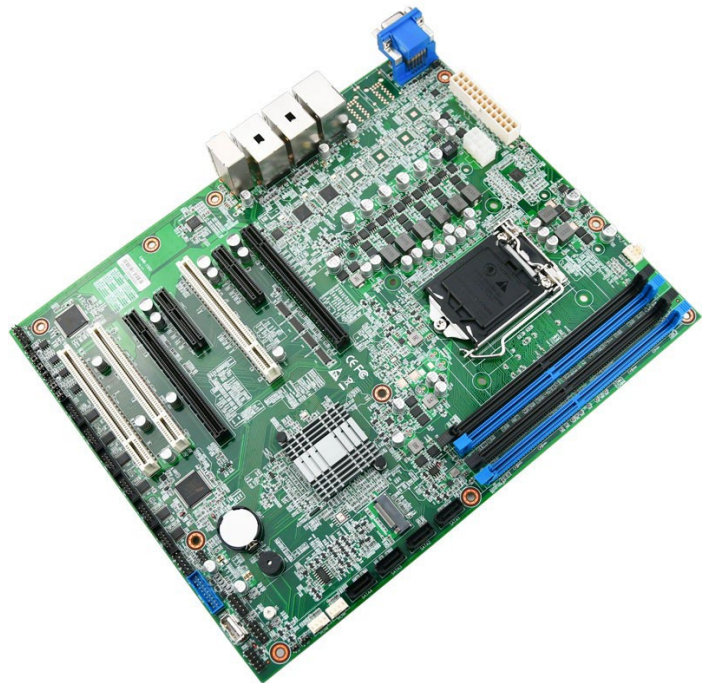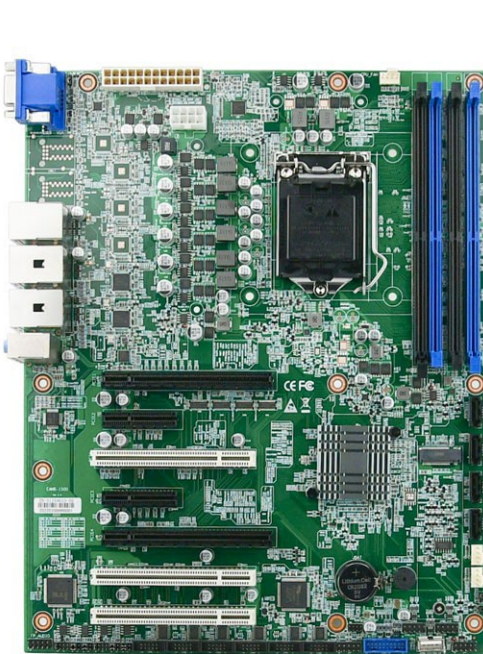POLYHEX

ATX Motherboard Based on Intel Q470 Chipset, Supporting Core i7/i5/i3, Pentium, Celeron Processors

Description:

EMB-IQ470-3N6 is an industrial-grade high-end embedded motherboard based on Intel Q470E/W480 chipset platform with high performance, high reliability, and rich expansion interfaces. It's mainly used in visual control, network security, industrial automation and control, embedded control and other fields.
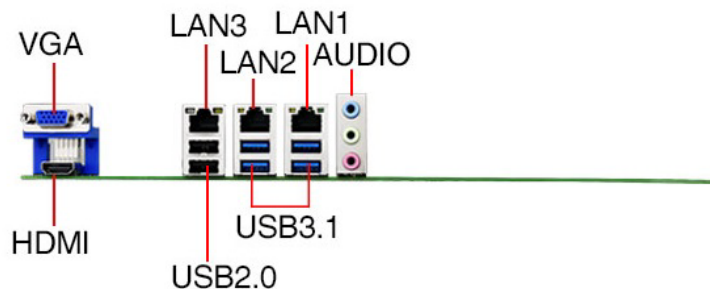

CPU Options:

Model	Main Frequency	Turbo	Cores	Threads	L3 Cache
Core i7-10700	2.9GHz	4.8GHz	8	16	16MB
Core i7-10700T	2.0GHz	4.4GHz	8	16	16MB
Core i5-10500	3.1GHz	4.5GHz	6	12	12MB
Core i5-10500T	2.3GHz	3.8GHz	6	12	12MB
Core i3-10100	3.6GHz	4.3GHz	4	8	6MB
Core i3-10100T	3.0GHz	3.8GHz	4	8	6MB
Pentium G6400	4.0GHz	-	2	4	4MB
Pentium G6400T	3.4GHz	-	2	4	4MB
Celeron G5900	3.4GHz	-	2	2	2MB
Celeron G5900T	3.2GHz	-	2	2	2MB

Specification:

CPU	Intel Comet Lake LGA1200 Processors
Chipset	Intel Q470, TDP 6W
Memory	4 x Dual-channel UDIMM slot, support DDR4 2400/2666/2933MHz, Max. Capacity 128GB(ECC is not supported)
Storage	4 x Standard 7Pin SATA for SATA3.0, SATA2.0 and SATA1.0, support AHCI, RAIDO, RAID1, RAID5, RAID10 modes
Network	3 x Intel i211, 3 x Standard RJ45 port 10/100/1000Mbps, support Adaptive and WOL functions
Display	VGA: 1 x Standard DB15, Max. resolution 1920 x 1200@60Hz HDMI: 1 x Standard HDMI, Max. resolution 4096 x 2160@30Hz Support synchronous and asynchronous dual display
Audio	Realtek ALC662 audio chip, support dual channels and stereo sound Audio sockets: Line OUT(Green), Mic IN(Pink), Line IN(Blue) 1 x 2*5Pin FP_AUDIO Pin Header(front), support Mic IN2 and Line OUT2
USB	6 x Standard USB3.1(4 rear interfaces, 2 pin headers) 7 x USB2.0(2 rear interfaces, 2 2*5Pin 2.54mm pin headers(can be transferred to 4 standard USB2.0), 1 built-in standard USB2.0)
Serial Ports	6 x 2*5Pin 2.00mm Pin Header, can be transferred to Standard DB9, support RS232, and COM1/2 also supports RS422/RS485
I/O Functions	Use Fintek F81866AD, 6 serial ports led by SIO 1 x 2*5Pin GPIO Pin Header led by SIO, support 8lane input or output 1 x 2*4Pin PS/2 keyboard & mouse interface 1 x 1*4Pin CPU Fan, 2 x 1*4Pin System Fan
Expansion	2 x Standard PCIE X16 slot(support PCIE 3.0) 2 x Standard PCIE X4(support PCIE 3.0) 3 x Standard PCI interface (support PCI 2.3) 1 x M.2(support NVMe and SATA protocol)
Power Supply	Standard 24+8Pin ATX power supply
Watch Dog	A reset will be caused when the 255-level timer overflows
BIOS	AMI BIOS
Temperature	Operating Temp. 0℃~+60℃, Storage Temp. -40℃~+80℃
Humidity	5%~95% relative humidity, non-condensing
Dimension	305mm x 244mm

I/O Interfaces:

ABOUT POLYHEX

As a board level and system level designer and manufacturer, Polyhex, with 12-year experience, always delivers best-in-class embedded computing solutions based on both ARM and X86 architecture, including hardware customization and software debugging etc. Partnered with silicon vendors like Intel, NXP, ST, Rockchip, Allwinner and so on, we have earned trust from clients worldwide in over 30 countries. Polyhex is also certified with ISO9001 and ISO13485 for the self-owned manufacture facility.

POLYHEX
Beyond the Embedded Deployment