W671DM v:1.1

ATX_ form factor, Based on Intel® Alder Lake_Q670 chipset

Processor-**LGA1700** socket / **6**W TDP

ideal for embedded systems, edge computing, IoT devices.



Features

- CPU: LGA1700 12th~14th Intel® Celeron/Pentium/Core™ i3/i5/i7/i9
- Memory: Dual channel DIMM DDR4 up to 128GB
- Display: Intel® HD Graphics; VGA+2*HDMI displays
- Ethernet: 2* I210AT GbE Ports
- Storage: 8* SATA3.0; 1* M.2
- Expansion: 1* PCIE4.0 X16; 1* PCIE X1; 2* PCI; 1* M.2 for 4G/5G LTE
- Power: ATX

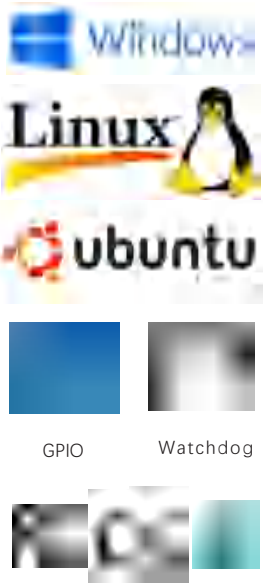
intel IoT Solutions Alliance
Industrial Solution Builders Specialist

Scan to know more

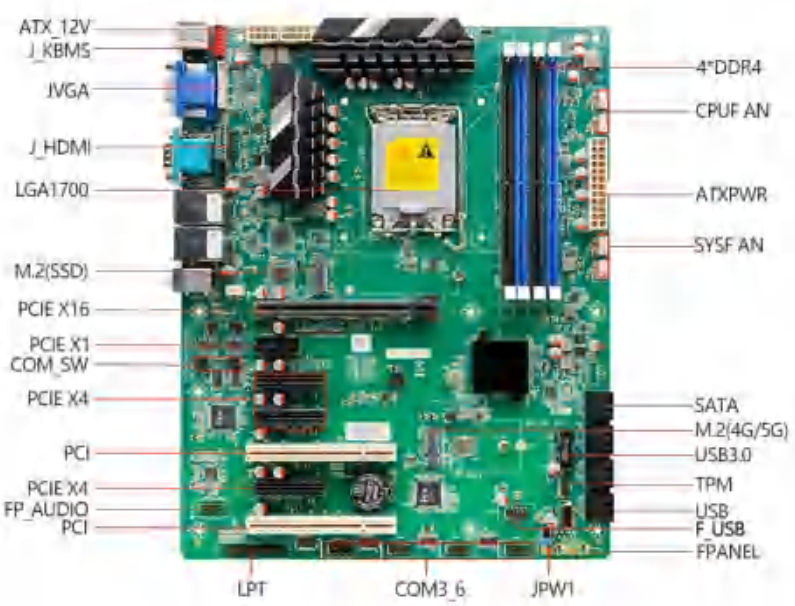
Introduction

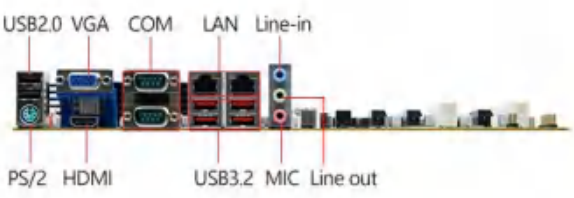
The Senbainno W671DM is a high-performance ATX industrial motherboard based on the Intel Q670 chipset. It supports 12th, 13th, and 14th generation Intel® Celeron, Pentium, and Core™ i3/i5/i7/i9 processors (LGA1700). The board features four DDR4 DIMM slots, supporting memory speeds up to 3200MHz and a maximum capacity of 128GB. It integrates an Intel® HD graphics controller for high-performance display output, offering one VGA port and two HDMI ports. Networking capabilities include dual Intel® I210AT Gigabit Ethernet controllers, while storage options feature eight SATA 3.0 ports with transfer speeds up to 6Gbps. Additionally, it supports six RS-232 serial ports, with COM1 and COM2 configurable for RS-485/422 operation.

With powerful computing capabilities and robust integrated performance, the Senbainno W671DM combines low power consumption with high performance, making it suitable for a wide range of industrial applications. It is ideal for use in industrial control, information systems, financial equipment, automated ticketing systems, automotive sectors, military applications, and various terminal markets.



I/O Interfaces





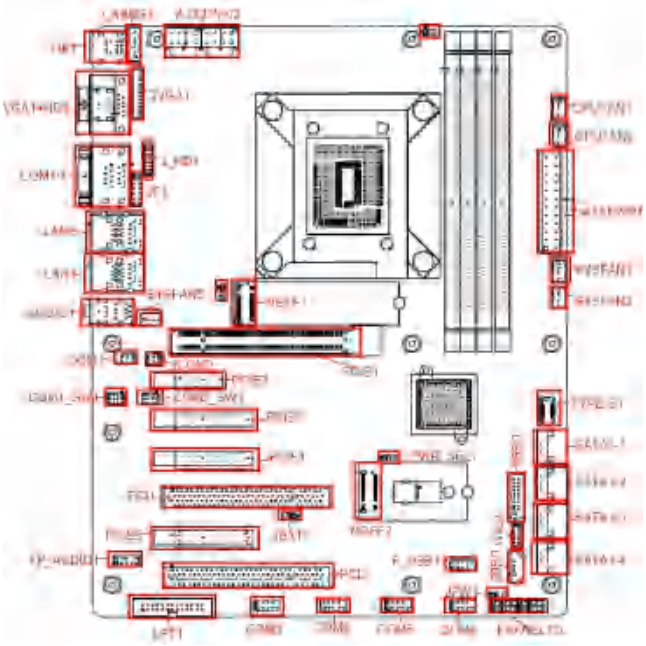
Specifications:

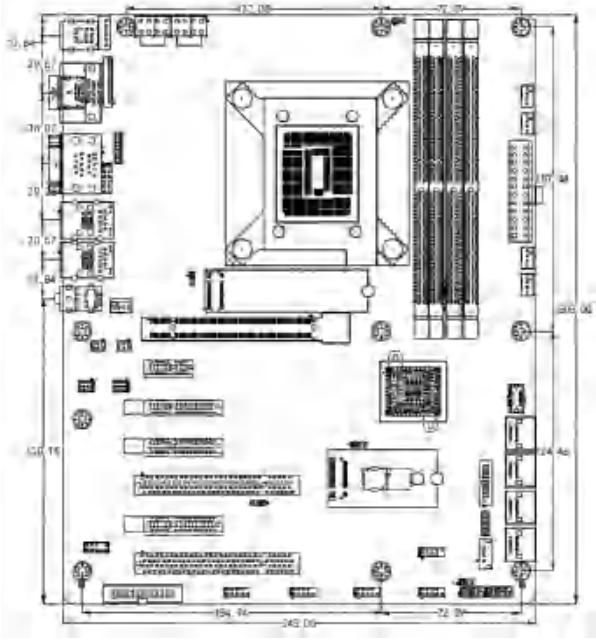
Model No.	W671DM VER:1.1
Processor	Support LGA1700 12th/13th/14th Intel® Celeron/Pentium/Core™ i3/i5/i7/i9 processor
Chipset	Adopt Intel® Q670 chipset
RAM	4* DDR4 DIMM memory slots, support dual-channel up to 3200MHz memory, up to 128GB
Dispay	Integrated Intel®HD Graphics, support DirectX12.1, OpenGL4.5, support 4K display
	1* VGA , support the highest resolution of 1920X1200@60Hz
	2* HDMI1.4 , support the highest resolution of 4096x2160 @24Hz
Ethernet	2* Intel® I210AT Gigabit Ethernet Lan, support Wake_on_LAN/PXE function
Storage	8* SATA3.0 hard disk interface, the transfer speed up to 6Gbps, support RAID 0,1,5,10
	1* M.2 slot, support M.2 Key M 2280 NVME PCIE X4 SSD
Audio	Onboard ALC897 7.1+2 vocal channels high fidelity audio controller,supports MIC/Line-out/Line-in
Expansion Slot	1* PCIE4.0 X16
	3* PCIE X4 (PCIE2/PCIE4 is 4.0, PCIE5 is 3.0)
	1* PCIE X1
	2* PCI
	1* M.2 slot, support M.2 Key B 2242/2252 4G/5G module
Rear I/O interface	1* PS/2 interface (expandable keyboard and mouse)
	1* DB15 VGA
	1* HDMI1.4
	2* DB9 RS232 serial port, supports the 9th pin charged function, support RS485/422
	2* USB2.0
	4* USB3.2, Gen 2x1 interface (10Gbps)
	2* RJ-45
	1* Three-layer audio interface, support Line-out, MICK, Line-in
Built-in I/O interface	2* USB2.0, 2*5pin
	1*Vertical USB2.0 interface
	2* USB3.0, 2*10pin
	1* Front panel audio interface (2*5pin)
	1* Front panel function button and indicator interface (2*5pin)
	1* 24pin ATX power socket, 2* 8pin ATX power socket
	1* PS/2 keyboard and mouse interface, 1*6pin
	1* JVGA interface, 1*12pin (the same signal as DB15)
	1* JHDMI, 2*8pin
	1* TPM, 2*6pin
	4* RS232, 2*5pin
	1* SIM
	1* LPT, 2*13pin
Fan interface	1* 4pin CPU smart fan connector, 4* 4pin system smart fan connector
BIOS	128Mb Flash ROM

Watchdog	Support hardware reset function (256 levels, 0~255 seconds)
OS	Windows 10/Windows 11/Linux
Power type	ATX 24Pin & 8pin power supply
Operating temperature	0℃ ~ 60℃
Storage temperature	-20℃ ~ 70℃
Working humidity	5%-95% relative humidity, non-condensing
Size	305mm x 245mm (ATX)

*All specifications and photos are subject to change without notice

Interface Diagram





Ordering Info

No.	Model	Processor	South bridge	Memory	VGA	HDMI	LAN	USB	COM	RS485/RS422	Power
1	W671DM VER:1.1	LGA1700	Q670	4*DDR4	1	2	2*I210AT	12	6	COM1/2	ATX

!! *For customized options, please consult regional sales. And please conrm the model name and description before purchasing.

*The model name and description might vary due to inventory changes.

Shenzhen Senba Innovation Technology Co., Ltd.

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