



# IMB-X790

ATX Motherboard

## Spotlight Features

- Supports Intel® Xeon® E3 v6 and E3 v5 Processor
- Supports Intel 7th/6th Gen (Kabylake-S/Skylake-S) Core™ Processors
- Supports Dual Channel DDR4 2133MHz, up to 64GB
- Supports ECC UDIMM memory modules
- 1 x VGA, 3 x Displayport
- 6 x USB 3.0, 6 x USB 2.0, 6 x SATA3
- 1 x PCIe x16, 1 x PCIe x8, 1 x PCIe x4, 1 x PCIe x1, 3 x PCI,
- 1 x Mini-PCIe, 1 x mSATA, 1 x M.2 Key M
- 2 x Intel LAN
- 1 x TPM IC onboard
- ATX PWR Con (24+8-pin)
- Supports RAID 0, 1, 5, 10

## Specifications

Processor System	
Dimensions	ATX (12-in x 9.6-in)
CPU	Supports Intel® Xeon® E3 v6 and E3 v5 Processor Supports Intel 7 <sup>th</sup> /6 <sup>th</sup> Gen (Kabylake-S/Skylake-S) Core™ Processors
Chipset	Intel® C236

Expansion Slot	
PCIe	1 x PCIe x16(Support riser card), 1 x PCIe x8, 1 x PCIe x4, 1 x PCIe x1 **Slot1: Gen3 x16 link, auto switch to x8 link if Slot3 is occupied.
PCI	3
Mini-PCIe	1 x Full/Half size with PCIe x1 and USB2.0
mSATA	1 x Full size with shared SATA3 and USB2.0
M.2	1x M.2 (Key M, 2230/42/60/80/110) with PCIe x4 and shared SATA3 for SSD

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
VGA	Supports max resolution up to 1920 x 1200
LVDS	N/A
eDP	N/A
HDMI	N/A
DVI	N/A
DisplayPort	Supports max resolution up to 4096 x 2160@60Hz
Multi Display	Triple Display

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

Environment	
Operating Temperature	0°C – 60°C
Storage Temperature	-40°C – 85°C

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

Internal Connector	
USB	2 x USB 3.0, 6 x USB 2.0 (2 x header, 2 vertical Type-A)
LVDS	N/A
eDP	N/A
VGA	N/A
Serial	4 x COM (RS-232)
SATA	6 (SATA1 shared with MSATA, SATA5 shared with M.2)
Parallel	1 (shared with GPIO)
GPIO	8 x GPI, 8 x GPO (shared with LPT header)
SATA PWR Output Con	N/A
Speaker Header	N/A
TPM	1 x IC onboard

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

## Assured Systems

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