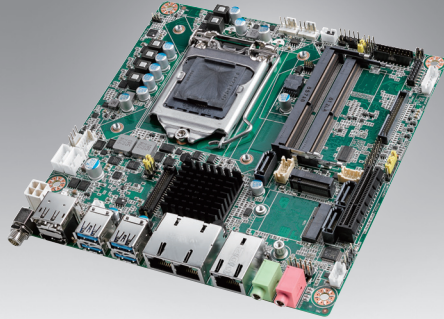


AIMB-286

Intel® Core™ i7/i5/i3 LGA 1151 Mini-ITX with DP++/HDMI/LVDS(eDP), 6 COM, Dual LAN, PCIe x4, M.2, DDR4, DC Input

NEW



WISE-PaaS/RMM

Features

- Supports Intel® 8th Gen Core™ i processor (LGA1151) with Intel H310 chipset
- Two 260-pin SO-DIMM up to 32GB DDR4 2666 MHz SDRAM
- Supports dual display of DP++/HDMI/LVDS (or eDP)
- Supports PCIe x4 (Gen 3), 1 M.2 B key & 1 M.2 E key, 4 USB 3.0 & 4 USB 2.0 and 3 SATA III
- Supports 12V DC Input and low profile height
- Supports TPM 1.2 / 2.0 (optional)
- Supports WISE-PaaS/RMM and Embedded Software APIs

Software APIs:



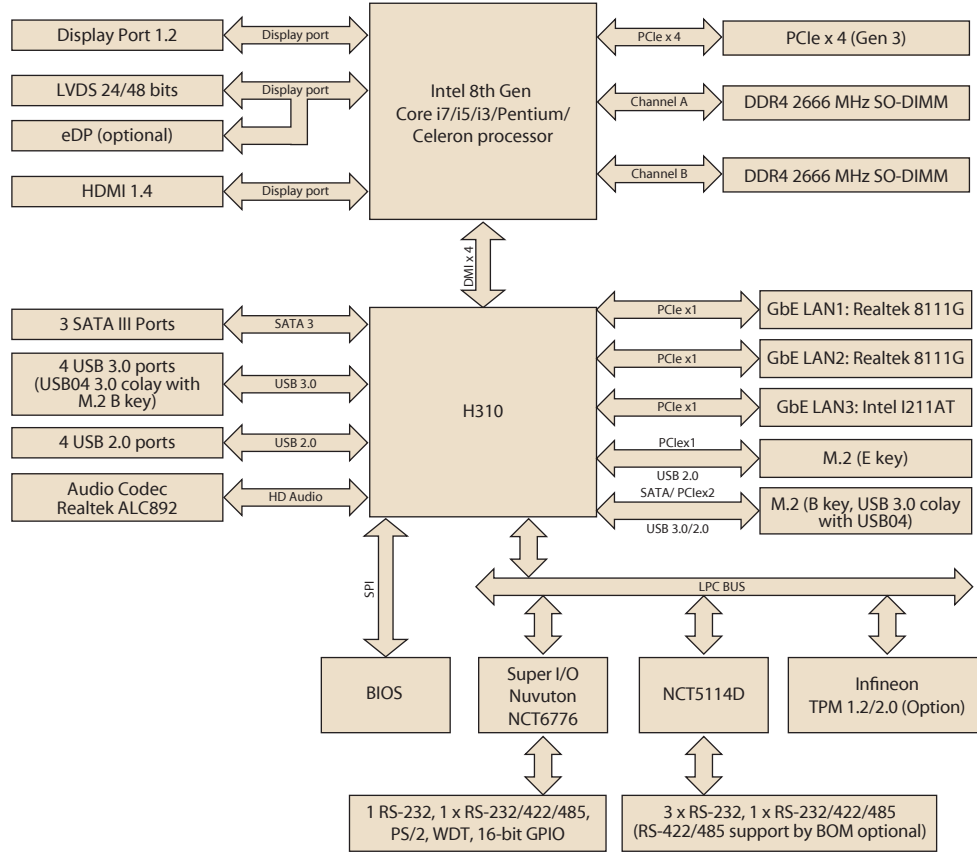
Utilities:



Specifications

| | CPU | i7-8700/i7-8700T | i5-8500/i5-8500T | i3-8100/i3-8100T | Pentium G5400/G5400T | Celeron G4900/G4900T | |
|--------------------------|---|---|------------------|------------------|----------------------|----------------------------|--|
| Processor System | Core Number | 6/6 | 6/6 | 4/4 | 2/2 | 2/2 | |
| | Max Speed | 3.2/2.4 GHz | 3.0/2.1 GHz | 3.6/3.1 GHz | 3.7/3.1 GHz | 3.1/2.9 GHz | |
| | SmartCache | 12/12 MB | 9/9 MB | 6/6 MB | 4/4 MB | 2/2 MB | |
| | TDP | 65/35 W | 65/35 W | 65/35 W | 54/35 W | 54/35 W | |
| | Chipset | H310 | | | | | |
| | BIOS | AMI EFI 128 Mbit SPI | | | | | |
| Expansion Slot | M.2 | 2, 1 x B key for SSD and 3G/4G (Type: 2242, 3042mm); with SIM card holder 1 x E key for wireless (Type: 2230mm) | | | | | |
| | PCIe x4 (Gen3) | 4 GB/s per direction, 1 slot | | | | | |
| Memory | Technology | Dual Channel DDR4 2666 MHz SDRAM | | | | | |
| | Max. Capacity | 32GB (up to 16GB per SO-DIMM) | | | | | |
| | Socket | 2 x 260 PIN DDR4 SO-DIMM (Non-ECC) | | | | | |
| Graphics | Controller | Intel HD Graphics | | | | | |
| | LVDS | Supports dual channel 24-bit up to 1920 x 1200 (colay with eDP) | | | | | |
| | HDMI 1.4 | Yes, supports max. resolution 4096 x 2160 @ 24 Hz | | | | | |
| | eDP | Yes, with internal pin header, supports max. resolution 4096 x 2304 @ 60 Hz (BOM optional) | | | | | |
| | Display Port 1.2 | Yes, supports 1 x DP++ with max resolution 4096 x 2304 @ 60 Hz | | | | | |
| Ethernet | Dual Display | DP+HDMI, DP+LVDS (or eDP), HDMI + LVDS (or eDP) | | | | | |
| | Interface | 10/100/1000 Mbps | | | | | |
| | Controller | GbE LAN1/2: Realtek 8111G GbE LAN3: Intel i211AT | | | | | |
| SATA | Connector | RJ-45 x 3 | | | | | |
| | Max Data Transfer Rate | 600 MB/s (SATA 3.0) | | | | | |
| Rear I/O | Channel | 3 (SATA III) | | | | | |
| | HDMI | 1 (HDMI 1.4) | | | | | |
| | Display Port 1.2 | 1 | | | | | |
| | Ethernet | 3 | | | | | |
| | USB | 4 USB 3.0 (USB04 colay with M.2 B key for USB 3.0) | | | | | |
| | Audio | 2 (Mic-in, Line-out) | | | | | |
| Internal Connector | DC Jack | 1 | | | | | |
| | USB | 4 (USB 2.0) | | | | | |
| | LVDS/inverter | 1 | | | | | |
| | Serial | 6 x RS-232 (COM1: RS-232, supports 5V/12V by jumper selection; COM2/3: RS-232/422/485 w/auto flow control, supports RS-232 by default, RS-422/485 supports by BOM option; COM4/5/6: RS-232) | | | | | |
| | SATA | 3 (SATA 3.0) | | | | | |
| | M.2 | 2, 1 x B key for SSD and 3G/4G (M.2 B key USB 3.0 colay with USB04), Type: 2242, 3042mm; 1 x E key for wireless, Type: 2230mm | | | | | |
| | IrDA | - | | | | | |
| Watchdog Timer | GPIO | 16-bit | | | | | |
| | Output | System reset | | | | | |
| Power Requirements | Interval | Programmable 1 ~ 255 sec/min | | | | | |
| | Input power | 12V DC Input | | | | | |
| Environment | Intel Core i7-8700 3.2GHz, 2pcs 16GB DDR4 2666MHz SDRAM, +12V @ 11.095A | | | | | | |
| | Operating | | | | | Non-Operating | |
| Physical Characteristics | Temperature | 0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution | | | | -40 ~ 85° C (-40 ~ 185° F) | |
| | Dimensions | 170 mm x 170 mm (6.69" x 6.69") | | | | | |

Block Diagram



Ordering Information

| P/N | Chipset | DP | LVDS/eDP | HDMI 1.4 | GbE LAN | COM | SATAIII | USB3.0/2.0 | M.2 B key | M.2 E key | PCIex4 | TPM | AMP |
|------------------|---------|----|----------|----------|---------|-----|---------|------------|-----------|-----------|--------|-----|-----|
| AIMB-286F-00A1E | H310 | 1 | 1 / (1) | 1 | 3 | 6 | 3 | 4/4 | 1 | 1 | 1 | (1) | (1) |
| AIMB-286G2-00A1E | H310 | 1 | 1 / (1) | 1 | 2 | 2 | 3 | 4/4 | 1 | 1 | 1 | (1) | (1) |
| AIMB-286L-00A1E | H310 | 1 | 0 | 1 | 1 | 2 | 2 | 4/0 | 1 | 1 | 0 | 0 | 0 |

*() BOM options available on MP version.

Packing List

| Part Number | Description | Quantity |
|----------------|----------------------------------|----------|
| 1700003194 | SATA HDD cable | 1 |
| 1700018785 | SATA power cable (1 port, 25cm) | 1 |
| 1701200220 | 1-to-2 serial port cable, 22cm | 1 |
| 1960090424T001 | I/O port bracket | 1 |
| 1700029538-01 | 1-to-4 serial port cable, 35cm | 1 |
| 2046028600 | Startup manual | 1 |
| 1700023082-11 | ATX 2*10P to 1*3P-2.0 25cm cable | 1 |

Optional Accessories

| Part Number | Description |
|-----------------|---|
| 1700029428-01 | M cable USB-A 4P(F)*2/2*4P-2.0 25cm |
| 1960053207N001 | LGA1150 CPU cooler for CPU TDP ≤ 65W, 92.9 (W) x 92.9 (L) x 46 (H) mm |
| 1960060732N001 | LGA1150 CPU cooler for CPU TDP ≤ 45W, 80 (W) x 80 (L) x 32.2 (H) mm |
| 96PSA-A120W12V1 | ADP A/D 100-240V 120W 12V C14 DC Plug 180LX |

Optional Chassis

| Part Number | Description |
|-----------------|--|
| AIMB-B2000-15ZE | Mini-ITX chassis with 150W ATX power supply |
| AIMB-B2000-00YE | Mini-ITX chassis (Optional external AC-DC 60W/84W Adaptor) |

Embedded OS/API

| OS/API | Part No. | 968 P/N | Description |
|------------|----------|---------|-------------|
| Windows 10 | | | |

I/O View

