



## Features

- 7th/6th Gen Intel® Xeon® E3 /Core™ i7/i5/i3 / Pentium® QC/DC Processor, up to 4.0 GHz
- 2x DDR4- 2133 DIMM, Max. 32GB, ECC compatible
- Intel® processor integrated graphics, supports DVI-I, CRT, DVI-D
- 2x Intel® PCI-E Gigabit LAN
- 3x USB 3.0, 2x USB 2.0, 4x COM, 6x SATA III
- 1x Mini PCI-E slot
- Watchdog timer, Digital I/O, iAMT (11.0)



## Specifications

CPU Socket	LGA1151
CPU	7th/6th Gen Intel® DT Xeon® E3 & Core™ i7/i5/i3 / Pentium®/ Celeron® QC/DC processors
PCH	IB990AF-C236: Intel® C236 PCH IB990AF: Intel® Q170 PCH
Memory Types	2x DDR4-2133 DIMM, Max 32GB (ECC compatible)
BIOS	AMI
Watchdog Timer	256 levels
H/W Monitor	Yes
Storage Device Interface	N/A
Expansion Slots	4x PCI, 4x PCI-E (x1) or 1x PCI-E (x4) 1x PCI-E (x16) from backplane
Mini Type Slots	1x Mini PCI-E
Graphics Controller	7th/6th Gen Intel® Core™ DT Xeon® E3 & Core™ i7/i5/i3/ Pentium®/ Celeron® integrated graphics
Video Output	Support DVI-I, VGA, DVI-D
Ethernet	Intel® I219LM Gigabit LAN PHY Intel® I21AT PCI-E Gigabit LAN( as 2nd LAN)
I/O Chip	Fintek F81846AD-I 1x RS232/422/485 (jumperless selection) 3x RS232, 1x LPT
USB 2.0	2x USB 2.0 (Type A) 1x USB 2.0 via Mini PCI-E
USB 3.0	3x USB 3.0 on board
Serial ATA	6x SATA III
Audio	Intel® C236 PCH built-in HD audio controller + Realtek ALC662 w/ 5.1 channel
TPM	TPM (1.2) (IB990VF)
Others	Digital I/O(4-in/4-out), RAID, iAMT (11.0), TPM (1.2)(IB990AF only)
Dimensions (L x W)	338mm x 126mm (13.31" x 4.96")
Max. Power Requirement	Intel® Xeon® processor E3-1225 v5 w/ 2x DDR4-2133 4GB +12V: 5.67A; +5V: 1.88A; +5VSB: 0.09A; +3.3V: 0.08A
Operating Temperature	0°C ~ 60°C(32°F ~ 140°F)
Storage Temperature	-20°C ~ 80°C(-4°F ~ 140°F)
Relative Humidity	90%(non-condensing @60°C)

## Ordering Information

IB990AF-C236	LGA1151 C236 PICMG 1.3 Full-Size CPU Card w/ DVI-I, VGA, DVI-D, dual Gigabit LAN, iAMT (11.0), 6x SATA III
IB990AF	LGA1151 Q170 PICMG 1.3 Full-Size CPU Card w/ DVI-I, VGA, DVI-D, dual Gigabit LAN, iAMT (11.0), 4x SATA III

## Dimensions and Drawing

