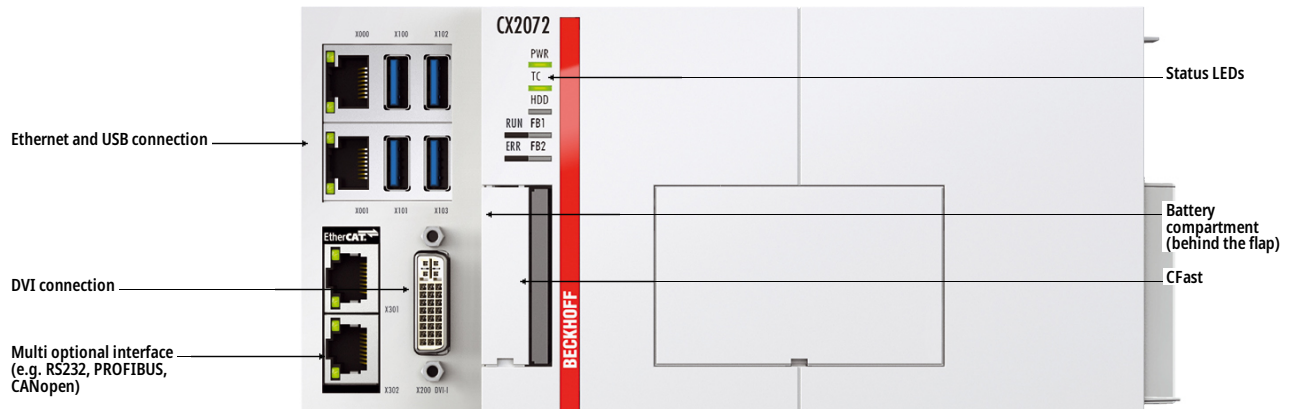


CX2072 | Basic CPU module



i Product status: regular delivery

The CX2072 has an Intel® Xeon® CPU with a clock rate of 2.1 GHz (12 cores). A fan with ball bearings and speed monitoring is integrated into the basic CPU module. In addition to the CPU, the basic module also contains the main memory with a size of 8 GB RAM, optionally available with up to 64 GB. The controller boots from a CFast flash memory card where both the operating system as well as user programs and data are stored.

The CPU has an internal 128 kB NOVRAM, which acts as a persistent data memory if no UPS is used.

The use of TwinCAT 3 allows automation tasks to be distributed across the various cores of the Intel® Xeon® CPU.

All system modules from the CX2000 series for left- or right-sided functional extensions can be connected. Internally the modules are connected via PCI Express and can be plugged to the CPU in the field.

The power supply for the CPU module comes from a CX2100-0014 power supply module. Up to two mass storage modules (either CX2550-0010 CFast modules or CX2550-0020 2½-inch SSD modules) can be plugged in between the power supply unit and the CPU, allowing the use of up to three mass storage devices in total.

Product information

Technical data

Technical data	CX2072
Processor	Intel® Xeon® D-1567 2.1 GHz
Number of cores	12

Flash memory	slot for CFast card, card not included
Main memory	8 GB DDR4 RAM (expandable ex factory to 64 GB)
Persistent memory	128 kB NOVRAM integrated
Interfaces	2 x RJ45 10/100/1000 Mbit/s, 1 x DVI-I, 4 x USB 3.0, 1 x optional interface
Cooling	integrated fan with ball bearings and speed monitoring
Diagnostics LED	1 x power, 1 x TC status, 1 x flash access, 2 x bus status
Clock	internal battery-backed clock for time and date (battery exchangeable)
Operating system	Windows 10 IoT Enterprise 2016 LTSB, Windows 10 IoT Enterprise 2019 LTSC, Windows 10 IoT Enterprise 2021 LTSC, TwinCAT/BSD
Control software	TwinCAT 3 runtime (XAR)
I/O connection	via power supply module (E-bus or K-bus, automatic recognition)
Power supply	24 V DC (-15 %/+20 %)
Max. power consumption	131 W
Dimensions (W x H x D)	204 mm x 99 mm x 91 mm
Weight	approx. 1650 g
Relative humidity	95 %, no condensation
Operating/storage temperature	-25...+50 °C/-40...+85 °C
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
Protection rating	IP20
Approvals/markings	CE, UL
TwinCAT 3 platform level	Very High Performance (81); please see here for an overview of all the TwinCAT 3 platform level

Ordering information

S = operating system options 0 = no operating system 5 = Windows 10 IoT Enterprise 2016 LTSB 64 bit 7 = Windows 10 IoT Enterprise 2019 LTSC 64 bit 8 = TwinCAT/BSD 9 = Windows 10 IoT Enterprise 2021 LTSC 64 bit	T = TwinCAT software licenses 0 = no TwinCAT 5 = equipped with TwinCAT 3 runtime (XAR), no licenses included
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CX20x2-01ST

Ordering information	
CX2072-0100	CPU module, no operating system, no TwinCAT
CX2072-0150	CPU module, Microsoft Windows 10 IoT Enterprise 2016 LTSB, 64 bit, no TwinCAT
CX2072-0155	CPU module, Microsoft Windows 10 IoT Enterprise 2016 LTSB, 64 bit, TwinCAT 3 runtime (XAR), no licenses included

CX2072-0175	CPU module, Microsoft Windows 10 IoT Enterprise 2019 LTSC, 64 bit, TwinCAT 3 runtime (XAR), no licenses included
CX2072-0185	CPU module, TwinCAT/BSD, TwinCAT 3 runtime (XAR), no licenses included
CX2072-0190	CPU module, Microsoft Windows 10 IoT Enterprise 2021 LTSC, 64 bit, no TwinCAT
CX2072-0195	CPU module, Microsoft Windows 10 IoT Enterprise 2021 LTSC, 64 bit, TwinCAT 3 runtime (XAR), no licenses included

TwinCAT/BSD requires a CFast flash card with a minimum capacity of 20 GB

Windows 10 IoT Enterprise requires a CFast flash card with a minimum capacity of 40 GB.

TwinCAT 3 runtime (XAR) is preinstalled, without licenses. Please order TwinCAT 3 licenses separately from the TwinCAT 3 Price List.

Options

Options	
CX2900-0010	Operating system preequipped on 2½-inch HDD/SSD for CX20x0, CX20x2 and CX20x3. Requires the extension module CX2550-0020 and one 2½-inch HDD/SSD.
CX2900-0205	memory extension to 16 GB DDR4 RAM, instead of 8 GB DDR4 RAM for CX2042, CX2062 and CX2072
CX2900-0206	memory extension to 32 GB DDR4 RAM, instead of 8 GB DDR4 RAM for CX2042, CX2062 and CX2072
CX2900-0207	memory extension to 64 GB DDR4 RAM, instead of 8 GB DDR4 RAM for CX2042, CX2062 and CX2072

Optional interfaces	
CX2072-N010	DVI-D interface, additional DVI-D port for clone or extended display mode. Is not supported by TwinCAT/BSD.
CX2072-N011	DisplayPort interface, additional DisplayPort for clone or extended display mode. Is not supported by TwinCAT/BSD.
CX2072-N030	RS232 interface, D-sub plug, 9-pin
CX2072-N031	RS485 interface, D-sub socket, 9-pin, configuration as an end point, without echo, termination on
CX2072-N031-0001	RS485 interface, D-sub socket, 9-pin, configuration as an end point, with echo, termination on
CX2072-N031-0002	RS485 interface, D-sub socket, 9-pin, configuration as drop point, without echo, termination off
CX2072-N031-0003	RS485 interface, D-sub socket, 9-pin, configuration as drop point, with echo, termination off
CX2072-N031-0004	RS422 interface, D-sub socket, 9-pin, configuration as full duplex end point, termination on
CX2072-N067	2 x Ethernet interface (2 x RJ45, 1/10 Gbit/s), version of the interfaces in the upper front of the device

CX2072-M112	2 x EtherCAT master interface
CX2072-B110	EtherCAT slave interface, EtherCAT IN and OUT (2 x RJ45)
CX2072-M310	PROFIBUS master interface, D-sub socket, 9-pin
CX2072-B310	PROFIBUS slave interface, D-sub socket, 9-pin
CX2072-M510	CANopen master interface, D-sub plug, 9-pin
CX2072-B510	CANopen slave interface, D-sub plug, 9-pin
CX2072-M930	PROFINET RT, controller interface, Ethernet (2 x RJ45 switch)
CX2072-B930	PROFINET RT, device interface, Ethernet (2 x RJ45 switched)

Accessories

Accessories	
CX1900-0101	DVI-to-VGA passive adaptor for connecting a standard desktop VGA monitor to the CX system (singles out the VGA signals of the DVI-I interface).
CX1900-0102	Spare battery suitable for CX10x0, CX81x0, CX5xxx, CX90x0, CX20xx – lithium button cell type CR2032, 3V/225 mAh – follow polarity when installing
CX2900-0026	20 GB CFast card, 3D flash, extended temperature range (only for Windows CE or TwinCAT/BSD operating systems)
CX2900-0038	40 GB CFast card, 3D flash, extended temperature range
CX2900-0040	80 GB CFast card, 3D flash, extended temperature range
CX2900-0042	160 GB CFast card, 3D flash, extended temperature range
CX2900-0044	320 GB CFast card, 3D flash, extended temperature range
CX2900-0101	Housing locking clips (black) for the CX52x0, CX53x0, CX56x0 and CX20xx series 10 locking pin sets (each set consisting of two pieces)
CX2900-0102	Cover for left-side module bus connector, 5 pieces
CX2900-0103	Spare fan cartridge for CX2040, CX2042, CX2043, CX2062, CX2072 and CX2020, CX2030, CX2033 with fan option – cartridge consisting of chassis and 60 mm fan – simple exchange in the field due to wireless installation – dimensions (W x H x D) 67 x 62 x 16 mm