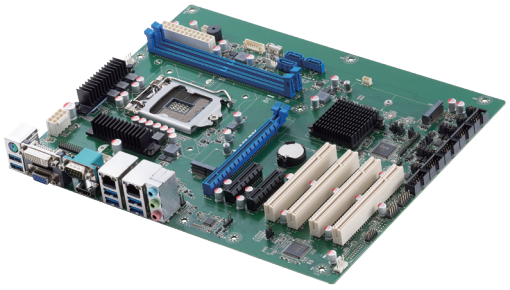
IMB-C46H

Industrial ATX Motherboard for 10th Gen Intel® Core™ i9/i7/i5/i3 Processors

Features

- 10th Gen Intel® Core™ i9/i7/i5/i3 processors with H420E chipset
- Dual-channel DDR4 up to 2933 MHz memory up to 64GB
- Triple independent display: DVI-D/ HDMI/ VGA/ eDP
- Dual GbE ports: 2x Intel 1 Gigabit
- Expansion slots: 1x PCIe Gen3 x16, 2x PCIe Gen3 x2, 4x PCI



Windows

60°C
0°C

Ordering Information

PN	Model Name	Chipset	Memory	PCIe x16	PCIe x4	PCI	DVI-D	HDMI	VGA	eDP	LAN	COM	SATA	M.2	USB3.0	USB2.0
95-13018-0000	IMB-C46H	H420E	Non-ECC DDR4 2933 MHz	1	2 (PCIe x2)	4	1	1	1	1	2	6	3	2	6	3

Packing Lists

Description	QTY
IMB-C46H I/O shield	1
M.2 screws kits	1
SATA cable	1
COM cable (1 port)	1

Embedded OS

PN	Description
92-56094-0010	Windows 10 IoT Ent LTSC 2021 High End PKEA
92-56094-2010	Windows 10 IoT Ent LTSC 2021 Value PKEA
92-56094-4010	Windows 10 IoT Ent LTSC 2021 Entry PKEA

Optional Accessories

PN	Description
32-20495-0000	CPU cooler for 65W CPU
32-20530-0010	CPU cooler for 35W CPU
30-25003-3000	COM Cable (2 ports)
30-25010-3010	USB2.0 Cable (2 ports)
30-25009-3000	USB2.0 Cable (4 ports)
30-25046-0100	USB3.0 Cable (2 ports)
30-10057-7000	SATA Cable

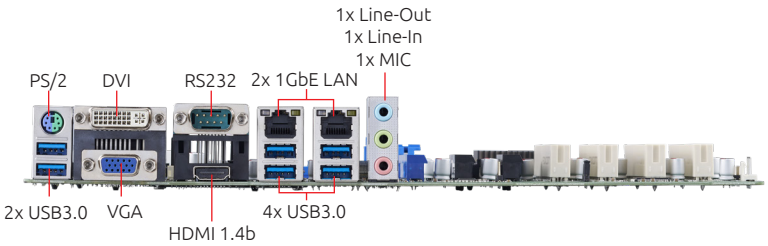
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Specifications

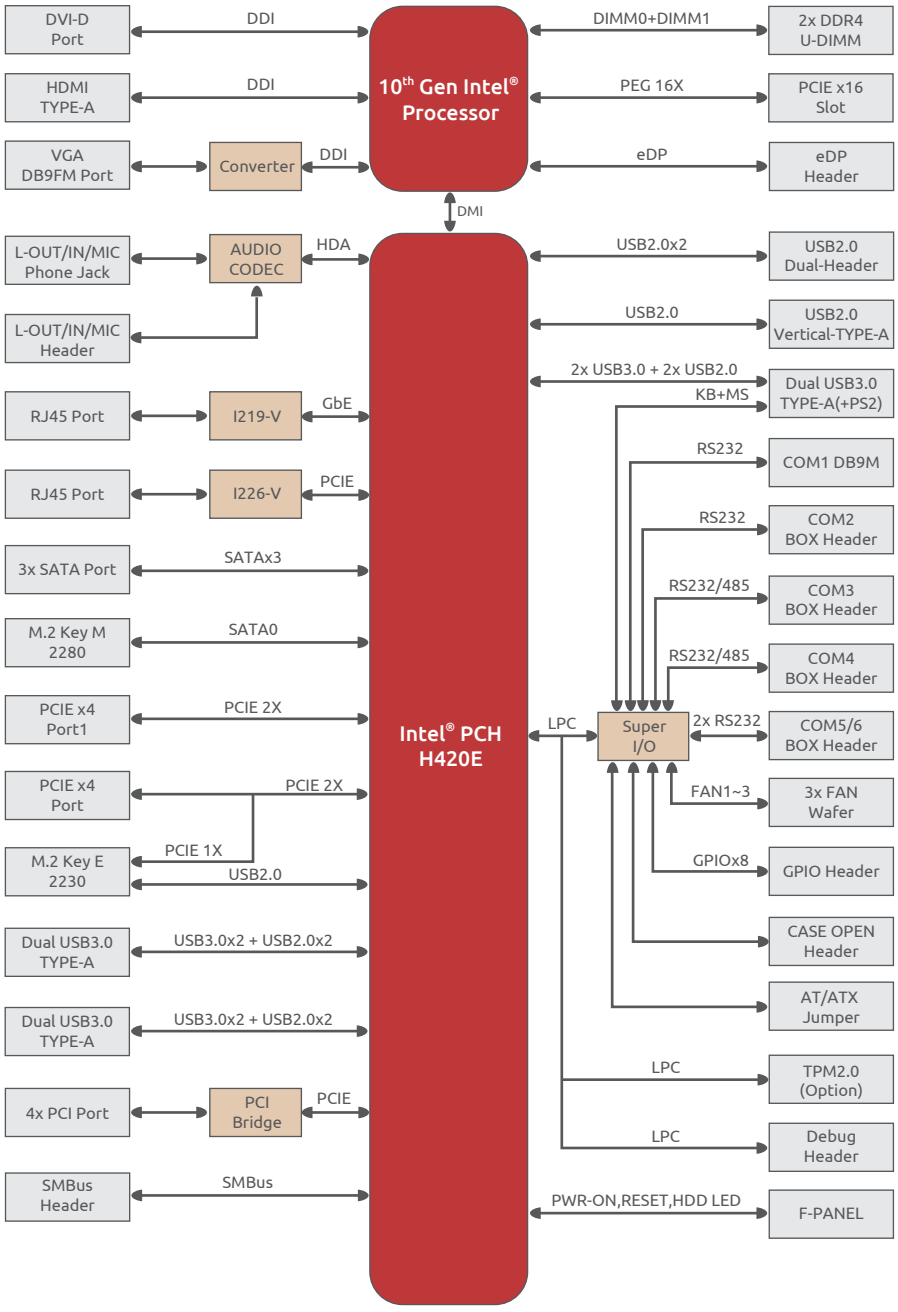
Model	IMB-C46H
Processor System	
CPU	10th Gen Intel® Core™, up to 65W
Chipset	H420E
Memory	2x DDR4 UDIMMs up to 2933MHz, up to 64 GB, non-ECC
OS Support	Windows® 10 64-bit
Display	
VGA	1
HDMI	1
DisplayPort	-
No.of Displays	3 (DVI-D/ HDMI/ VGA/ eDP)
Ethernet	
Gbe Port	2
Controller/ Frequency	1x Intel® I219-V, 1Gbps/ 100Mbps / 10Mbps 1x Intel® I226-V, 1Gbps/ 100Mbps / 10Mbps
Storage	
SATA	3x SATA 6Gb/s ports
RAID	-
I/O Interfaces	
USB	6x USB 3.0 (rear I/O) 2x USB 2.0 by pin header 1x USB2.0 (Vertical TYEP-A, Internal)
COM	1x RS-232 (COM1, rear I/O) 3x RS-232 (COM2/5/6, by internal header) 2x RS-232/RS485 (COM3/4, by internal header)
PS/2	1 (pin header)
Audio	Realtek ALC897
GPIO	8x GPIO
TPM	TPM2.0 (option)
Expansion Slots	
PCIe	1x PCIe x16 Slot 1x PCIe x4 slot (PCIe x2, co-lay with M.2 M-key 2280) 1x PCIe x4 slot (PCIe x2, share PCIe x1 with M.2 E key 2230 by BOM change)
PCI	4
M.2	1x M.2 Key-E 2230 Slot (PCIe x1, USB 2.0) 1x M.2 Key-M 2242/2280 Slot (PCIe 2x/SATA, default)
Mechanical and Environmental	
Dimension	ATX(305 mm x 244 mm (W x L))
Operating Temperature	0°C to 60°C
Storage Temperature	20°C to 75°C
Relative Humidity	60°C @ 95% RH, Non-condensing
Certification	
	CE & FCC Class A

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Product Illustration



Block Diagram



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CPU Support List

Family	Number	CPU Core	Frequency	Cache	Processor Base Power	Since BIOS
Comet Lake	i9-10900E	10 Cores	4.70 GHz	20 MB	65 W	1.01.10
Comet Lake	i9-10900TE	10 Cores	4.50 GHz	20 MB	35 W	1.01.10
Comet Lake	i7-10700E	8 Cores	4.50 GHz	16 MB	65 W	1.01.10
Comet Lake	i7-10700TE	8 Cores	4.40 GHz	16 MB	35 W	1.01.10
Comet Lake	i5-10500E	6 Cores	4.20 GHz	12 MB	65 W	1.01.10
Comet Lake	i5-10500TE	6 Cores	3.70 GHz	12 MB	35 W	1.01.10
Comet Lake	i3-10100E	4 Cores	3.80 GHz	6 MB	65 W	1.01.10
Comet Lake	i3-10100TE	4 Cores	3.60 GHz	6 MB	35 W	1.01.10
Comet Lake	Pentium G6400	2 Cores	3.20 GHz	4 MB	35 W	1.01.10
Comet Lake	Pentium G6400E	2 Cores	3.80 GHz	4 MB	58 W	1.01.10
Comet Lake	G5900TE	2 Cores	3.00 GHz	2 MB	35 W	1.01.10
Comet Lake	G5900E	2 Cores	3.20 GHz	2 MB	58 W	1.01.10

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