

SIMB-A21

Intel® LGA1155 Core™ i7/i5/i3, Celeron® ATX with VGA/DVI, 6 COM and Dual LAN



Features

- Intel® LGA1155 socket supports Intel® Core™ i7/i5/i3/Celeron® processor
- Intel H61 Chipset
- Two 240-pin DIMM sockets supports up to 16GB DDR3 1066/1333 MHz SDRAM
- Intel HD Graphics 2000/3000 supports DirectX 10
- Realtek ALC892 supports 5.1 + 2 channel HD audio
- Dual Realtek RTL8111E Gigabit LAN
- 1 PCIe x 16, 1 PCIe x1, 4 PCI
- 6 COM (1 x RS-232 w/ power, 1 x RS-422/485 with power, 4 x RS-232)
- 4SATA II, 10 USB 2.0
- 8-bit GPIO

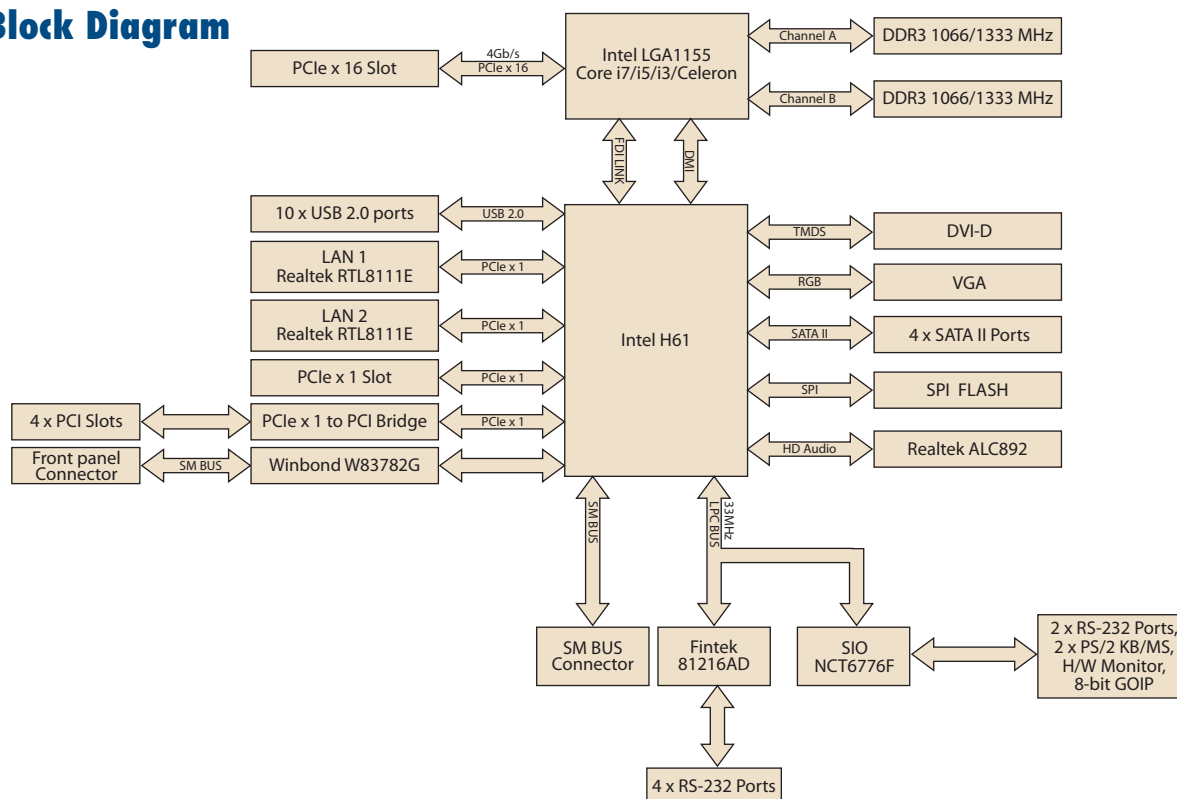


CE FCC

Specifications

| | | | | | |
|--------------------------|------------------------|--|------------------------|---------------------------|----------------------|
| Processor System | CPU | Intel Core 2nd gen. i7 | Intel Core 2nd gen. i5 | Intel Core 2nd gen. i3 | Intel Celeron |
| | Core Number | 4 | 4 | 2 | 2 |
| | Max. Speed | i7-2600 3.4 GHz | i5-2400 3.1 GHz | i3-2120 3.3 GHz | Celeron G540 2.5 GHz |
| | L2 Cache | 8 MB | 6 MB | 3 MB | 2 MB |
| | Chipset | Intel H61 | | | |
| | BIOS | AMI 32 Mbit, SPI | | | |
| Expansion Slot | Front Side Bus | 1066/1333 MHz | | | |
| | PCI | 32-bit/33 MHz, 4 slot | | | |
| | PCIe x 16 | 4.0 GB/s per direction, 1 slot | | | |
| | PCIe x1 | 250 MB/s per direction, 1 slot | | | |
| Memory | Full-size Mini-PCIe | - | | | |
| | Technology | Dual channel DDR3 1066/1333 MHz | | | |
| | Max. Capacity | 16GB | | | |
| Graphics | Socket | 2 x 240-pin DIMM | | | |
| | Controller | Intel HD Graphics 2000/3000 | | | |
| | VRAM | Shared memory up to 224 MB | | | |
| | VGA | 1, supports max. resolution 2048 x 1536 | | | |
| | DVI-D | 1, supports max. resolution 1920 x 1200 | | | |
| Ethernet | Dual Display | VGA + DVI | | | |
| | Interface | 10/100/1000 Mbps | | | |
| | Controller | GbE-LAN1: Realtek RTL8111E, GbE-LAN2: Realtek RTL8111E | | | |
| SATA | Connector | RJ-45 x 2 | | | |
| | Max Data Transfer Rate | 300 MB/s | | | |
| SSD | Channel | 4 | | | |
| | SATA DOM | Power Pin7 of SATA 1 | | | |
| Rear I/O | VGA | 1 | | | |
| | DVI-D | 1 | | | |
| | Ethernet | 2 | | | |
| | USB | 4 (USB 2.0) | | | |
| | Audio | 3 (Line-out, Line-in, Mic-in) | | | |
| | Serial | 1 (RS-232 w/ 5V/12V) | | | |
| | PS/2 | 2 (1 x keyboard and 1 x mouse) | | | |
| Internal Connector | USB | 6 (USB 2.0) | | | |
| | Serial | 5 (1 x RS-232/422/485 and 4 x RS-232) | | | |
| | SATA | 4 (SATA II) | | | |
| | Parallel | 1 LPT Port header (2 x 13 pin) | | | |
| | GPIO | 8-bit (4-bit DI and 4-bit DO) | | | |
| Watchdog Timer | Output | System reset | | | |
| | Interval | Programmable 1~ 255 sec/min | | | |
| Security | TPM | Optional Module via TPM Header | | | |
| Power Requirements | Power On | +12 V | +5 V | +3.3 V | 5 Vsb |
| | | 6.04 A | 4.34 A | 2.38 A | 0.82 A |
| Environment | Temperature | Operating | | Non-Operating | |
| | | 0 ~ 50° C (32 ~ 140° F) | | -20 ~ 70° C (-4 ~ 158° F) | |
| Physical Characteristics | Dimensions | 305mm x 203 mm (12" x 8.0") | | | |

Block Diagram



Ordering Information

| P/N | CPU | Chipset | VGA | GbE | USB | COM | SATA |
|-------------------|-----------------------------------|-----------|-----|-----|-------------------------|------------------------|-----------|
| SIMB-A21-8VG00A1E | Intel Core i7 / i5 / i3 / Celeron | Intel H61 | 1 | 2 | 10 (4 Rear, 6 Internal) | 6 (1 Rear, 5 Internal) | 4 SATA II |

Note: Minimum order quantity is 200 pieces

I/O View



Packing List

| Description | Quantity |
|-----------------------------|------------------|
| SATA Cable Kit (SATA/POWER) | 1 |
| I/O Shield | 1 |
| Startup Manual | 1 (per 10 units) |
| Driver CD | 1 (per 10 units) |

Optional Accessories

| Part Number | Description |
|----------------|---|
| 1700003195 | USB cable with two ports, 17.5 cm |
| 1700002204 | USB cable with two ports, 27 cm |
| 1700008461 | USB cable with two ports, 30.5 cm |
| 1960047670N001 | LGA1156 CPU cooler for 2U and wallmount chassis |

Remark: Using Advantech Cooler (P/N 1750000334) with SIMB-A21 is not recommended.