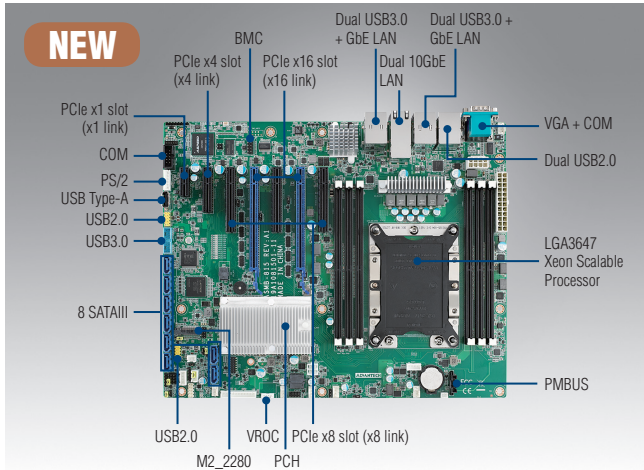


ASMB-815

LGA 3647-PO Intel® Xeon® Scalable ATX Server Board with 6 DDR4, 5 PCIe x8 or 2 PCIe x16 and 1 PCIe x8, 8 SATA3, 6 USB3.0, Dual 10GbE, IPMI



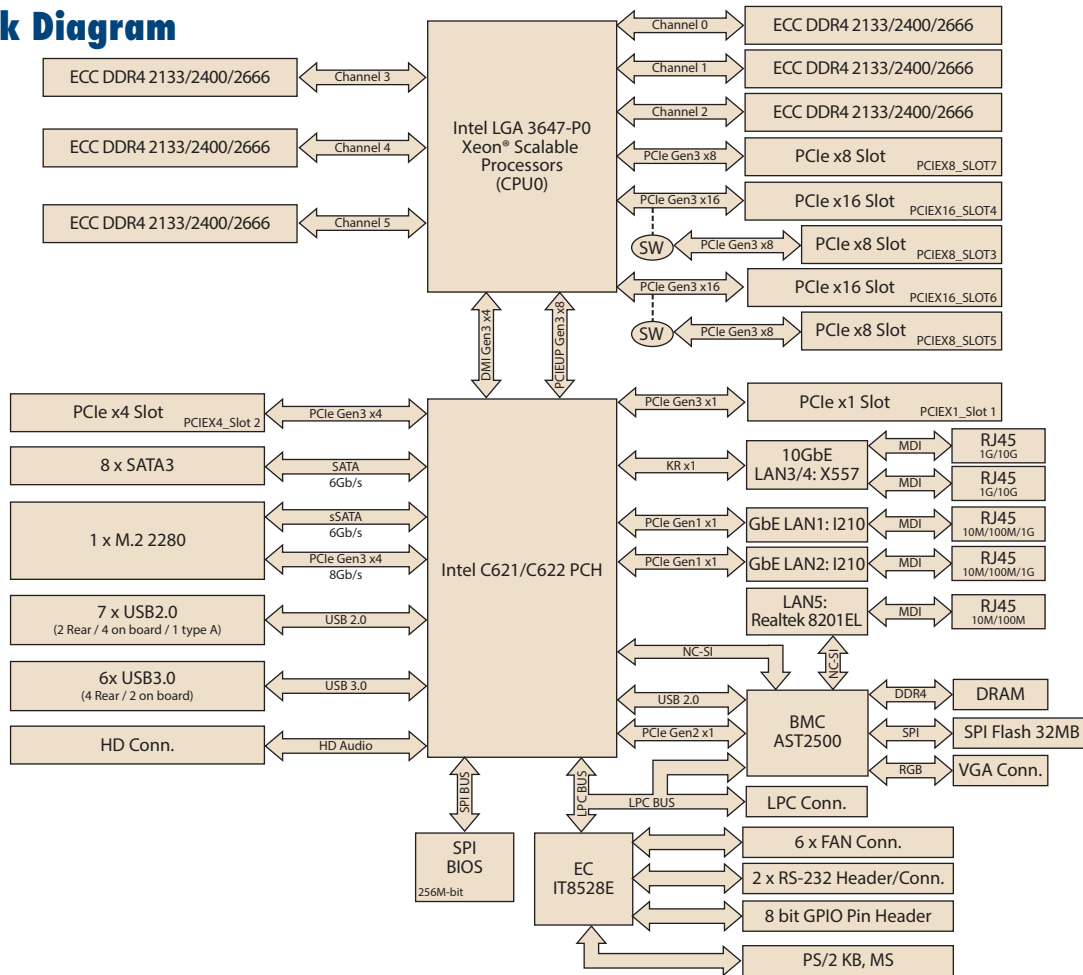
Features

- ATX server board with Xeon® Scalable processors
- DDR4 2666 MHz RDIMM up to 384 GB (6 LRDIMMs), support Apache Pass
- Five PCIe x8 or two PCIe x16 and 1 PCIe x8
- Intel® X557-AT2 dual 10GbE ports
- Eight SATA3 and one M.2 connectors (SATA / PCIe compatible)
- 0 ~ 60 °C ambient operating temperature range

Specifications

| | | |
|--------------------------|---|---|
| Form Factor | ATX form factor | |
| Processor System | Socket | Intel LGA 3647-PO |
| | CPU type | Intel Xeon Scalable processors (CPU cooler should be purchased separately and TDP up to 205W) |
| Core Logic | Chipset | Intel C621/C622 chipset |
| Memory | Total slots | 6 (1 DIMM per channel) |
| | Capacity | Maximum 384GB ECC LRDIMM Maximum 192GB 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 PCI/PCI-X/PCIe slots | 7 |
| | Slot location 1 | PCIe x1 slot (x1 link), signal from PCH |
| | Slot location 2 | PCIe x4 slot (x4 link), signal from PCH |
| | Slot location 3 | PCIe x8 slot (0 or x8 link), signal from CPU |
| | Slot location 4 | PCIe x16 slot (x8 or x16 link), signal from CPU |
| | Slot location 5 | PCIe x8 slot (0 or x8 link), signal from CPU |
| | Slot location 6 | PCIe x16 slot (x8 or x16 link), signal from CPU |
| Slot location 7 | PCIe x8 slot (x8 link), signal from CPU | |
| Graphics | VGA | Aspeed AST 2500/2510 |
| Storage | SATA controller | Intel C621/C622: 8 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) |
| Onboard I/O Connector | PSU connector | 24-pin SSI power connector + 1 x 8-pin SSI 12 V power connector + 4-pin SSI 12 V power connector |
| | USB connector | 4 x USB2.0 ports (two onboard headers) + 2 x USB3.0 ports (one onboard header) + 1 x Type-A USB2.0 port |
| | Fan header | 6 x 4-pin (5 for system + 1 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 |
| Rear I/O Connector | PS/2 KB/Mouse | 1 |
| | Serial port header | 1 |
| | External serial port | 1 |
| | External USB port | 4 (USB3.0) + 2 USB (2.0) |
| | VGA port | 1 |
| | RJ-45 | 5 (1 port dedicated for IPMI function) |
| | PS/2 KB/mouse | - |
| Management Solution | Software | - |
| | Out of band remote management | Yes (ASMB-8151 & ASMB-815T2 SKUs) |
| 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 |
| | (205W CPU@2.5GHz DDR4 2400 4G*6) | 2.77127A 7.00549A 0.57829A 0.132880A 0.063951A 17.5801A |
| Environment | Operating | Non-operating |
| | Temperature | 0 ~ 60 °C, depends on CPU speed and cooler solution |
| Physical Characteristics | Humidity | -40 ~ 85 °C |
| | Dimension (L x H) | 10% ~ 95% 10% ~ 95% (Non condensing) |
| | | 304.8 x 244 mm (12" x 9.6") |

Block Diagram



Ordering Information

| Part Number | Chipset | Memory | GbE/10GbE LAN | IPMI | Graphics |
|------------------|---------|------------|---------------|------|----------|
| ASMB-815-00A1E | C621 | DDR4 RDIMM | 2/- | - | AST 2510 |
| ASMB-815I-00A1E | C621 | DDR4 RDIMM | 2/- | Yes | AST 2500 |
| ASMB-815T2-00A1E | C622 | DDR4 RDIMM | 2/2 | Yes | AST 2500 |

Packing List

| Part Number | Description | Quantity |
|----------------|----------------------|----------|
| 2066815I00 | Driver CD | x 1 |
| 2006815I10 | 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 1 |

Optional Accessories

| Part Number | Description |
|-----------------|---|
| PCA-AUDIO-HDA1E | HD Audio-card |
| PCA-TPM-00B1E | TPM 2.0 Module by LPC |
| 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) |
| 1700002204 | Dual port USB cable (27 cm) with bracket |
| 1700008461 | Four port USB cable (30.5 cm) with bracket |
| 1700020277-01 | Dual port USB 3.0 cable (30 cm) with bracket |
| 1701090401 | COM port cable (40 cm) with bracket |
| 1700019268-11 | PS/2 port cable (35 cm) |
| 1960063434N000 | Cable bracket for 1700019268-11 |
| 1960082347T000 | For 1U chassis IO shield |

I/O View



ASMB-815T2-00A1E



ASMB-815I-00A1E



ASMB-815-00A1E