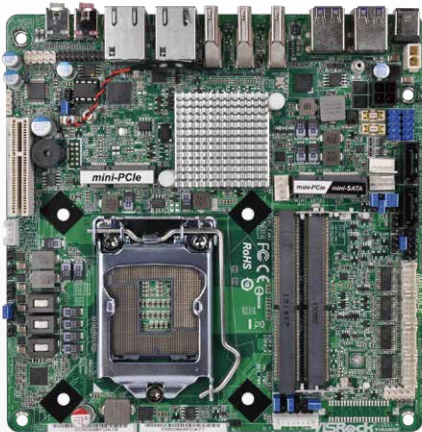


IMB-X190

Mini-ITX Motherboard



Spotlight Features

- Supports the Intel® Xeon® E3-1200 v5 Processor and 7th and 6th Generation Intel® Core™ i3/Pentium®/Celeron® Processors
- Supports Dual Channel DDR4 SO-DIMM 2133, up to 32GB
- Supports ECC DIMM memory modules
- 3 x HDMI, 1 x LVDS
- 4 x USB 3.0, 4 x USB 2.0, 2 x SATA3, 4 x COM
- 2 x Mini-PCIe, 1 x PCIe x4, 1 x mSATA
- 2 x Intel® LAN
- 1 x TPM Header
- 12V / 19~24V DC-in

Specifications

Processor System	
Dimensions	Mini-ITX (6.7-in x 6.7-in)
CPU	Supports the Intel® Xeon® E3-1200 v5 Processor and 7 th and 6 th Generation Intel® Core™ i3/Pentium®/Celeron® Processors
Chipset	Intel® C236

Expansion Slot	
PCIe	1 x PCIe x4
Mini-PCIe	1 x half size with PCIe x1 and USB2.0
M.2	N/A
mini-PCIe/ mSATA	1 x full size with PCIe x1, SATA3 and USB2.0

Memory	
Technology	Dual Channel DDR4 2133 MHz Supports ECC SO-DIMM memory modules
Max.	32GB
Socket	2 x SO-DIMM

Graphics	
VGA	Supports max resolution up to 1920 x 1200
LVDS	Supports Dual channel 24-bit co-lay with eDP, max resolution up to 1920 x 1200@60Hz
eDP	N/A
HDMI	HDMI1: Supports max resolution 4096 x 2160@60Hz HDMI2 & 3: Supports max resolution 4096 x 2160@30Hz
DVI	N/A
DisplayPort	N/A
Multi Display	Triple Display

Ethernet	
Interface	10/100/1000 Mbps
Controller	1 x Intel® I210 1 x Intel® I219LM

Rear I/O	
VGA	N/A
DVI	N/A
HDMI	3
DisplayPort	N/A
Ethernet	2
USB	4 x USB 3.0
Audio Jack	2 (Mic-in, Line-out)
Serial	N/A
PS/2	N/A

Internal Connector	
USB	4 x USB 2.0
LVDS	1
eDP	N/A
VGA	1
Serial	2 x COM (RS-232), 2 x COM (RS-232/422/485)
SATA	2 x SATA3
Parallel	N/A
GPIO	4 x GPI + 4 x GPO
SATA PWR Output Con	1
Speaker Header	1
TPM	1 x Header

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
Storage Temperature	-40°C – 85°C