

# IMB524R NEW

ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® H310, USB 3.1 Gen1, SATA 3.0, PCI Express Mini Card Slot, VGA, DisplayPort++, DVI-D, and HDMI

## Features

- LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor (Coffee Lake Refresh)
- Two 288-pin DDR4-2666/2400 DIMM for up to 64GB of memory
- DisplayPort++, DVI-D, HDMI and VGA with dual-view supported
- 4 SATA-600
- 1 PCI Express Mini Card slot
- 4 USB 3.1 Gen1 and 5 USB 2.0
- TPM 2.0 supported (optional)

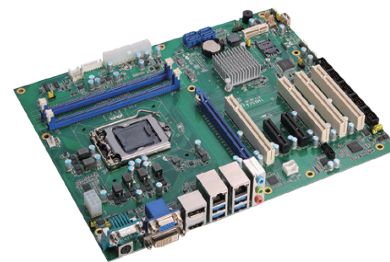
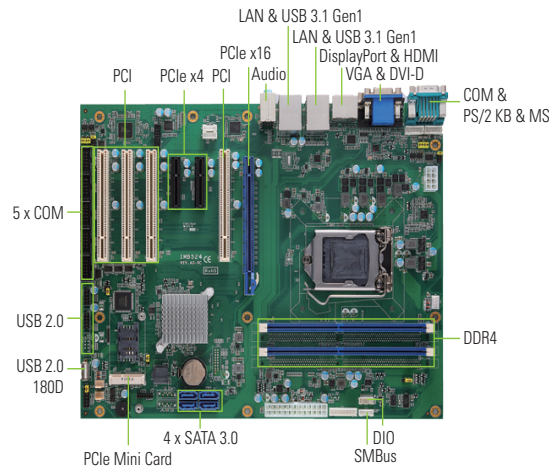


## Core System

|                       |                                                                                                                            |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------|
| CPU                   | LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor                                            |
| System Memory         | 2 x 288-pin DDR4-2666/2400 DIMM, up to 64GB                                                                                |
| Chipset               | Intel® H310                                                                                                                |
| BIOS                  | AMI BIOS                                                                                                                   |
| SSD                   | N/A                                                                                                                        |
| Watchdog Timer        | 255 levels, 1 to 255 sec.                                                                                                  |
| Expansion Interface   | 1 x PCIe x16 slot<br>2 x PCIe x4 slot (2 PCIe x1 signal)<br>4 x PCI slot<br>1 x PCIe Mini Card slot with PCIe x1 & USB 2.0 |
| Battery               | Lithium 3 V/ 220 mAh                                                                                                       |
| Dimensions            | 305 x 244 mm                                                                                                               |
| Board Thickness       | 1.6 mm                                                                                                                     |
| Operating Temperature | 0°C to +60°C (+32°F to +140°F)                                                                                             |
| Humidity              | 10% to 95% relative humidity, non-condensing                                                                               |

## I/O

|                     |                                                                                                                                                                                |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SATA                | 4 x SATA-600                                                                                                                                                                   |
| Hardware Monitoring | Detect CPU/system temperature, voltage and supports Smart fan control                                                                                                          |
| Ethernet            | 1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, PXE Boot ROM<br>1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM |
| Audio               | HD Codec audio as MIC-in/Line-in/Line-out with Realtek ALC662                                                                                                                  |
| USB                 | 4 x USB 3.1 Gen1 (rear I/O)<br>5 x USB 2.0 (pin header, 180D type A)                                                                                                           |
| Serial              | 4 x RS-232 (Internal box header)<br>2 x RS-232/422/485 (COM 1: rear I/O; COM 2: internal box header)                                                                           |
| PS/2 Combo Port     | 1 x PS/2 keyboard and mouse                                                                                                                                                    |
| TPM                 | TPM 2.0 (optional)                                                                                                                                                             |
| SMBus               | Yes                                                                                                                                                                            |
| Digital I/O         | 8-channel programmable                                                                                                                                                         |



▲ Side view

## Display

|                   |                                                       |
|-------------------|-------------------------------------------------------|
| Graphic           | Intel® HD Graphic                                     |
| Memory Size       | Share system memory                                   |
| Display Interface | 1 x VGA<br>1 x DVI-D<br>1 x HDMI<br>1 x DisplayPort++ |

## Ordering Information

| Standard                              |                                                                                                                                                                                        |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IMB524RVDHGGGA-H310 (P/N: E38F524103) | ATX motherboard with LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor, Intel® H310, USB 3.1 Gen1, SATA 3.0, 2 GbE LAN, VGA, DisplayPort, DVI-D and HDMI |

| Optional     |                                                      |
|--------------|------------------------------------------------------|
| 5938A808010E | 2 x USB 2.0 cable with bracket, P=2.54 mm, L=190 mm  |
| 5938A808020E | 2 x USB 2.0 cable with bracket, P=2.54 mm, L=400 mm  |
| 5948C122800E | 2 x USB 3.1 Gen1 cable with bracket, L=400 mm        |
| 59380000290E | PS/2 keyboard & mouse cable with bracket             |
| 593826A0000E | SATA signal cable/red, L=500 mm                      |
| 59384500100E | Audio cable with bracket, P=2.0 mm, L=450 mm         |
| 59380402010E | 1 x COM port cable with bracket, P=2.54 mm, L=300 mm |
| 59380703000E | 2 x COM port cable with bracket, P=2.54 mm, L=300 mm |
| 83935151000E | TPM 2.0 module (AX93515)                             |

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508

Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050

Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28

Business Registration Number: 07699660