



IMB-390-L / IMB-390-D

Micro ATX 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, 4 x Long-DIMM, up to 64GB system memory
- 1 x VGA, 1 x HDMI, 1 x Displayport, 1 x DVI (IMB-390-L) / 1 x HDMI, 1 x Displayport, 1 x DVI (IMB-390-D)
- 6 x USB 3.0, 6 x USB 2.0, 6 x SATA3
- 1 x Mini-PCIe, 1 x PCIe x16, 2 x PCI, 1 x PCIe x4 Slot,
- 2 x mSATA
- Gigabit LAN : 2 x Intel LAN
- 1 x TPM 2.0 IC onboard
- ATX PWR Con (24+8-pin)
- Supports RAID 0, 1, 5, 10

Specifications

Processor System	IMB-390-L	IMB-390-D
Dimension	Micro ATX (9.6-in x 9.6-in)	
CPU	Socket LGA1151 for Intel® Core i7/i5/i3/Celeron(Skylake-S)	
Core Number	(By CPU, Max 4)	
Max Speed	(By CPU)	
L2 Cache	(By CPU)	
Chipset	Intel® Q170	
BIOS	UEFI	

Expansion Slot	
PCIe	1 x PCIe x16, 2 x PCI, 1 x PCIe x4 slot
Mini PCIe	1 (half/full size, supports PCIe x1 and USB device)
M.2	0
mSATA	1 (full size, supports SATA and USB device)

Memory	
Technology	Dual Channel DDR4 2133MHz
Max.	64GB
Socket	4 x Long-DIMM

Graphics		
Controller	Intel® Gen9 Graphics DX 11/12, OGL4.3/4.4	
VRAM	Shared Memory	
VGA	Supports max resolution up to 1920 x 1200	No
LVDS	Supports max resolution up to 1920 x 1200@60Hz	No
eDP	Supports max resolution up to 4096 x 2160@60Hz	
HDMI	Supports max resolution up to 4096 x 2160@60Hz	
DVI	Supports max resolution up to 1920 x 1200@60Hz	
DisplayPort	Supports max resolution up to 4096 x 2160@60Hz	
Multi Display	Yes (Triple Display)	

Ethernet	
Interface	10/100/1000 Mbps
Controller	1 x Intel I219LM, 1 x Intel I210
Connector	2 x RJ45

SATA	
Max Data Transfer Rate	SATA3 (6.0Gb/s)

Rear I/O	IMB-390-L	IMB-390-D
VGA	1	0
DVI	1	
HDMI	1	
DisplayPort	1	
Ethernet	2	
USB	4 x USB 3.0	
Audio	3 (Mic-in, Line-in, Line-out)	
Serial	1 x COM (RS-232/422/485)	
PS/2	1 x PS/2 combo	

Internal Connector		
USB	2 x USB 3.0 (1 x USB3.0 header), 6 x USB 2.0 (3 x 2.54 pitch header)	
LVDS/inverter	1/1	0
eDP	0	1
VGA	0	
Serial	5 x COM (supports RS-232 only)	
SATA	6 (one shared with mSATA)	
mPCIe	1	
Parallel	1 (shared with GPIO)	
mSATA	1	
IrDA	0	
GPIO	8 x GPI + 8 x GPO	
SATA PWR Output Con	0	
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	ATX PWR Con (24+8-pin)
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