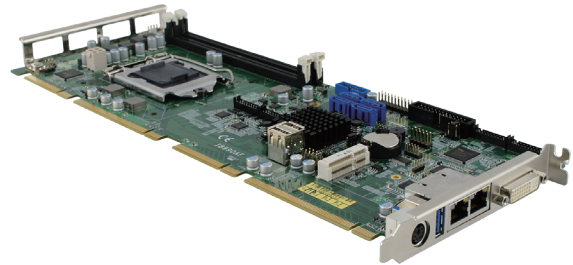


Features

- 7th/6th Generation 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 device, supports DVI-I, CRT, DVI-D
- 2x Intel® PCI-E Gigabit LAN
- 3x USB3.0, 2x USB2.0, 4x COM, 6x SATA III
- 1x Mini PCI-E slot
- Watchdog timer, Digital I/O, iAMT(11.0)



System

CPU Socket	LGA1151 for 7th/6th Generation Intel® DT Xeon® E3 & Core™ i7/i5/i3/Pentium® / Celeron® QC/DC processors
System Memory	2x DDR4-2133 DIMM, Max 32GB (ECC compatible)
System Chipset	Intel® C236/ Q170 PCH
BIOS	AMI
Watchdog Timer	256 levels
SSD	N/A
H/W Monitor	Yes
Expansion Slot	1x Mini PCI-E

Graphics

VGA Controller	7th/6th Generation Intel® Core™ DT Xeon® E3 & Core™ i7/i5/i3/Pentium® / Celeron® integrated graphics
VGA Memory	Max. shared memory – 1024MB
Display Interface	Support DVI-I, VGA, DVI-D

LAN

LAN Controller	Intel® I219LM Gigabit LAN PHY Intel® I211AT PCI-E Gigabit LAN(as 2nd LAN)
Connector	2x RJ-45 on board

Multi I/O

I/O Chipset	Fintek F81846AD-I 1x RS232/422/485(Jumperless selection) 3x RS232, 6x SATA III, 1x LPT
USB	3 ports x USB3.0 on board 2 ports x USB2.0 (Type A) 1 port x USB2.0 via Mini PCI-E
Audio	Intel® C236 PCH built-in HD audio controller + Realtek ALC662 w/ 5.1 channel
Others	Digital I/O (4-in/4-out), RAID, iAMT (11.0)

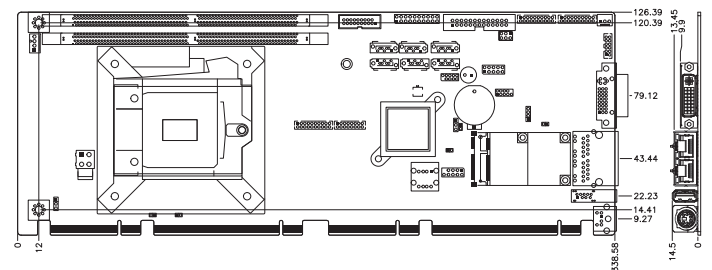
Mechanical and Environmental

Dimensions	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



01 Embedded Systems
02 CPU Modules
03 Motherboards
04 Disk-Size SBCs
05 CPU Cards

Desktop Processor Reference Table

Processor Number	Base Freq (GHz)	Intel® Turbo Boost Technology - max single core turbo freq (GHz)	Last Level Cache	Cores/Threads	Memory Speed Support (DDR4)	ECC Memory Support	TDP	Intel Integrated Graphics	Intel vPro	Intel Technology ³			
										Intel® AMT	Intel® TXT	Intel® VT-x	Intel® VT-d
Intel® Xeon®E3 Processor - 14nm Kaby Lake Platform													
E3-1275-v6	3.8	4.2	8M	4/8	2400	✓	80W	GT2-P530	✓	AMI 11.6	✓	✓	✓
Intel® Core™ Processors - 14nm Kaby Lake Platform													
i7-7700	3.6	4.2	8M	4/8	2400		65W	GT2-530	✓	AMI 11.6	✓	✓	✓
i7-7700T	2.9	3.8	8M	4/8	2400		35W	GT2-530	✓	AMI 11.6	✓	✓	✓
i5-7500	3.4	3.8	6M	4/4	2400		65W	GT2-530	✓	AMI 11.6	✓	✓	✓
i5-7500T	2.7	3.3	6M	4/4	2400		35W	GT2-530	✓	AMI 11.6	✓	✓	✓
i3-7101E	3.9		3M	2/4	2400	✓	54W	GT2-530				✓	✓
i3-7101TE	3.4		3M	2/4	2400	✓	35W	GT2-530				✓	✓
Intel® Core™ Processors - 14nm Skylake Platform													
i7-6700	3.4	4	8M	4/8	2133		65W	GT2-530	✓	AMT 11.0	✓	✓	✓
i7-6700TE	2.4	3.4	8M	4/8	2133		35W	GT2-530	✓	AMT 11.0	✓	✓	✓
i5-6500	3.2	3.6	6M	4/4	2133		65W	GT2-530	✓	AMT 11.0	✓	✓	✓
i5-6500TE	2.3	3.3	6M	4/4	2133		35W	GT2-530	✓	AMT 11.0	✓	✓	✓
i3-6100	3.7		4M	2/4	2133	✓	65W	GT2-530				✓	✓
i3-6100TE	2.7		4M	2/4	2133	✓	35W	GT2-530				✓	✓
Intel® Pentium® Processors - 14nm Skylake Platform													
G4400	3.3		3M	2/2	2133	✓	65W	GT1-510				✓	
G4400TE	2.9		3M	2/2	2133	✓	35W	GT1-510				✓	
Intel® Celeron® Processors - 14nm Skylake Platform													
G3900	2.8		2M	2/2	2133	✓	65W	GT1-510				✓	
G3900TE	2.6		2M	2/2	2133	✓	35W	GT1-510				✓	

