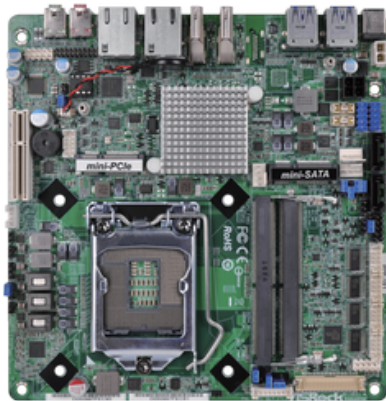




# IMB-191

Mini-ITX Motherboard



## KEY FEATURES

- Intel® 7<sup>th</sup>/ 6<sup>th</sup> Gen (Kabylake-S/Skylake-S) Core™ Processors with H110 chipset
- 2 x 260-pin SO-DIMM up to 32GB DDR4 2133 MHz (16GB per DIMM)
- 1 x PCIe x4 (Gen2), 4 x USB 3.1 Gen1, 4 x USB 2.0, 1 x mini-PCIe, 1 x mSATA,
- 4 x COM, 2 x SATA3
- 2 x Intel Gigabit LAN
- Supports dual display, 2 x HDMI 2.0, 1 x VGA header, 1 x LVDS
- TPM Header
- 12V/ 19~24V DC-In

## SPECIFICATIONS

### Form Factor

Dimensions	Mini-ITX (6.7-in x 6.7-in)
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### Processor System

CPU	Intel® 7 <sup>th</sup> / 6 <sup>th</sup> Gen (Kabylake-S/Skylake-S) Core™ Processors
Chipset	Intel® H110
Socket	LGA1151
BIOS	AMI SPI 128 Mbit

### Memory

Technology	Dual Channel DDR4 2133 MHz
Capacity	32 GB (16 GB per DIMM)
Socket	2 x 260-pin SO-DIMM

### Graphics

Controller	Intel® Gen9 Graphics DX 11/12
HDMI	HDMI 1.4b Max resolution up to 4096x2160@24Hz
DisplayPort	N/A
VGA	Max resolution up to 1920x1200@60Hz
LVDS	Dual channel 24 bit up to 1920x1200@60Hz
eDP	N/A
DVI	N/A
MultiDisplay	Dual Display

### Expansion Slot

PCIe	1 x PCIe x4 (Gen2)
PCI	N/A
mini-PCIe	1 x Half size with PCIe x1 and USB 2.0
M.2	N/A

### Audio

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

Controller/ Speed	LAN1: 1 x Intel® I219V with 10/100/1000 Mbps  LAN2: 1 x Intel® I210 with 10/100/1000Mbps
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	N/A
PS2	N/A

### Internal Connector

USB	4 x USB 2.0 (2 x 2.54 pitch header)
COM	COM1, 2(RS-232/422/485), COM3,4(RS-232)
Parallel	N/A
GPIO	4 x GPI, 4 x GPO
TPM	TPM Header
LVDS	1
eDP	N/A
VGA	1 x Header
SATA PWR Output	1
Speaker Header	1

### Storage

M.2	N/A
mSATA	1 x Full size with SATA3 and USB 2.0
SATA	2 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 or 19~24V DC-In with 4-pin plug PWR cable or DC Jack
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	5% ~ 90%

## Assured Systems

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