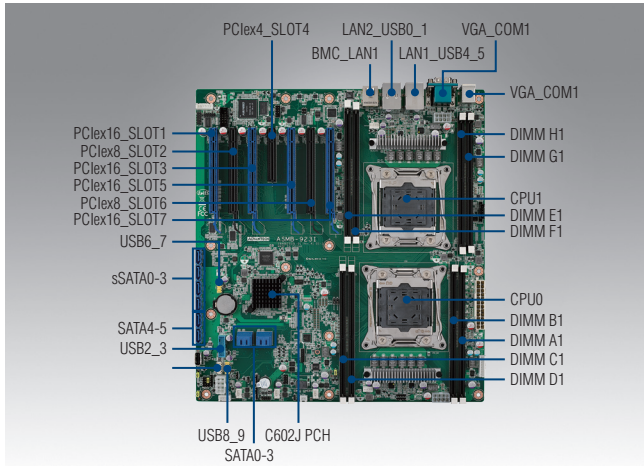


ASMB-923

**Dual LGA 2011-R3 Intel® Xeon®
E5-2600 v3/v4 EATX Server Board with
8 DDR4, 4 PCIe x16+ 2 PCIe x8,
4 USB 3.0, IPMI**



Features

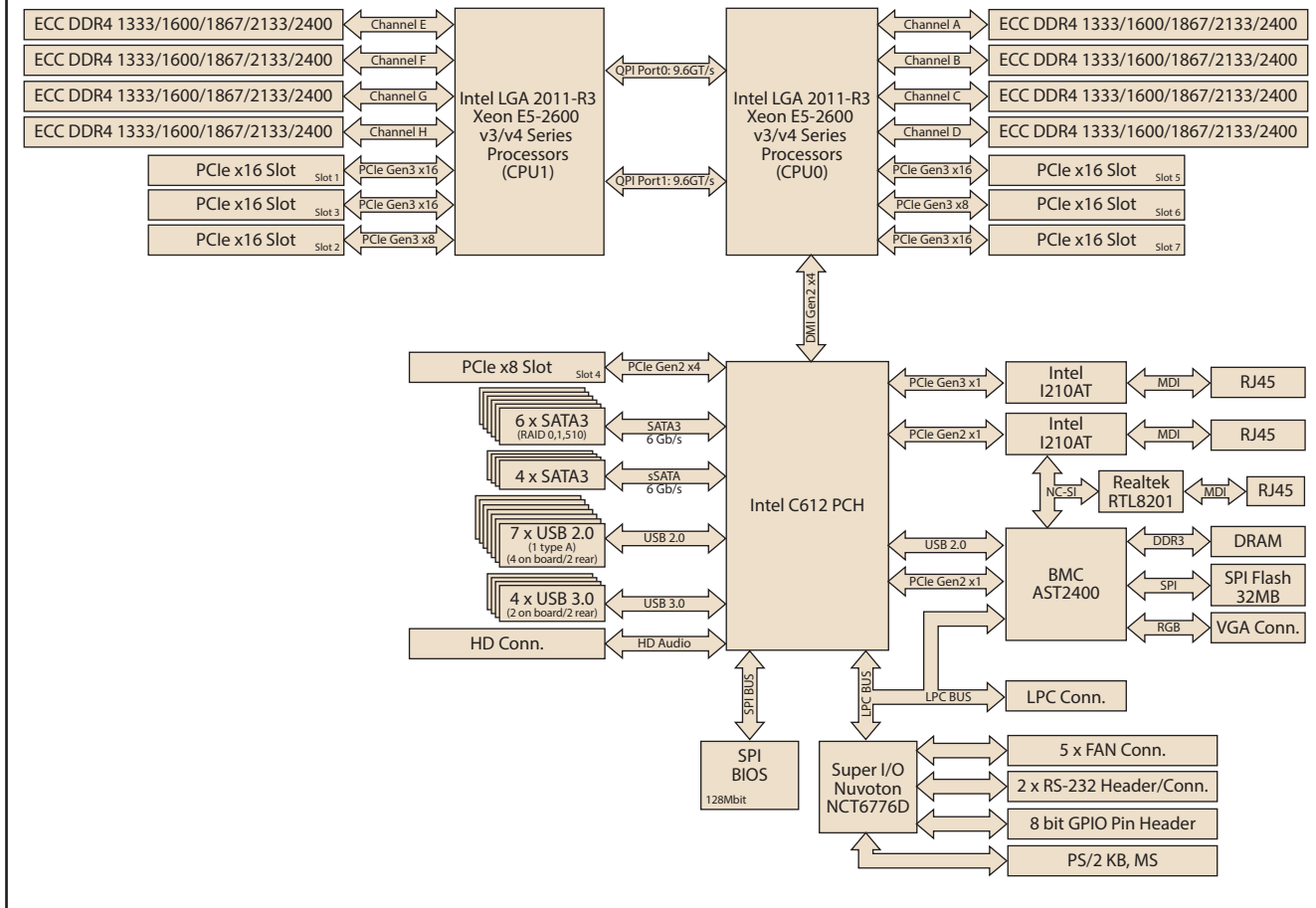
- EATX server board with dual Xeon® E5-2600 v3/v4 processor, 8 DIMMs 256 GB memory capacity
- DDR4 2400 MHz RDIMM up to 256 GB
- Four PCIe x16 slots (Gen3) + two PCIe x8 slots (Gen3.0) and one PCIe x4 (Gen2.0)
- 0 ~ 40 °C ambient operating temperature range



Specifications

| | | | | | | |
|--------------------------|-------------------------------|--|-------|--------|-------|-------|
| Form Factor | | Extended ATX form factor | | | | |
| Processor System | Socket | Intel LGA 2011-R3 | | | | |
| | CPU type | Intel® Xeon® E5-2600 v3/v4 dual processor (CPU cooler should be purchased separately and TDP up to 160W) Intel® Xeon® E5-1600 v3/v4 Series (1S conditional support, please contact to Advantech application engineer) | | | | |
| Core Logic | Chipset | Intel C612 chipset | | | | |
| | Total slots | 8 (Quad Channel) | | | | |
| Memory | Capacity | Maximum 256 GB ECC RDIMM | | | | |
| | Memory type | DDR4 ECC-REG 2400/2133/1866/1600/1333 MHz DIMM | | | | |
| | Memory size | 1 GB, 2 GB, 4 GB, 8 GB, 16 GB, 32 GB | | | | |
| Expansion Slots | Total PCI/PCI-X/PCIe slots | 7 | | | | |
| | Slot location 1 | PCIe x16 slot (x16 link), signal from CPU1 | | | | |
| | Slot location 2 | PCIe x16 slot (x8 link), signal from CPU1 | | | | |
| | Slot location 3 | PCIe x16 slot (x16 link), signal from CPU1 | | | | |
| | Slot location 4 | PCIe x8 slot (x4 link), signal from PCH | | | | |
| | Slot location 5 | PCIe x16 slot (x16 link), signal from CPU0 | | | | |
| | Slot location 6 | PCIe x16 slot (x8 link), signal from CPU0 | | | | |
| Graphics | VGA | Aspeed AST2400/1400 64 MB | | | | |
| | IDE controller | - | | | | |
| Storage | SATA controller | Intel C610: 10 SATA3 6 Gb/s ports Intel Rapid Storage Technology (for Windows only) (SATA0-SATA5 and sSATA0-sSATA3 Supports software RAID 0, 1, 10 & 5) | | | | |
| | SAS controller | - | | | | |
| Networking | GbE LAN | 2 x Intel I210AT | | | | |
| Onboard I/O Connector | Floppy connector | - | | | | |
| | PSU connector | 24-pin SSI power connector + 8-pin SSI 12 V power connector + 8-pin SSI 12 V power connector | | | | |
| | USB connector | 2 (supports 4 USB port), 1* Type-A , 1* USB3.0 20pin header (supports 2*USB 3.0 port) | | | | |
| | Fan header | 5 x 4-pin | | | | |
| | SMBus | 1 | | | | |
| | Chassis intruder | 1 | | | | |
| | Front LAN LED | 2 | | | | |
| | Audio Header | 1 | | | | |
| | Serial port header | 1 | | | | |
| | Rear I/O Connector | External serial port | 1 | | | |
| External USB port | | 4 (2*USB2.0 + 2*USB3.0) | | | | |
| VGA port | | 1 | | | | |
| RJ-45 | | 3 (1 port dedicated for IPMI function) | | | | |
| PS/2 KB/mouse | | 1 | | | | |
| Management Solution | Infiniband | - | | | | |
| | Software | - | | | | |
| Monitoring | Out of band remote management | Yes (ASMB-923I sku only) | | | | |
| | CPU temperature | Yes | | | | |
| Watchdog Timer | System Monitoring | Yes | | | | |
| | Output | System reset | | | | |
| Power Requirement | Interval | Programmable 1 ~ 255 sec/min | | | | |
| | Power On | 3.3V | 5V | 12V | 5Vsb | -12V |
| Environment | | 1.69A | 1.00A | 17.42A | 0.05A | 0.01A |
| | Operating | | | | | |
| | Temperature | 0 ~ 40 °C, depends on CPU speed and cooler solution | | | | |
| Physical Characteristics | Humidity | 10% ~ 95% | | | | |
| | Dimension (L x H) | 304.8 x 330.2 mm (12" x 13") | | | | |

Block Diagram



Ordering Information

| Part Number | Chipset | Memory | GbE LAN | IPMI | Graphics |
|-----------------|---------|------------|---------|------|----------|
| ASMB-923-00A1E | C612 | DDR4 RDIMM | 2 | - | AST 1400 |
| ASMB-923I-00A1E | C612 | DDR4 RDIMM | 2 | Yes | AST 2400 |

Packing List

| Part Number | Description | Quantity |
|----------------|--------------------------------|----------|
| 2006923I11 | Driver CD | x 1 |
| 2006923I10 | Startup manual | x 1 |
| 1700003194 | SATA data cables | x 2 |
| 1700022749-11 | SATA power cables | x 2 |
| 1700019748 | CPU power cable(8P) | x 2 |
| 1960052312T010 | I/O shield | x 1 |
| 1960066285N000 | Expansion card support bracket | x 1 |

Optional Accessories

| Part Number | Description |
|-----------------|---|
| PCA-AUDIO-HDA1E | HD Audio-card |
| PCA-TPM-00B1E | TPM 2.0 Module by LPC |
| 1960057226N001 | LGA-2011 square CPU heatsink for 1U chassis (95W) |
| 1960055362N001 | LGA-2011 square CPU cooler for 2U/4U chassis (145W) |
| 1960065684N011 | LGA-2011 square CPU cooler for 4U chassis (160W) |
| 1700028025-01 | Dual port USB cable (45 cm) with bracket |
| 1700028042-01 | Four port USB cable (45 cm) with bracket |
| 1701090401 | COM port cable with bracket |
| 1920000406T000 | 1U chassis IO shield |
| 968EMLSAP2 | SUSIAccess Pro 3.0 |

I/O View



ASMB-923-00A1E



ASMB-923I-00A1E