





IMB-1002J

Mini-ITX Motherboard

KEY FEATURES

- · Intel® Apollo Lake SoC Processor J3455
- · 2 x 204-pin SO-DIMM up to 16GB DDR3L 1866MHz (8GB per DIMM)
- 1 x PCle x1 (Gen2), 4 x USB 3.1 Gen1, 4 x USB 2.0, 1 x M.2 Key E,
 1 x M.2 Key B, 1 x M.2 Key M, 4 x COM, 1 x SATA3
- · 2 x Realtek 1 Gigabit LAN
- · Supports triple display, 2 x HDMI 1.4b, 1 x LVDS
- · TPM Header
- · 12V DC-In





SPECIFICATIONS

Form Factor

| Dimensions Mini-ITX (6.7-in x 6.7-in) |
|---------------------------------------|
|---------------------------------------|

Processor System

| CPU | Intel® Apollo Lake SoC Processor |
|---------|----------------------------------|
| | J3455, QC, 1.50 GHz, 10 W |
| Chipset | SoC |
| Socket | N/A |
| BIOS | AMI SPI 128 Mbit |

Memory

| Technology | Dual Channel DDR3L 1866 MHz |
|------------|-----------------------------|
| Capacity | 16 GB (8 GB per DIMM) |
| Socket | 2 x 204-pin SO-DIMM |

Graphics

| Controller | Intel® HD Graphics |
|--------------|--|
| HDMI | HDMI 1.4b |
| | Max resolution up to 4096x2160@24Hz |
| DisplayPort | N/A |
| VGA | N/A |
| LVDS | Dual Channel 24-bit up to 1920x1200@60Hz |
| eDP | N/A |
| DVI | N/A |
| MultiDisplay | Triple Display |

Expansion Slot

| PCle | 1 x PCle x1 (Gen2) |
|------------|--|
| PCI | N/A |
| mini-PCle | N/A |
| M.2 | 1 x M.2 (KEY E, 2230) with PCIe x1 and shared USB 2.0 for Wireless |
| | 1 x M.2 (KEY B, 3042) with shared USB 2.0 and UIM for 4G |
| SIM Socket | 1 x Socket connected to M.2 Key_B |

Audio

| Interface | Realtek ALC887, High Definition Audio. Line-out, Mic-in |
|-----------|---|
|-----------|---|

Ethernet

| Controller/ Speed | LAN1: 1 x Realtek RTL8111G with 10/100/1000 Mbps |
|-------------------|--|
| | LAN2: 1 x Realtek RTL8111G with 10/100/1000 Mbps |
| Connector | 2 x RJ-45 |

Rear I/O

| HDMI | 2 x HDMI 1.4b |
|-------------|------------------------------------|
| DisplayPort | N/A |
| VGA | N/A |
| DVI | N/A |
| Ethernet | 2 x 1 Gigabit LAN |
| USB | 4 x USB 3.1 (Gen1) |
| Audio | 2 (Mic-in, Line-out) |
| COM | COM3(RS-232/422/485), COM4(RS-232) |
| PS2 | N/A |

Internal Connector

| USB | 4 x USB 2.0 (2 x 2.54 pitch header) |
|-----------------|--|
| | (one is shared with M.2 Key E, one is shared with M.2 Key B) |
| COM | COM5, COM6 (RS-232) |
| Parallel | 1 (shared with GPIO) |
| GPIO | 8 x GPI, 8 x GPO (shared with LPT header) |
| TPM | TPM Header |
| LVDS | 1 |
| eDP | N/A |
| VGA | N/A |
| SATA PWR Output | 1 |
| Speaker Header | 1 |
| | 1 |

Storage

| M.2 | 1 x M.2 (KEY M, 2242/2260/2280) with SATA3 for SSD |
|-------|--|
| mSATA | N/A |
| SATA | 1 x SATA3 (6Gb/s) |
| eMMC | N/A |

Watchdog Timer

| Output | From Super I/O to drag RESETCON# |
|----------|----------------------------------|
| Interval | 256 Segments, 0, 1, 2,255sec |

Power Requirements

| Input PWR | 12V DC-In with 4-pin plug PWR cable |
|-----------|--|
| Power On | AT/ATX Supported |
| | - AT : Directly PWR on as power input ready |
| | - ATX : Press button to PWR on after power input ready |

Environment

| Operating Temp | 0°C~60°C |
|--------------------|----------------|
| Storage Temp | -40° C ~ 85° C |
| Operating Humidity | 5%~90% |
| Storage Humidity | 50% ~ 00% |