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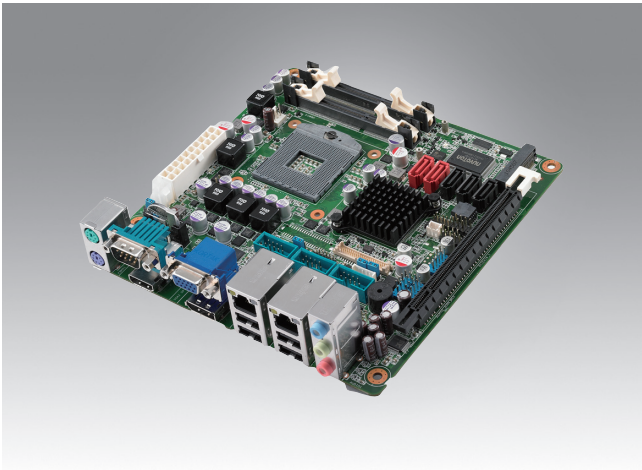
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SIMB-M21

Intel® Core™ i7/i5/i3/Celeron® Mini-ITX with VGA/HDMI/LVDS/Display Port, 4 COM and Dual LAN



Features

- Intel rPGA988 socket supports Mobile Intel® Core™ i7/ i5/ i3/ Celeron® processor
- Intel HM65 chipset
- Intel GMA HD 2000/ 3000 supports DirectX 10.1, OpenGL 3.0
- Two 204-pin SODIMM sockets support up to 16 GB DDR3 1333/ 1066 SDRAM
- Dual Intel Gigabit LAN : Intel 82579LM (LAN 1), Intel 82583V (LAN 2)
- Supports multiple dual display functions : VGA, HDMI, DisplayPort, dual channel 24-bit LVDS
- 1 PCIe x16 Gen. 2, 1 mini PCIe, 1 CFast
- 2 SATA III and 3 SATA II
- 4 COM (3 with Power), 10 USB 2.0

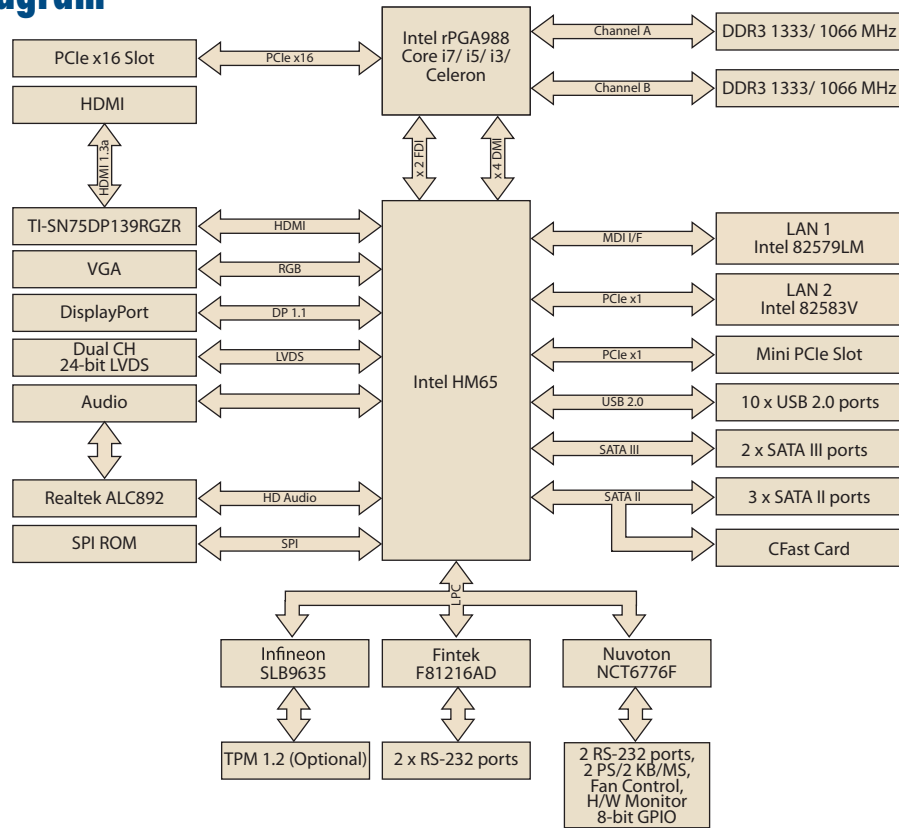


CE FCC

Specifications

| | | | | | |
|--------------------------|------------------------|--|---------------------|--|--------------------|
| Processor System | CPU | Intel Core i7-2710QE | Intel Core i5-2510E | Intel Core i3-2330E | Intel Celeron B810 |
| | Core Number | 4 | 2 | 2 | 2 |
| | Max. Speed | 2.1 GHz | 2.5 GHz | 2.1 GHz | 1.6 GHz |
| | L2 Cache | 6 MB | 3 MB | 3 MB | 2 MB |
| | Chipset | Intel HM65 | | | |
| Expansion Slots | BIOS | AMI 64 Mbit , SPI | | | |
| | PCI | - | | | |
| | PCIe x16 | 4.0 GB/s per direction, 1 slot | | | |
| | PCIe x1 | - | | | |
| Memory | Full-size Mini PCIe | 1 | | | |
| | Technology | Dual channel DDR3 1066/1333 MHz | | | |
| | Max. Capacity | 16 GB | | | |
| Graphics | Socket | 2 x 204-pin SODIMM | | | |
| | Controller | Intel Graphics Media Accelerator HD 2000/3000 | | | |
| | VRAM | Shared system memory up to 1.7 GB SDRAM | | | |
| | VGA | 1, supports max. resolution 2048 x 1536 | | | |
| | LVDS | 1, dual channel 24-bit LVDS supports max resolution 1600 x 1200 | | | |
| | HDMI | 1, HDMI 1.3 supports max resolution 1920 x 1080 | | | |
| | Display Port | 1, supports max resolution 2560 x 1600 | | | |
| Ethernet | Dual Display | VGA + LVDS, VGA + DisplayPort, VGA + HDMI, DisplayPort + HDMI, LVDS + HDMI, LVDS + DisplayPort | | | |
| | Interface | 10/100/1000 Mbps | | | |
| | Controller | GbE-LAN1: Intel 82579LM , GbE-LAN2: Intel 82583V | | | |
| SATA | Connector | RJ-45 x 2 | | | |
| | Max Data Transfer Rate | 600 MB/s (SATA III) / 300 MB/s (SATA II) | | | |
| SSD | Channel | 2/3 | | | |
| | CFast | 1 | | | |
| Rear I/O | VGA | 1 | | | |
| | Display Port | 1 | | | |
| | HDMI | 1 | | | |
| | Ethernet | 2 | | | |
| | USB | 4 (USB 2.0) | | | |
| | Audio | 3 (Line-out, Line-in, Mic-in) | | | |
| | Serial | 1 (RS-232) | | | |
| | PS/2 | 2 (1 x keyboard and 1 x mouse) | | | |
| Internal Connectors | LVDS & Inverter | 1 | | | |
| | USB | 6 (USB 2.0) | | | |
| | Serial | 3 (RS-232) | | | |
| | SATA | 5 (2 SATA III, 3 SATA II) | | | |
| | GPIO | 8-bit (4-bit DI and 4-bit DO) | | | |
| Watchdog Timer | Output | System reset | | | |
| | Interval | Programmable 1~ 255 sec/min | | | |
| Security | TPM | Optional | | | |
| Power Requirements | Power On | +12 V | +5 V | +3.3 V | -12 V |
| | | 2.59 A | 0.97 A | 1.10 A | 0.56 A |
| Environment | | | | | 5 Vsb |
| | Temperature | Operating 0 ~ 50° C (32 ~ 122° F) | | Non-Operating -20 ~ 70° C (-4 ~ 158° F) | |
| Physical Characteristics | Dimensions | 170 x 170 mm (6.69" x 6.69") | | | |

Board Diagram



Ordering Information

| P/N | CPU | Chipset | VGA | GbE | USB | COM | SATA |
|-------------------|---|------------|-----|-----|-------------------------|---------------------------------|---------------------------|
| SIMB-M21-7G200A1E | Intel Core i7/i5/i3/ Celeron Mobile Processor | Intel HM65 | 1 | 2 | 10 (4 Rear, 6 Internal) | 4 x RS-232 (1 Rear, 3 Internal) | 5 (2 SATA III, 3 SATA II) |

Note: Minimum order quantity is 10 pieces

Packing List

| Description | Quantity |
|-----------------------------|------------------|
| SATA cable kit (SATA/POWER) | 1 |
| I/O shield | 1 |
| CPU Cooler (25mm Height) | 1 |
| Startup manual | 1 (per 10 units) |
| Driver CD | 1 (per 10 units) |

Remark: If Intel Core i7 45W is used, it is highly recommended to select CPU Cooler (40.1 mm Height, P/N 19AD13GS0700145H35) instead.

Optional Accessories

| Part Number | Description |
|--------------------|--|
| 1700003195 | USB cable with two ports, 17.5 cm |
| 1700002204 | USB cable with two ports, 27 cm |
| 19AD13GS0700145H35 | CPU Cooler (40.1 mm Height) recommended for use with Core i7 45W |
| 1700008461 | USB cable with two ports, 30.5 cm |
| 1700019549 | COM port cable with bracket, 40 cm |
| 1700021716-01 | COM port cable w/o bracket, 10 cm |

I/O View

