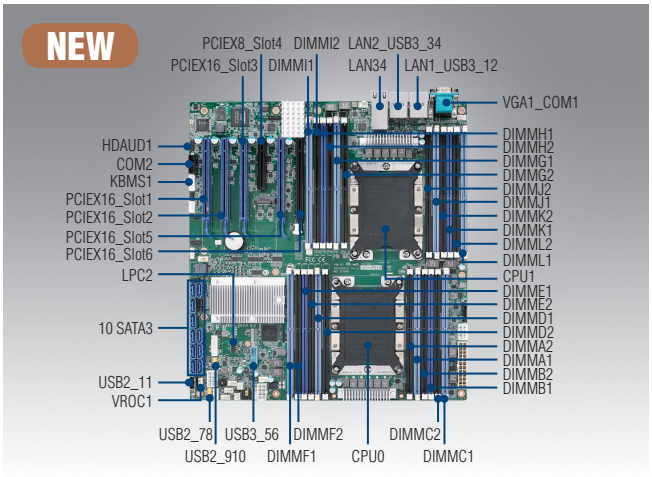
# ASMB-935

## Dual LGA3647-P0 Intel® Xeon® Scalable EATX Server Board with 24 DDR4, 5 PCIe x16 + 1 PCIe x8, 10 SATA3, 6 USB3.0, Dual 10GbE, IPMI




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## Features

- EATX server board with dual Xeon Scalable processors
- DDR4 2666 MHz RDIMM up to 1.5 TB (24 LDIMMs), support Apache Pass
- Five PCIe x16 (Gen3) and one PCIe x8 (Gen3) for three double-deck cards
- Intel® X557-AT2 dual 10GbE ports
- Ten SATA3 and six USB3.0 ports
- One M.2 2280 (SATA / PCIe compatible)
- 0 ~ 40 °C ambient operating temperature range

## Specifications

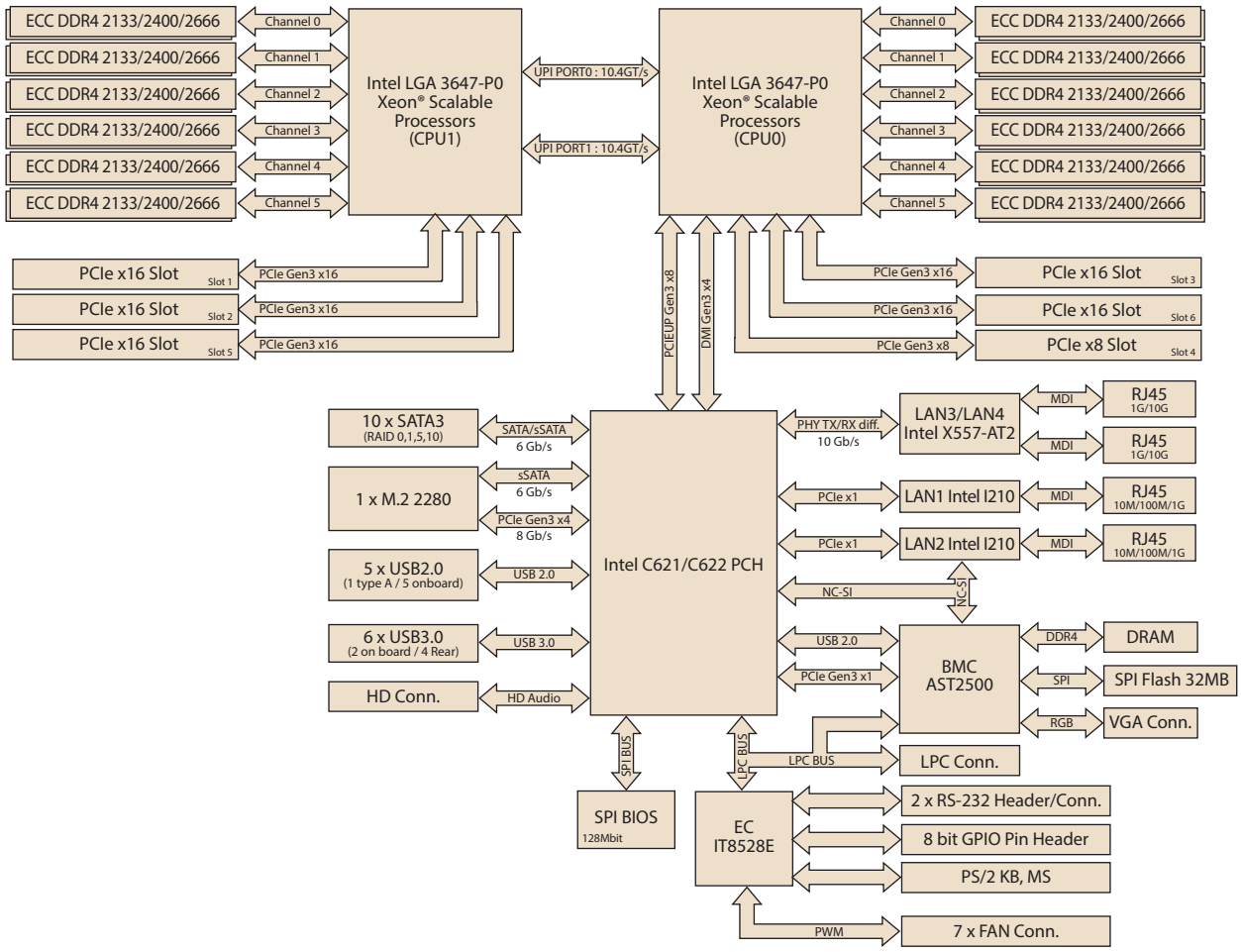
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Form Factor | | EATX form factor | | | | | | |
| Processor System | Socket | Intel LGA3647-P0 | | | | | | |
| | CPU type | Intel Xeon Scalable dual processors (CPU cooler should be purchased separately and TDP up to 205W) | | | | | | |
| Core Logic | Chipset | Intel C620 Series | | | | | | |
| Memory | Total slots | 24 (2 DIMM per channel) | | | | | | |
| | Capacity | Maximum 1.5 TB ECC LRDIMM<br>Maximum 768GB ECC RDIMM | | | | | | |
| | Memory type | DDR4 ECC-REG 2133/2400/2666 MHz DIMM, support Apache Pass | | | | | | |
| | Memory size | 4 GB, 8 GB, 16 GB, 32 GB, 64 GB (LRDIMM) | | | | | | |
| Expansion Slots | Total PCIe slots | 6 | | | | | | |
| | Slot location 1 | 1 x PCIe x16 slot (x16 link), signal from CPU1 | | | | | | |
| | Slot location 2 | 1 x PCIe x16 slot (x16 link), signal from CPU1 | | | | | | |
| | Slot location 3 | 1 x PCIe x16 slot (x16 link), signal from CPU0 | | | | | | |
| | Slot location 4 | 1 x PCIe x8 slot (x8 link), signal from CPU0 | | | | | | |
| | Slot location 5 | 1 x PCIe x16 slot (x16 link), signal from CPU1 | | | | | | |
| | Slot location 6 | 1 x PCIe x16 slot (x16 link), signal from CPU0 | | | | | | |
| Graphics | VGA | ASPEED AST2500/2510 | | | | | | |
| Storage | SATA controller | Intel C621/C622: 10 x SATA3 (600 MB/s) support software RAID 0,1,5,10 | | | | | | |
| | SAS controller | - | | | | | | |
| Networking | GbE/10GbE LAN | 2 x Intel I210AT + Intel X557-AT2 (dual 10GbE ports for ASMB-935T2 sku only) | | | | | | |
| Onboard I/O Connector | PSU connector | 24-pin SSI power connector + 3 x 8-pin SSI 12 V power connector | | | | | | |
| | USB connector | 4 x USB2.0 ports (two onboard headers) + 2 x USB3.0 ports (one onboard headers) + 1 x Type-A USB2.0 port | | | | | | |
| | Fan header | 7 x 4pin (5 for system + 2 for CPU) | | | | | | |
| | M.2 | 1 x M.2 2280 B+M key (SATA and PCIe) | | | | | | |
| | SMBus | 1 | | | | | | |
| | Chassis intruder | 1 | | | | | | |
| | Front LAN LED | 1 | | | | | | |
| | Audio Header | 1 | | | | | | |
| | PS/2 KB/Mouse | 1 | | | | | | |
| | Serial port header | 1 | | | | | | |
| Rear I/O Connector | External serial port | 1 | | | | | | |
| | External USB port | 4 (USB3.0) | | | | | | |
| | VGA port | 1 | | | | | | |
| | RJ-45 | 4 (LAN2/4 sharing with IPMI function) | | | | | | |
| | PS/2 KB/mouse | - | | | | | | |
| | Infiniband | - | | | | | | |
| Management Solution | Software | - | | | | | | |
| | Out of band remote management | Yes (ASMB-935I/ASMB-935T2 sku only) | | | | | | |
| Monitoring | CPU temperature | Yes | | | | | | |
| | System Monitoring | Yes | | | | | | |
| Watchdog Timer | Output | System reset | | | | | | |
| | Interval | Programmable 1 ~ 255 sec/min | | | | | | |
| Power Requirement | Power On | 3.3V | 5V | 12V | 5Vsb | -12V | 12V_8P_0 | 12V_8P_1 |
| | (205W CPU@2.5GHz DDR4 2400 32G*24) | 6.77A | 5.11A | 0.04A | 0.17A | 0.01A | 21.49A | 23.19A |
| Environment | | Operating | | | | Non-operating | | |
| | Temperature | 0 ~ 40 °C, depends on CPU speed and cooler solution | | | | -40 ~ 85 °C | | |
| | Humidity | 10% ~ 95% | | | | 10% ~ 95% (Non condensing) | | |
| Physical Characteristics | Dimension (L x H) | 304.8 x 330.2 mm (12" x 13") | | | | | | |



All product specifications are subject to change without notice.

Last updated: 26-Dec-2018

## Block Diagram




## Ordering Information

| Part Number | Chipset | Memory | GbE/10GbE LAN | IPMI | Graphics |
|---|---|---|---|---|---|
| ASMB-935-00A1 | C621 | 24 x DDR4 RDIMM | 2/- | - | AST2510 |
| ASMB-935I-00A1 | C621 | 24 x DDR4 RDIMM | 2/- | Yes | AST2500 |
| ASMB-935T2-00A1 | C622 | 24 x DDR4 RDIMM | 2/2 | Yes | AST2500 |

## Packing List

| Part Number | Description | Quantity |
|---|---|---|
| 2061093500 | Driver CD | x 1 |
| 2001093500 | Startup manual | x 1 |
| 1700003194 | SATA data cables | x 2 |
| 1700022749-11 | SATA power cables | x 2 |
| 1700019748 | CPU power cable | x 2 |
| 1930008089 | Screw for M.2 device | x 2 |
| 1960076488T000 | I/O shield | x 1 |
| 1651003167-01 | LGA3647 CPU clip | x 2 |

## Optional Accessories

| Part Number | Description |
|---|---|
| PCA-AUDIO-HDA1E | HD Audio-card |
| PCA-TPM-00B1E | TPM2.0 Module |
| 1960081155N001 | LGA-3647 narrow CPU cooler for 1U chassis (85W) |
| 1960081603N001 | LGA-3647 narrow CPU cooler for 2U/4U chassis (150W) |
| 1960081603N101 | LGA-3647 narrow CPU cooler for 4U chassis (205W) |
| 1700028025-01 | Dual port USB cable (45 cm) with bracket |
| 1700028042-01 | Four port USB cable (45 cm) with bracket |
| 1700028024-01 | Dual port USB 3.0 cable (45 cm) with bracket |
| 1701090401 | COM port cable with bracket |
| 1960082347T000 | For 1U chassis IO shield |

## I/O View



ASMB-935T2-00A1



ASMB-935-00A1
ASMB-935I-00A1