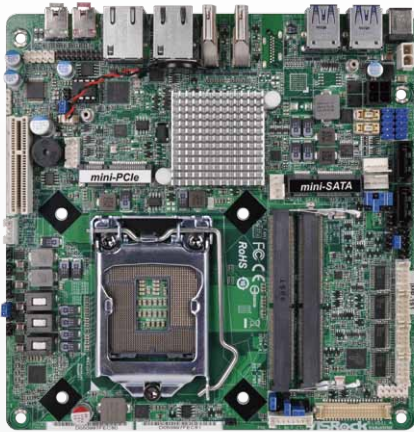


# IMB-191

## Mini-ITX Motherboard



### Spotlight Features

- Socket LGA1151 for Intel Core i7/i5/i3/Celeron (Skylake-S)
- Intel® Gen9 Intel Graphics DX 11/12, OGL4.3/4.4
- Supports Dual Channel DDR4 2133MHz, 2 x SO-DIMM, up to 16GB system memory
- 2 x HDMI, 1 x Dual Channel 24-bit LVDS/eDP
- 4 x USB 3.0, 4 x USB 2.0, 2 x SATA3
- 1 x Mini-PCIe, 1 x PCIe x4 Slot, 1 x mSATA
- Gigabit LAN : 2 x Intel Lan
- 1 x TPM Header
- 12V / 19~24V DC-in

### Specifications

Processor System	
Dimension	Mini-ITX (6.7-in x 6.7-in)
CPU	Socket LGA1151 for Intel Core i7/i5/i3/Celeron (Skylake-S)
Core Number	(By CPU Max 4)
Max Speed	(By CPU)
L3 Cache	(By CPU)
Chipset	H110
BIOS	UEFI
Expansion Slot	
PCIe	1 x PCIe x4 slot
Mini-PCIe	1 (1 x half size)
mSATA	1
Memory	
Technology	Dual Channel DDR4 2133 MHz SDRAM
Max.	16G
Socket	2 x SO-DIMM
Graphics	
Controller	Intel® Gen9 Intel Graphics DX 11/12, OGL4.3/4.4
VRAM	Shared Memory
VGA	Supports max. resolution 1920 x 1200
LVDS	Dual channel 24-bit co-lay with eDP, max resolution 1920 x 1200@60Hz
HDMI	Supports HDMI 1.4a, max resolution 4096 x 2160@30Hz
DVI	No
Display Port	No
Multi Display	Yes (Dual Display)
Ethernet	
Interface	10/100/1000 Mbps
Controller	1 x Intel i210 1 x Intel 219V
Connector	2 x RJ 45
SATA	
Max Data Transfer Rate	SATA3 (6.0Gb/s)

Rear I/O	
VGA	0
HDMI	2
DVI-I/D	0
Display Port	0
Ethernet	2
USB	4 x USB 3.0
Audio	2 (Mic-in, Line-out)
Serial	0
e-SATA	0
PS/2	0

Internal Connector	
USB	4 ( 2*2.54 pitch header USB 2.0 compliant)
LVDS/Inverter	1/1
VGA	1
Serial	4 x RS-232 (COM1, 2 support RS-232/422/485)
SATA	2 x SATA3 (6.0Gb/s)
m-SATA	1
Mini-PCIe	1
Parallel	0
IrDA	0
GPIO	4 x GPI + 4 x GPO
SATA PWR Output Con	1
Speaker Header	1

Watchdog Timer	
Output	From Super I/O to drag RESETCON#
Interval	256 segments, 0,1,2...255sec/min

Power Requirements	
Input PWR	12V / 19-24V DC-in (DC Jack / 4-pin ATX PWR Con)
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 Temperature	0°C – 60°C