

# IMBA-H420

ATX industrial motherboard supporting 10th /11th Intel® Core™ i9/i7/i5/i3, Celeron®, Pentium® processors

- Support HDMI, DP, VGA display output
- Support Intel® i225V 2.5GbE controller
- Support 1 x PCIe x16, 1x PCIe x4 and 4 x PCI expansion
- Support 4 x USB 3.2 Gen1, 4 x USB 2.0 transfer rate up to 5Gb/s
- Support 5 x RS-232, 1 x RS-232/422/485, 4 x SATA 6Gb/s connector

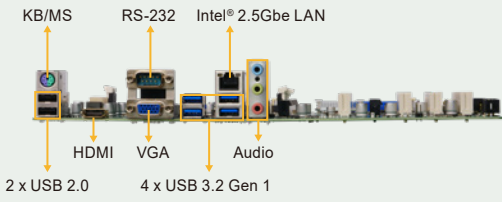
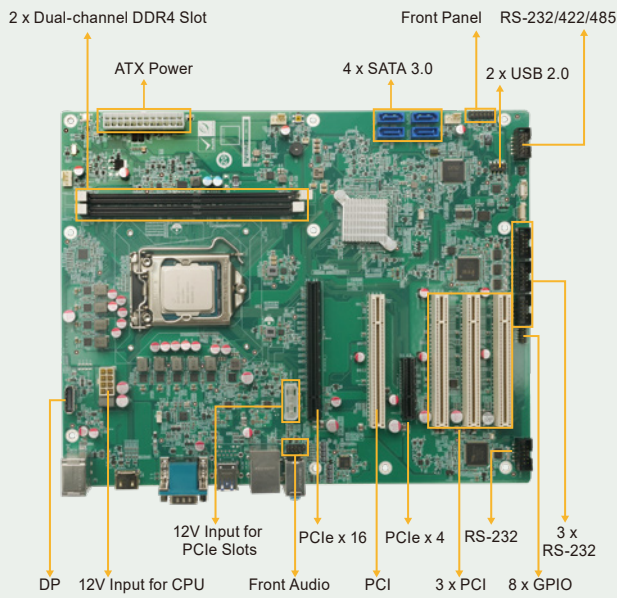
**High Performance Capability  
with multi-tasking function**



[www.ieiworld.com](http://www.ieiworld.com)

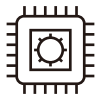
# IMBA-H420

ATX motherboard supports 14nm LGA1200 Intel® 10th/11th Generation Core™ i9/i7/i5/i3, Celeron® and Pentium® processor, DDR4, Triple displays, 2.5GbE LAN, USB 3.2, SATA 6Gb/s, HD Audio and RoHS



## Support Intel® 10th/11th generation processor

Support Intel® 10th/11th generation Core™ i9/i7/i5/i3, Celeron® Pentium® Serise pcessor (LGA 1200 slot),release super performance,and can handle multiple tasks at the same time



## Support Intel® I225V 2.5GbE Ethernet Controller

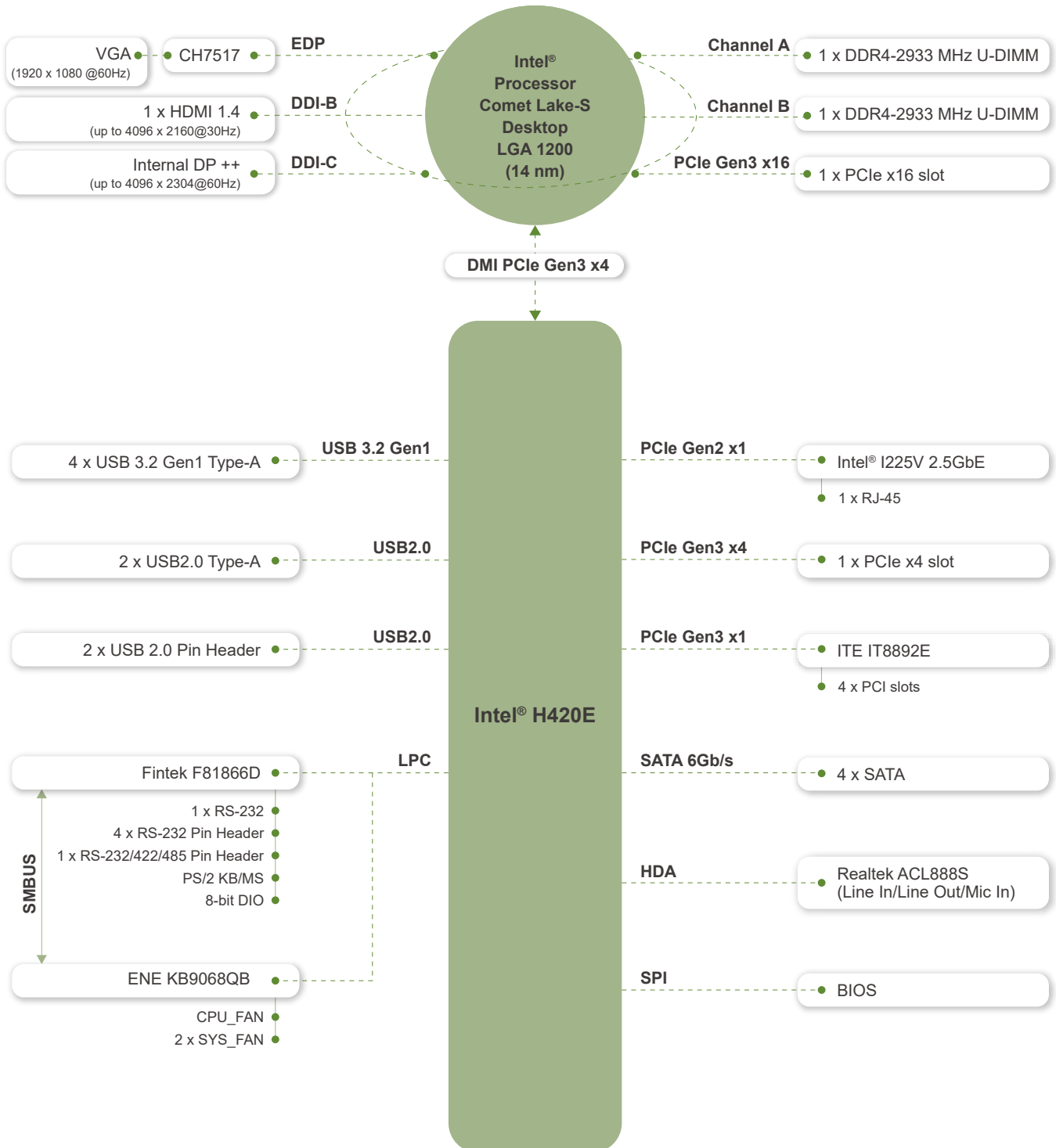
Support RJ45 network interfaces, based on Intel ® I225v 2.5GbE network controller core Chip to achieve network transmission rate up to 2.5GbE



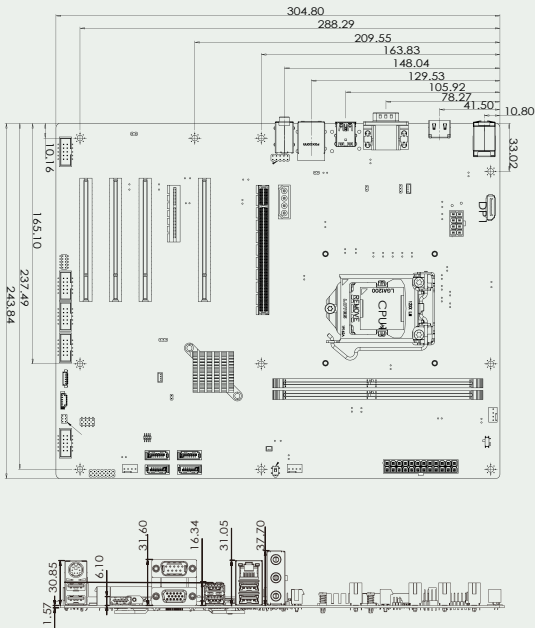
## Support multiple expansion slot

Support 1 x PCIe Gen3 x16,1 x PCIe Gen3 x4 and 4 x PCI slot can install PCIe function expansion cards such as graphics card, network card and motion control card

# IMBA-H420 Block Diagram



### Dimensions



### Optional accessories



CB-USB02-RS

19800-020100-100-RS

32205-000702-200-RS

32102-000100-200-RS

CF-115XA-R10

CF-1156C-R20

CF-1156D-R30

CF-115XE-R10

### Specifications

Model	Description
CPU	LGA1200 socket supports 10th/11th Gen Intel® Core™ i9/i7/i5/i3, Celeron® and Pentium® processor
Chipset	Intel® H420E
BIOS	AMI UEFI BIOS
Memory	Two 288-pin 2933 MHz Dual-Channel DDR4 SDRAM Unbuffered DIMMs supported up to 64GB
Graphics Engine	Up to Intel® UHD Graphics 630, Intel® HD Graphics Gen 9 Engines with Low power 16 execution unit, supports DX2015, OpenGL 5.X and OpenCL2.x, ES 2.0
Display Output	Triple display 1 x VGA (up to 1920 x 1200@60Hz) 1 x internal DP++ (up to 4096 x 2304@60Hz) 1 x HDMI 1.4 (up to 4096 x 2160@30Hz)
Ethernet	LAN1: Intel i225-V GbE controller (colay i225-LM)
External I/O Interface	4 x USB 3.1 Gen 1 (5Gb/s) 2 x USB 2.0 1 x RS-232 1 x KB/MS
Internal I/O Interface	1 x RS-232/422/485 (2x5 pin, P=2.54) 2 x USB 2.0 (2x4 pin, P=2.54) 4 x RS-232 (2x5 pin, P=2.54) 4 x SATA 6Gb/s (no RAID)
I <sup>2</sup> C	1 x I <sup>2</sup> C (1x4 PIN)
SMBus	1 x SMBus(1x4 pin)
Audio	Realtek ALC888S HD codec 3 x Audio Jack (Line-in, Line-out, Mic-in) on rear IO 1 x Front audio (2x5 pin)
Front Panel	1 x Front Panel (2 x 7 pin, Power LED, HDD LED, Speaker, Power Button, Reset Button)
LAN LED	1 x LAN LED (1x2 pin)
Expansion	1 x PCIe Gen3 x16 slot 1 x PCIe Gen3 x4 slot 4 x PCI slot
Digital I/O	1 x 8-bit digital I/O (2x5 pin)
TPM	Intel® PTT (TPM 2.0)
FAN connector	1 x CPU fan connector (1x4 pin) 2 x System fan connector (1x4 pin)
Chassis Open	1 x Chassis intrusion connector (1x2 pin)
Power supply	ATX/AT power supply Support AT/ATX mode ErP/EuP Compliant
Watchdog Timer	Software Programmable support 1~255 sec. System reset
Power Consumption	3.3V@0.84A, 5V@8.12A, 12V@3.77A, 5VSB@0A (Intel® Core™ i5-10500TE CPU with two 32 GB 2933 MHz DDR4 memory, EuP mode enabled)
Operating Temperature	0°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Operating Humidity	5% ~95%, non-condensing
Diemension	244mm x 305mm
Weight	GW:1200g / NW:700g

### Packing List

1 x IMBA-H420 single board computer	1 x I/O Shielding
2 x SATA cable	1 x QIG

### Ordering Information

IMBA-H420-R10	ATX motherboard supports 14nm LGA1200 Intel® 10th/11th Generation Core™ i9/i7/i5/i3, Celeron® and Pentium® processor, DDR4, Triple displays, 2.5GbE LAN, USB 3.2, SATA 6Gb/s, HD Audio and RoHS
IMBA-H420-ECO-R10	ATX motherboard supports 14nm LGA1200 Intel® 10th/11th Generation Core™ i9/i7/i5/i3, Celeron® and Pentium® processor, DDR4, Triple displays, 2.5GbE LAN, USB 3.2, SATA 6Gb/s, HD Audio ECO packing and RoHS

### Optional Accessories

CB-USB02-RS	Dual port USB cable with bracket, 300mm, P=2.54
19800-020100-100-RS	RS-232 cable 230mm P=2.54
32205-000702-200-RS	RS-232 cable, 230mm, P=2.54
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P
CF-115XA-R10	High-performance LGA1155/1156/1200 cooler kit, 1U chassis compatible 73W
CF-1156C-R20	LGA1155/1156/1200 cooler kit, 1U chassis compatible, 45W
CF-1156D-R30	LGA1155/1156/1200 cooler kit, 1U chassis compatible, 65W
CF-115XE-R10	High-performance LGA1155/1156/1200 cooler kit, 95W