

ASMB-310IR/310 (Dual 1366 Socket CEB Server Board with 2 PCIe x16 Expansion Slots) Startup Manual

Packing List

Before you begin installing your card, please make sure that the following items have been shipped:

1. 1 x ASMB-310IR/310 CEB motherboard
2. 1 x ASMB-310IR Startup Manual
3. 1 x Driver CD (user's manual is included)
4. 2 x Serial ATA HDD data cables
5. 2 x LGA 1366 2U/4U CPU Cooler
6. 2 x mini-SAS to 4 Serial ATA HDD data cable (For ASMB-310IR only)
7. 1 x I/O port bracket
8. 2 x SATA power cable
9. 1 x Warranty card

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

Note: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: www.adobe.com/Prodindex/acrobat/readstep.html (Acrobat is a trademark of Adobe).

Specifications

General

- **PCIe architecture:** The Intel E5520 PCH chipset supports 36 PCIe lanes
- **Intel latest dual processor platform:** ASMB-310IR/310 support two Intel Latest 5500/5600 Quad/Dual core Processor
- **High performance I/O capability:** Dual Gigabit LAN via PCIe x1 bus, one PCIe x4 slot, 6 SATAII connectors and 11 USB 2.0 ports
- **Standard CEB form factor with industrial features:** ASMB-310IR provides industrial features like long product life, reliable operation under wide temperature range, watchdog timer, etc
- **SAS hard drive support:** Embedded LSI 1068E SAS controller which can support eight SAS/SATA HDD with software RAID 0,1,1E (for ASMB-310IR only)
- **IPMI 2.0 support:** ASMB-310IR equip Aspeed 2050 BMC chip supports IPMI 2.0 (Intelligent Platform Management Interface 2.0) via dedicated LAN port
- **KVM over IP:** ASMB-310IR KVM over IP function

Graphic Interface

- **Controller:** ASPEED AST2050 controller with 64 MB VGA memory provides basic

Ethernet Interface

- **LAN1:** 10/100/1000 Mbps GbE LAN Intel 82574L
- **LAN2:** 10/100/1000 Mbps GbE LAN Intel 82567LM

Mechanical and Environmental

- **Dimensions:** 304.8 x 257.05 mm
- **Operating temperature:** 0 ~ 50° C

For more information on this and other Advantech products, please visit our website at:

<http://www.advantech.com>

<http://www.advantech.com/eplatform>

For technical support and service, please visit our support website at:

<http://service.advantech.com.tw/support/>

This manual is for the ASMB-310IR Series Rev. A1.

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Jumpers and Connectors

The board has a number of jumpers that allow you to configure your system to suit your application. The table below lists the function of each of the jumpers and connectors.

Jumpers and connectors

Jumpers	
Label	Function
JP_CMOS1	CMOS Clear
JP_BMC1	BMC Enable (2-3) or Disable (1-2)

Connectors	
Label	Function
ATX_8P_P0	SSI EPS 12 V auxiliary power connector (for CPU0) and memory
ATX_8P_P1	SSI EPS 12 V auxiliary power connector (for CPU1) and memory
ATX_P24	SSI EPS 24-pin main power connector (for system)
COM2	Serial port: RS-232
CPU0	Intel LGA1366 CPU0 socket
CPU1	Intel LGA1366 CPU1 socket
CPUFAN0	CPU0 fan connector (4-pin)
CPUFAN1	CPU1 fan connector (4-pin)
DIMMP0A_1	Channel A DIMM1 of CPU0
DIMMP0B_1	Channel B DIMM1 of CPU0
DIMMP0C_1	Channel C DIMM1 of CPU0
DIMMP1A_1	Channel A DIMM1 of CPU1
DIMMP1B_1	Channel B DIMM1 of CPU1
DIMMP1C_1	Channel C DIMM1 of CPU1
FPPH1	Front panel pin header connector
HDAUD1	HD audio Interface connector
IPMB_TB1	IPMB connector (For ASMB-310IR only)
LANLED1	LAN1/2 LED extension connector
LPC2	LPC port for debug
PCIEX16_1	PCIe x16 slot
PCIEX16_3	PCIe x16 slot
PCIEX4_5	PCIe x4 slot
PCIEX4_6	PCIe x4 slot (For ASMB-310IR only)
PCIEX8_2	PCIe x8 slot
PCIEX8_4	PCIe x8 slot
SAS0	SAS0 hard drive connector (For ASMB-310IR only)

Jumpers and Connectors

SAS1	SAS1 hard drive connector (For ASMB-310IR only)
SAS2	SAS2 hard drive connector (For ASMB-310IR only)
SAS3	SAS3 hard drive connector (For ASMB-310IR only)
SAS4	SAS4 hard drive connector (For ASMB-310IR only)
SAS5	SAS5 hard drive connector (For ASMB-310IR only)
SAS6	SAS6 hard drive connector (For ASMB-310IR only)
SAS7	SAS7 hard drive connector (For ASMB-310IR only)
SATA0	Serial ATA0 hard drive connector
SATA1	Serial ATA1 hard drive connector
SATA2	Serial ATA2 hard drive connector
SATA3	Serial ATA3 hard drive connector
SATA4	Serial ATA4 hard drive connector
SATA5	Serial ATA5 hard drive connector
SGPIOA1	GPIO connector for SAS0 ~ SAS3 (For ASMB-310IR only)
SGPIOB1	GPIO connector for SAS4 ~ SAS7 (For ASMB-310IR only)
SYSDFAN1	System fan connector (4-pin)
SYSRFAN1	System fan connector (4-pin)
SYSUAFAN1	System fan connector (4-pin)
USB10	USB port 10
USB67	USB port 6, 7
USB89	USB port 8, 9

On-board LED

Label	Function
5 V_LED1	Power on LED
5 VSB_LED2	Standby LED

