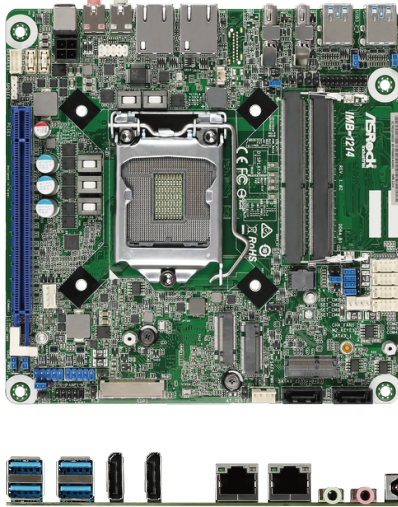




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## IMB-1214

Mini-ITX Motherboard

### KEY FEATURES

- Intel® 9<sup>th</sup>/ 8<sup>th</sup> Gen (Coffee Lake-S) Core™ Processors with H310 chipset
- 2 x 260-pin SO-DIMM up to 64GB\* DDR4 2666MHz
- 1 x PCIe x16 (Gen3), 4 x USB 3.1 Gen1, 4 x USB 2.0, 1 x M.2 Key E, 2 x M.2 Key M, 4 x COM, 2 x SATA3
- 1 x Intel 1 Gigabit LAN, 1 x Realtek 1 Gigabit LAN
- Supports dual display, 2 x DP 1.2, 1 x eDP
- TPM header
- 19V DC-In

### SPECIFICATIONS

#### Form Factor

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

#### Processor System

|         |                                                                                                                                                                    |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CPU     | Intel® 9 <sup>th</sup> / 8 <sup>th</sup> Gen (Coffee Lake-S) Core™ Processors, up to 65W<br>*The Performance of CPUs over 65W will be limited due to power design. |
| Chipset | Intel® H310                                                                                                                                                        |
| Socket  | LGA1151                                                                                                                                                            |
| BIOS    | AMI SPI 128 Mbit                                                                                                                                                   |

#### Memory

|            |                                                                                                                                                 |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Technology | Dual Channel DDR4 2666 MHz                                                                                                                      |
| Capacity   | 64GB*<br>* Intel Core i9/i7/i5 CPUs support up to 64GB (32GB per DIMM)<br>Intel Core i3/Pentium/Celeron CPUs support up to 32GB (16GB per DIMM) |
| Socket     | 2 x 260-pin SO-DIMM                                                                                                                             |

#### Graphics

|              |                                                              |
|--------------|--------------------------------------------------------------|
| Controller   | Coffee Lake integrated graphics                              |
| HDMI         | N/A                                                          |
| DisplayPort  | DisplayPort 1.2, DP++<br>Max resolution up to 4096x2304@60Hz |
| VGA          | N/A                                                          |
| LVDS         | N/A                                                          |
| eDP          | eDP 1.4<br>Max resolution up to 4096x2304@60Hz               |
| DVI          | N/A                                                          |
| MultiDisplay | Dual Display                                                 |

#### Expansion Slot

|            |                                                                   |
|------------|-------------------------------------------------------------------|
| PCIe       | 1 x PCIe x16 (Gen3)                                               |
| PCI        | N/A                                                               |
| mini-PCIe  | N/A                                                               |
| M.2        | 1 x M.2 (Key E, 2230) with PCIe x1, USB 2.0 and CNVi for Wireless |
| SIM Socket | N/A                                                               |

#### Audio

|           |                                                             |
|-----------|-------------------------------------------------------------|
| Interface | Realtek ALC887/897, High Definition Audio. Line-out, Mic-in |
|-----------|-------------------------------------------------------------|

#### Ethernet

|                   |                                                                                                              |
|-------------------|--------------------------------------------------------------------------------------------------------------|
| Controller/ Speed | LAN1: 1 x Intel® I219V with 10/100/1000 Mbps<br>LAN2: 1 x Realtek RTL8111G/RTL8111H-CG with 10/100/1000 Mbps |
| Connector         | 2 x RJ-45                                                                                                    |

#### Rear I/O

|             |                      |
|-------------|----------------------|
| HDMI        | N/A                  |
| DisplayPort | 2 x DP 1.2           |
| 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         | N/A                  |
| PS2         | N/A                  |

#### Internal Connector

|                 |                                          |
|-----------------|------------------------------------------|
| USB             | 4 x USB 2.0 (2 x 2.54 pitch header)      |
| COM             | COM3(RS232/422/485)<br>COM1, 2, 4(RS232) |
| Parallel        | N/A                                      |
| GPIO            | N/A                                      |
| TPM             | TPM Header                               |
| LVDS            | N/A                                      |
| eDP             | 1                                        |
| VGA             | N/A                                      |
| SATA PWR Output | 1                                        |
| Speaker Header  | 1                                        |

#### Storage

|       |                                                                                                  |
|-------|--------------------------------------------------------------------------------------------------|
| M.2   | 1 x M.2 (Key M, 2242/2260) with PCIe x1 for SSD<br>1 x M.2 (Key M, 2242/2280) with SATA3 for SSD |
| mSATA | N/A                                                                                              |
| SATA  | 2 x SATA3 (6Gb/s)                                                                                |
| eMMC  | N/A                                                                                              |

#### Watchdog Timer

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

#### Power Requirements

|           |                                                                                                                           |
|-----------|---------------------------------------------------------------------------------------------------------------------------|
| Input PWR | 19V DC-In with 4-pin plug PWR cable or DC Jack                                                                            |
| Power On  | AT/ATX Supported<br>- AT : Directly PWR on as power input ready<br>- 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   | 5% ~ 90%       |

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