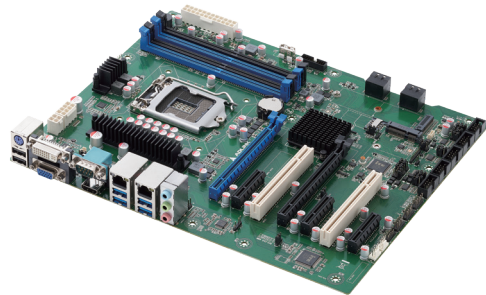


# IMB-C46

Industrial ATX Motherboard for  
10/11th Gen Intel® Core™ i9/i7/i5/i3 Processors

## Features

- 10/11th Gen Intel® Core™ i9/i7/i5/i3 processors with Q470 chipset
- Dual-channel DDR4 up to 2933 MHz memory up to 128 GB
- Triple independent display: DVI-D/ HDMI/ VGA/ eDP
- Dual GbE ports: 2x Intel 1 Gigabit
- Expansion slots: 1x PCIe Gen3 x16, 1x PCIe Gen3 x8, 3x PCIe Gen3 x4, 2x PCI



## Ordering Information

PN	Model Name	Chipset	Memory	PCIe x16	PCIe x4	PCI	DVI-D	HDMI	VGA	eDP	LAN	COM	SATA	mini-PCIe	M.2	USB3.0	USB2.0
95-13017-0010	IMB-C46	Q470	Non-ECC DDR4 2933 MHz	1 (2x PCIe x8)	3	2	1	1	1	1	2	6	4	1	2	6	7

## Packing Lists

Description	QTY
IMB-C46 I/O shield	1
M.2 screws kits	1
SATA cable	1
COM cable (1port)	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

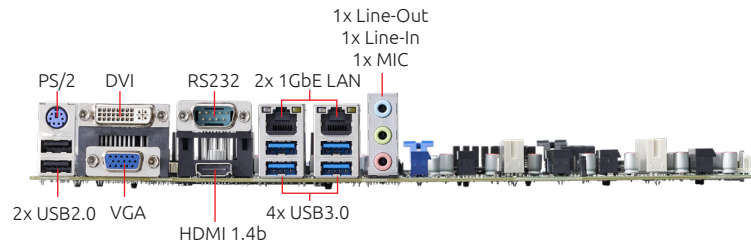
## Optional Accessories

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

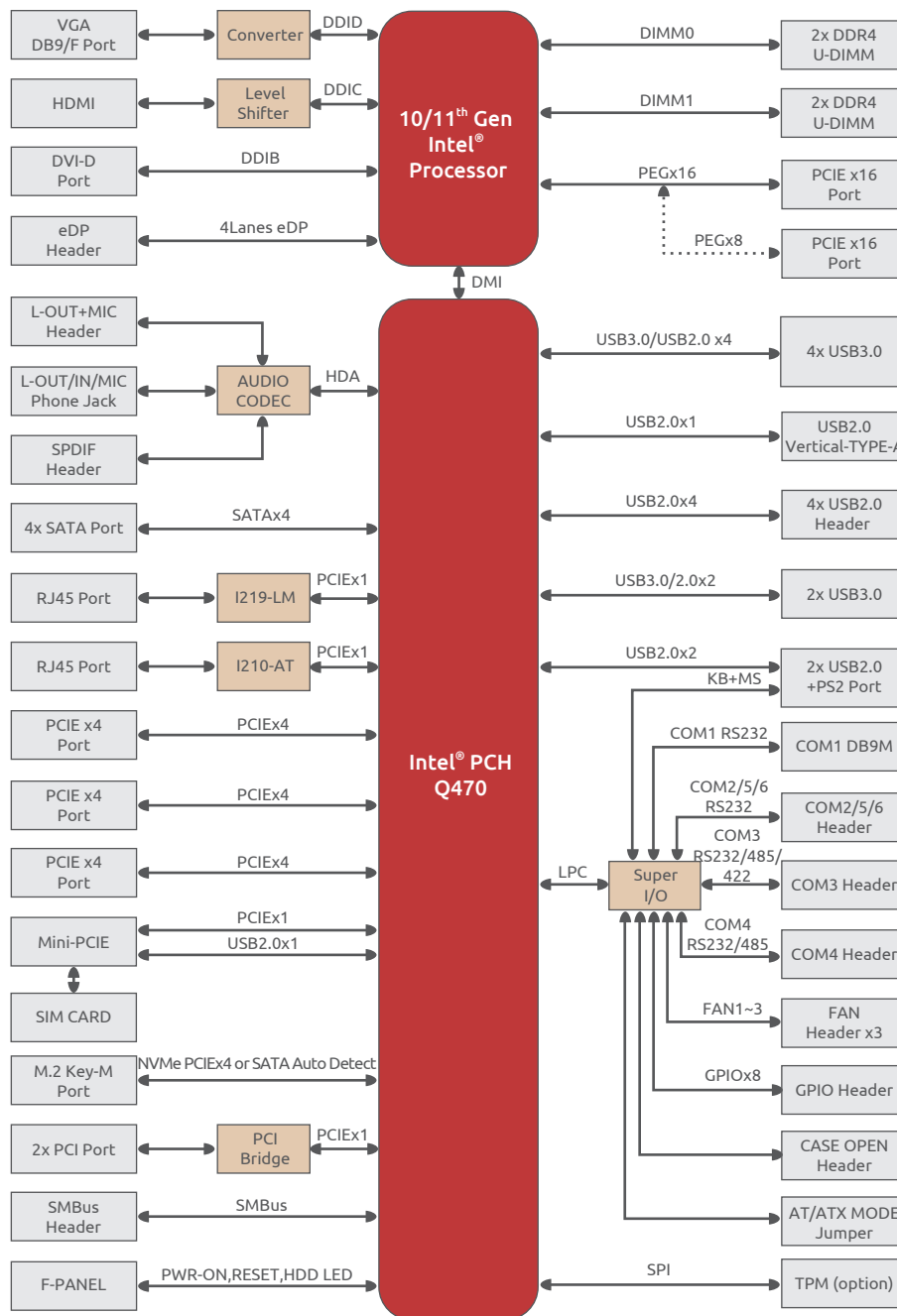
## Specifications

Model	IMB-C46
<b>Processor System</b>	
CPU	10/11th Gen Intel® Core™, up to 65W
Chipset	Q470
Memory	4x DDR4 UDIMMs 2933MHz, up to 128 GB, non-ECC
OS Support	Windows® 10 64-bit
<b>Display</b>	
VGA	1
HDMI	1
DisplayPort	-
No.of Displays	3 (DVI-D/ HDMI/ VGA/ eDP)
<b>Ethernet</b>	
Gbe Port	2
Controller/ Frequency	1x Intel® I219-LM, 1Gbps 1x Intel® I210, 1Gbps
<b>Storage</b>	
SATA	4x SATA 6Gb/s ports
RAID	Intel SW RAID 0/1/5/10
<b>I/O Interfaces</b>	
USB	4x USB 3.0 (rear I/O) 2x USB 2.0 (rear I/O) 2x USB 3.0 by pin header 4x USB 2.0 by pin header 1x USB2.0 (Vertical TYEP-A, Internal)
COM	1x RS-232/422/485 by pin header 1x RS-232/485 by pin header 4x RS-232 (COM1 by DB9, others by pin headers)
PS/2	1 (pin header)
Audio	Realtek ALC897
LPT	1 (pin header)
GPIO	8x GPIO
TPM	TPM2.0 (option)
<b>Expansion Slots</b>	
PCIe	2x PCIe x16 Slot (1x PCIe x16 Gen3 or 2x PCIe x8 Gen3) 3x PCIe x4 Gen3
PCI	2
M.2	1x M.2 M-Key, 2242/2280 (PCIe x4/ SATA, auto detect)
Mini Card	1x mini PCIe Slot (PCIe x1, USB2.0 x1) with SIM slot
<b>Mechanical and Environmental</b>	
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
<b>Certification</b>	
	CE & FCC Class A
<b>Manageability SEMA</b>	
	-

## Product Illustration



## Block Diagram



## 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	1.01.11
Comet Lake	i9-10900TE	10 Cores	4.50 GHz	20 MB	35 W	1.01.11
Comet Lake	i7-10700E	8 Cores	4.50 GHz	16 MB	65 W	1.01.11
Comet Lake	i7-10700TE	8 Cores	4.40 GHz	16 MB	35 W	1.01.11
Comet Lake	i5-10500E	6 Cores	4.20 GHz	12 MB	65 W	1.01.11
Comet Lake	i5-10500TE	6 Cores	3.70 GHz	12 MB	35 W	1.01.11
Comet Lake	i3-10100E	4 Cores	3.80 GHz	6 MB	65 W	1.01.11
Comet Lake	i3-10100TE	4 Cores	3.60 GHz	6 MB	35 W	1.01.11
Comet Lake	Pentium G6400	2 Cores	3.20 GHz	4 MB	35 W	1.01.11
Comet Lake	Pentium G6400E	2 Cores	3.80 GHz	4 MB	58 W	1.01.11
Comet Lake	G5900TE	2 Cores	3.00 GHz	2 MB	35 W	1.01.11
Comet Lake	G5900E	2 Cores	3.20 GHz	2 MB	58 W	1.01.11