. Carefully pull the board out from the BMC socket, then set aside. 2 - 4 2 - 4 C h a p t e r 2 : I n s t a l l a t i o n C h a p t e r 2 : I n s t a l l a t i o n 2 - 4 2 - 4...

[Page 19: Running The Asmc Utility](#)

Running the ASMC utility Running the ASMC utility The ASUS Server Management Card Utility allows you to know the MAC address of the server motherboard and to set the IP address. This utility is available from the support CD that came with the package.

[Page 20: Configuring The Lan Controller](#)

ASMC Help Menu options ASMC Help Menu options ASMC Help Menu options ASMC Help Menu options ASMC Help Menu options O p t i o n s O p t i o n s O p t i o n s D e s c r i p t i o n D e s c r i p t i o n D e s c r i p t i o n...

[Page 21](#) Run the ASMC utility from the support CD following the instructions in the previous section. Type a s m c - b m c _ i p x x x . x x x . x x x . x x x a s m c - b m c _ i p x x x .

[Page 22: Updating The Asmc-Le Firmware](#)

2.3.3 Updating the ASMC-LE firmware Updating the ASMC-LE firmware You can use the ASUS System Web-based Management (ASWM) application to update the ASMC-LE firmware. To do this: Download the latest ASMB-LE firmware from the ASUS website (www.asus.com), then save the firmware file to the server.

[Page 23: Installing The Arc](#)

You can monitor, control, or manage the remote server from the local/central server using the ASUS Remote Console (ARC). The ARC is a web-based application available from the support CD that came with the ASMB-LE package. You must install the ARC on the local/central server to access the remote server.

[Page 24: Launching Arc](#)

Remote Console Remote Console ® desktop. Double-click the ASUS Remote Console icon on the Windows ® desktop. 2 - 1 0...

[Page 25](#) This chapter tells you how to use the software applications that the server management board supports.

[Page 26: Chapter 3: Software Support](#)

The ASUS Remote Console (ARC) is a web-based utility that allows you to monitor the remote host's hardware information including temperatures, fan rotations, voltages, and power. This application also lets you instantly power on/off or reset the remote server. Menu bar...

[Page 27](#) Navigation window Navigation window Navigation window Navigation window Navigation window The Navigation window displays the directory of connected and disconnected remote server(s). For multiple monitoring, this window allows you to navigate through the remote servers. Click the All Servers All Servers All Servers All Servers All Servers root directory to display all...

[Page 28](#) Detail/SEL window Detail/SEL window Detail/SEL window Detail/SEL window Detail/SEL window The Detail/SEL window displays the detailed SDR and FRU information, and the System Event Log (SEL). The window provides the link for detailed sensor information or system events and allows you to adjust the sensor threshold values.

[Page 29: Connecting To The Remote Server](#)

3.1.2 3.1.2 3.1.2 Connecting to the remote server Connecting to the remote server Connecting to the remote server 3.1.2 3.1.2 Connecting to the remote server Connecting to the remote server To connect to the remote server: From the menu bar, click Server Server New...

[Page 30](#) The navigation window displays the remote server. The available remote server information are displayed on the Detail/SEL window. Click before the remote server to display the remote server information, then select from the list. You can also double-click a remote server information from the Detail/SEL window. When prompted, enter the default user name (adm) and password (asusadm).

[Page 31: Retrieving Sensor Information](#)

3.1.3 3.1.3 3.1.3 Retrieving sensor information Retrieving sensor information Retrieving sensor information 3.1.3 3.1.3 Retrieving sensor information Retrieving sensor information The Sensor Data Record (SDR) provides remote server system information through available sensors including CPU/system/power temperatures, voltages, fan speeds, chassis intrusion, etc. The SDR also provides information on the sensor location (e.g.

[Page 32](#) Click More More More. A sensor window More More appears displaying additional information on the sensor. The Information Information Information Information tab displays Information...

[Page 33: Displaying All Remote Server Sensors](#)

3.1.4 3.1.4 3.1.4 Displaying all remote server sensors Displaying all remote server sensors Displaying all remote server sensors 3.1.4 3.1.4 Displaying all remote server sensors Displaying all remote server sensors To display all remote server sensors in graphical format: From the navigation window, click before the server name to open the remote server information.

[Page 34: Displaying Fru Information](#)

3.1.5 3.1.5 3.1.5 Displaying FRU information Displaying FRU information Displaying FRU information 3.1.5 3.1.5 Displaying FRU information Displaying FRU information The Field Replaceable Unit (FRU) information provides the manufacturer, product name, and/or serial number of various modules and components installed on the remote server. For example, the

FRU feature can display the remote server motherboard name, model, and serial number.

[Page 35: Displaying System Event Logs](#)

3.1.6 3.1.6 3.1.6 Displaying system event logs Displaying system event logs Displaying system event logs 3.1.6 3.1.6 Displaying system event logs Displaying system event logs The System Event Log (SEL) is a non-volatile storage area where all remote server system events are stored for real-time tracking or later retrieval. The ARC application can display system events for efficient remote server monitoring and troubleshooting.

[Page 36: Adjusting The Monitoring Settings](#)

3.1.7 3.1.7 3.1.7 Adjusting the monitoring settings Adjusting the monitoring settings Adjusting the monitoring settings 3.1.7 3.1.7 Adjusting the monitoring settings Adjusting the monitoring settings The ARC application allows you to adjust the remote server monitoring settings including SEL polling, SDR reading, ASF, and PET. To adjust the monitoring settings: S e r v e r S e r v e r...

[Page 37: Controlling The Remote Server Power](#)

3.1.8 3.1.8 3.1.8 Controlling the remote server power Controlling the remote server power Controlling the remote server power 3.1.8 3.1.8 Controlling the remote server power Controlling the remote server power The ASMB-LE board through the ARC application allows you to power up, power down, or reset the remote server using the power menu.

[Page 38: Viewing Pet Information](#)

Description of service field Description of service field Description of service field (i.e. ASUS ARC). Type the IP address of the local/central server, then set the E x t e r n a l E x t e r n a l...

[Page 39: Installing And Launching The Asus Host Management Controller Setup Utility](#)

The ASUS Host Management Controller Setup utility provides precise configuration and basic functions including System Event Log (SEL) generation and System Data Record (SDR) reading in DOS mode. This utility also supplies configuration sequences for the type of host interface as well as direct real-time monitoring of system information including CPU temperature(s), fan speeds and system voltages.

[Page 40: Command Fields](#)

3.2.2 3.2.2 3.2.2 Command fields Command fields Command fields 3.2.2 3.2.2 Command fields Command fields The utility menu bar has five commands: Initial, View, Set, Monitor and Help. You can select a command using the left or right arrow button on the keyboard.

[Page 41](#) To view the System Data Record (SDR): To view the System Data Record (SDR): To view the System Data Record (SDR): To view the System Data Record (SDR): To view the System Data Record (SDR): B M C S D R B M C S D R V i e w V i e w...

[Page 42](#) To view the BMC information: To view the BMC information: To view the BMC information: To view the BMC information: To view the BMC information: B M C I n f o B M C I n f o V i e w V i e w Select B M C I n f o B M C I n f o...

[Page 43: Set](#)

3.2.5 3.2.5 3.2.5 S e t S e t S e t 3.2.5 3.2.5 S e t S e t The S e t S e t S e t S e t command controls the host interface type and the correct BMC time. S e t To select the host interface: To select the host interface:...

[Page 44: Monitor](#)

3.2.6 3.2.6 3.2.6 Monitor Monitor Monitor 3.2.6 3.2.6 Monitor Monitor The M o n i t o r M o n i t o r M o n i t o r command displays real-time data on the remote server system and CPU temperatures, voltages, and fan speeds.

[Page 45](#) The Appendix shows the location of the LAN port for server management on several motherboards and presents common problems that you may encounter when installing or using the server management board.

[Page 46](#) The ASUS server motherboards that support the ASMB-LE comes with two LAN (RJ-45) ports: one for network connection and the other for server management. You must identify and use the LAN port for server management to connect the remote server to the local/central host (direct LAN connection) or to the network hub or router.

[Page 47](#) NCLV-D motherboard NCLV-D motherboard NCLV-D motherboard NCLV-D motherboard NCLV-D motherboard PSCH-SR motherboard PSCH-SR motherboard PSCH-SR motherboard PSCH-SR motherboard PSCH-SR motherboard PSCH-LR motherboard PSCH-LR motherboard PSCH-LR motherboard PSCH-LR motherboard PSCH-LR motherboard A S U S S e r v e r M a n a g e m e n t B o a r d (A S M B - L E) A S U S S e r v e r M a n a g e m e n t B o a r d (A S M B - L E) A - 3 A - 3...

[Page 48](#) The ASUS server motherboards that support the ASMB-LE comes with a Baseboard Management Card (BMC) socket. Refer to the illustrations below to locate the BMC socket on different server motherboards. NCL-DS motherboard NCL-DS motherboard NCL-DS motherboard NCL-DS motherboard NCL-DS motherboard NCL-DS motherboard...

[Page 49](#) NCCH-DR motherboard NCCH-DR motherboard NCCH-DR motherboard NCCH-DR motherboard NCCH-DR motherboard 26.8cm (10.5in) ATX12V1 PS/2KBMS ATXPWR1 T: Mouse KBPWR1 B: Keyboard PSUSMB1 USB12 USBPW12 REAR_FAN2 LAN_EN1 Intel CPU2 82547GI Gigabit Intel Ethernet E7210 CPU_FAN2 FM_CPU2 DDR_DIMM_A1 (64 bit,184-pin module) LAN1 DDR DIMM_A2 (64 bit,184-pin module) DDR DIMM_B1 (64 bit,184-pin module) LAN2...

[Page 50](#) PSCH-SR motherboard PSCH-SR motherboard PSCH-SR motherboard PSCH-SR motherboard PSCH-SR motherboard 25cm (9.8in) PS/2KBMS ATXPWR1 KBPWR1 T: Mouse PSUSMB1 B: Keyboard Intel 82547GI Gigabit USB2.0 Ethernet Top: T: USB1 LAN1 Socket 478 B: USB2 Intel E7210 (Canterwood-ES) REAR_FAN1 ® REAR_FAN2 PSCH-SR CPU_FAN1 CPU_FAN2 ATX12V1...

[Page 51](#) This troubleshooting guide provides answers to some common problems which you may encounter while installing and/or using ASUS ASMB-LE. These problems requires simple troubleshooting that you can perform by yourself. Contact the Wireless LAN Technical Support if you encounter problems not mentioned in this section.

[Page 52: Appendix: Reference Information](#)

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