

ASMB-913I Intel Xeon® E5-2600 v3 series EATX Server Board with 16 DDR4 DIMM, 3 PCIe x16, PME support, 4 GbE Startup Manual

Packing List

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

- 1 ASMB-913I Startup Manual
- 1 Driver CD (user's manual is included)
- 2 Serial ATA HDD data cables
- 2 Serial ATA HDD power cables
- 2 CPU power cables (8P)
- 1 I/O port bracket
- 1 Warranty card

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

Note 1: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: www.adobe.com/Products/acrobat/readstep2.html (Acrobat is a trademark of Adobe)

Specifications

Standard SBC Functions

- **CPU:** Dual LGA2011-R3 Intel Xeon® E5-2600v3 series
- **BIOS:** AMI 128 Mb SPI BIOS
- **Chipset:** Intel® C612 PCH
- **System Memory:** 16* DDR4 REG 1600/1866/2133 DIMM, Max. 512 GB

Note: Due to the inherent limitations of PC architecture, the system may not fully detect 512 GB RAM when 512 GB RAM is installed.

- **SATA Interface:** 8 SATA3 6 Gb/s ports Intel Matrix Storage (for Windows only) (SATA0-SATA5 and sSATA0-sSATA1 Supports software RAID 0, 1, 10 & 5)
- **Serial ports:** Two serial ports, only support RS-232
- **Keyboard/mouse connector (KBMS2):** Supports the standard PS/2 keyboard and mouse via PS/2 cable
- **Watchdog timer:** 255 level timer intervals
- **USB port:** Supports up to three USB 2.0 ports (1*Type-A) and six USB 3.0 ports (4 ports from on-board 20pin header)

VGA Interface

- **Chipset:** Aspeed AST2400/1400
- **Display Memory:** 64 MB
- **Resolution:** Supports VGA up to resolution 1920 x 1200 @ 60 Hz refresh rate

Ethernet Interface

- **Interface:** 10/100/1000 Mbps
- **Controller:** LLAN1_BMC: Intel I210 (only ASMB-913I sku support BMC); LAN2: Intel I210; LAN3/4: Intel I210 (ASMB- 913I sku only)

Mechanical and Environment

- **Dimensions (L x W):** 330 x 304 mm (13" x 12")
- **Power supply voltage:** +3.3 V, +5 V, ±12 V, +5 Vsb
- **Power consumption (mainboard only, excluding IO device):** Max. load: +3.3 V @ 1.40 A, +5 V @ 0.50 A, +12 V @ 23.20 A, +5 Vsb @ 0.09 A, -12 V @ 0.05 A
- **Operating temperature:** 0 ~ 40° C (depending on CPU)
- **Weight:** 1.7 kg (weight of board)

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<http://www.advantech.com>

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

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

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This manual is for the ASMB-913I 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.

Connectors	
Label	Function
ATXPWR1	ATX 24 Pin main power connector
ATX12V1	Processor power connector (for CPU0)
ATX12V2	Processor power connector(for CPU1)
SLOT12V1	For PCIe slot 12V input only
SATA0~SATA5 sSATA0~sSATA1	Serial ATA0~5, Slave serial ATA0~1
USB8_9	USB 2.0 header 8, 9
USB10	USB 2.0 port 10 (Type-A)
USB0_1, USB2_3, USB4_5	USB 3.0 port 0, 1; USB 3.0 port 2, 3, 4, 5 (20-pin header)
EX_THR1	Connector for external thermostat
SPI_CN1	Connector for BIOS update tool
LPC1	TPM connector
PCIE_PME1	PCIE x16 slot (For PME)
SLOT4	PCIE x16 slot
SLOT5	PCIE x16 slot
SLOT6	PCIE x16 slot
DIMMA1 ~ DIMMH1 DIMMA2 ~ DIMMH2	DDR4 slot
CPUFAN0,CPUFAN1	CPU FAN connector
SYSFAN0,SYSFAN1, SYSFAN2	System FAN connector
LAN2, LAN3, LAN4	LAN connector
LAN1_BMC	LAN connector and share link for IPMI
VGA_COM1	VGA+COM connector
VOLT1	Voltage Display
KBMS2	External keyboard and mouse connector (6 pin)
BIOS1	BIOS SPI ROM
LANLED1	LAN 1/2 LED extension connector
SMBUS1	Front panel SMBus header

Jumpers and Connectors

BMC1/BMC2	IPMI module header
SGPIO1/SGPIO2	SATA SGPIO header
JCASE1	Chassis case open alarm header
HDAUD1	Audio header
COM2	Serial port: RS-232
JFP1, JFP2, JFP3	Front panel header
GPIO1	GPIO connector
PMBUS1	Power supply SMBus I ² C Header

Jumper list

Label	Function
JCMOS1	CMOS clear
JME1	ME update

JCMOS1/JME1: CMOS clear/ME update function

Closed pins	Result
1-2	Keep CMOS data/Disable ME update*
2-3	Clear CMOS data/Enable ME update

*: Default



Keep CMOS data/Disable ME update Clear CMOS data/Enable ME update

Installation Note

JFP1	3 6 9 12	PWRSW	RESET
&	2(+) 5(-) 8 11	HDDLED	SNMP SM_BUS
JFP2	▶ 1(+) 4 7 10(-)	SPEAKER	
JFP3	▶ 1 2 3 4 5	PWRLD & KEYLOCK	

JFP1, JFP2

Pin.3	#PWR_SW
Pin.6	GND
Pin.9	#RST_SW
Pin.12	GND

*Power button pin is located in Pin 3 & 6 of front panel connector

Software Installation

The CD disc contains a driver installer program that will lead you through the installation of various device drivers needed to take full advantage of your motherboard.

The computer is supplied with a battery-powered realtime clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to manufacturer's instructions.

Declaration of Conformity

The device complies with the requirements in Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference;
2. This device must accept any interference received, including interference that may cause undesired operation.

Board Layout

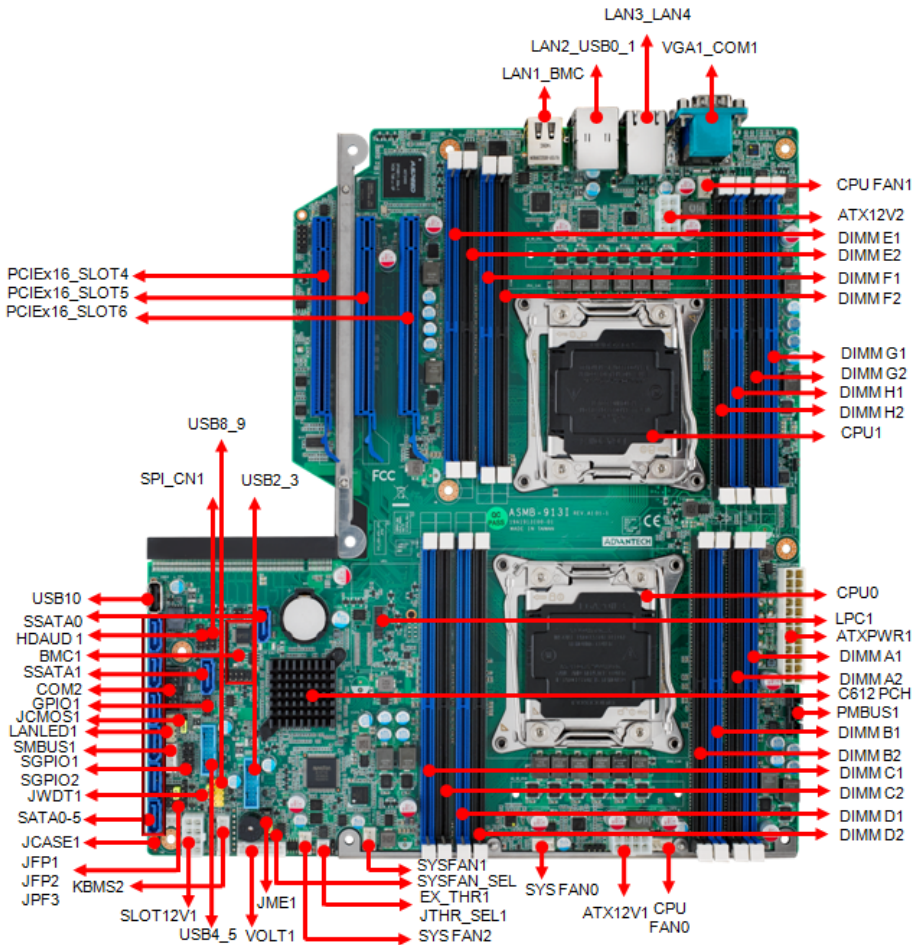


Figure 1: Board Layout: Jumper and Connector Locations