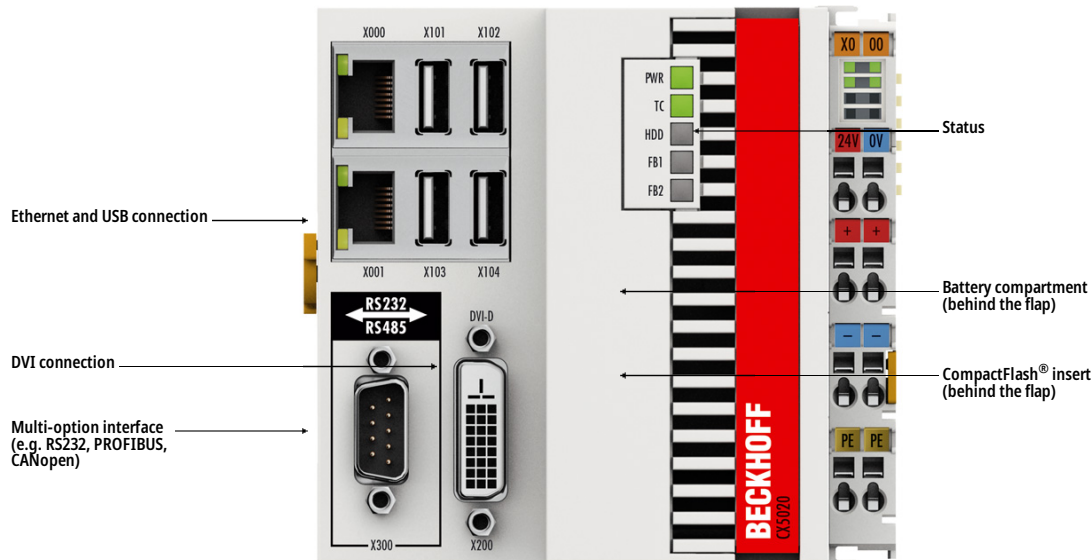
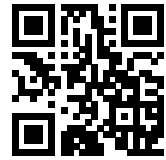


CX5020 | Embedded PC with Intel Atom® (service phase)



i Product status: service phase | recommended alternative: CX5120

The CX5010 and CX5020 are Embedded PCs from the CX5000 series based on Intel Atom® processors and differ only by the CPU version. The CX5010 has a 1.1 GHz Intel Atom® Z510 processor, while the CX5020 has a 1.6 GHz Intel Atom® Z530 processor. Apart from the clock speed, the two processors also differ by the fact that the Z530 features hyperthreading technology, i.e. it has two virtual CPU cores for more effective execution of software.

Depending on the installed TwinCAT runtime environment, the CX5010/CX5020 can be used for the implementation of PLC or PLC/motion control projects (with or without visualization).

Product information

Technical data

Technical data	CX5020
Processor	Intel Atom® Z530, 1.6 GHz clock frequency
Number of cores	1
Flash memory	slot for CompactFlash® card, 128 MB included (expandable)
Main memory	512 MB RAM (expandable ex factory to 1 GB)
1-second UPS	integrated (1 MB on CompactFlash® card)
Interfaces	2 x RJ45 10/100/1000 Mbit/s, 1 x DVI-D, 4 x USB 2.0, 1 x optional interface
Cooling	passive

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 Embedded CE 6, Windows Embedded Standard 2009
Control software	TwinCAT 2 runtime TwinCAT 3 runtime (XAR)
I/O connection	E-bus or K-bus, automatic recognition
Power supply	24 V DC (-15%/+20%)
Current supply E-bus/K-bus	2 A
Max. power consumption	13 W
Max. power consumption E-bus/K-bus	10 W (5 V/max. 2 A)
Weight	approx. 575 g
Dimensions (W x H x D)	106 mm x 100 mm x 92 mm
Relative humidity	95%, no condensation
Operating temperature	-25...+60°C
Storage temperature	-40...+85°C
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protection rating	IP20
Approvals/markings	CE, UL, with CX1900-0105 ordering option: ATEX
Ex marking	II 3 G Ex nA IIC T4 Gc
TwinCAT 3 platform level	Performance (40); please see here for an overview of all the TwinCAT 3 platform level

Ordering information

S = operating system options
 0 = no operating system
 1 = Windows Embedded CE 6
 2 = Windows Embedded Standard 2009

T = TwinCAT software licenses
 0 = no TwinCAT
 1 = equipped with TwinCAT 2 PLC runtime
 2 = equipped with TwinCAT 2 NC PTP runtime
 5 = equipped with TwinCAT 3 runtime (XAR),
 no licenses included

CX50x0-01ST

Ordering information	
CX5020-0100	CPU module, E-bus, no operating system, no TwinCAT
CX5020-0110	CPU module, E-bus, Microsoft Windows Embedded CE 6.0, no TwinCAT
CX5020-0111	CPU module, E-bus, Microsoft Windows Embedded CE 6.0, TwinCAT 2 PLC runtime
CX5020-0112	CPU module, E-bus, Microsoft Windows Embedded CE 6.0, TwinCAT 2 NC PTP runtime
CX5020-0115	CPU module, E-bus, Microsoft Windows Embedded CE 6.0, TwinCAT 3 runtime (XAR), no licenses included

CX5020-0120	CPU module, E-bus, Microsoft Windows Embedded Standard 2009, no TwinCAT
CX5020-0121	CPU module, E-bus, Windows Embedded Standard 2009, TwinCAT 2 PLC runtime
CX5020-0122	CPU module, E-bus, Windows Embedded Standard 2009, TwinCAT 2 NC PTP runtime
CX5020-0125	CPU module, E-bus, Microsoft Windows Embedded Standard 2009, TwinCAT 3 runtime (XAR), no licenses included
CX5020-1100	CPU module, K-bus, no operating system, no TwinCAT
CX5020-1110	CPU module, K-bus, Microsoft Windows Embedded CE 6.0, no TwinCAT
CX5020-1111	CPU module, K-bus, Microsoft Windows Embedded CE 6.0, TwinCAT 2 PLC runtime
CX5020-1112	CPU module, K-bus, Microsoft Windows Embedded CE 6.0, TwinCAT 2 NC PTP runtime
CX5020-1115	CPU module, K-bus, Microsoft Windows Embedded CE 6.0, TwinCAT 3 runtime (XAR), no licenses included
CX5020-1120	CPU module, K-bus, Microsoft Windows Embedded Standard 2009, no TwinCAT
CX5020-1121	CPU module, K-bus, Windows Embedded Standard 2009, TwinCAT 2 PLC runtime
CX5020-1122	CPU module, K-bus, Windows Embedded Standard 2009, TwinCAT 2 NC PTP runtime
CX5020-1125	CPU module, K-bus, Microsoft Windows Embedded Standard 2009, TwinCAT 3 runtime (XAR), no licenses included

The end date of the extended support for the operating system Microsoft Windows Embedded CE 6 has already passed. Up-to-date security updates can no longer be provided.

Options

Options	
CX5020-N020	audio interface, 3 x 3.5 mm jack sockets, Line In, Mic In, Line Out or 5.1 Surround
CX5020-N030	RS232 interface, D-sub plug, 9-pin
CX5020-N031	RS485 interface, D-sub socket, 9-pin, configuration as an end point, without echo, termination on
CX5020-N031-0001	RS485 interface, D-sub socket, 9-pin, configuration as an end point, with echo, termination on
CX5020-N031-0002	RS485 interface, D-sub socket, 9-pin, configuration as drop point, without echo, termination off
CX5020-N031-0003	RS485 interface, D-sub socket, 9-pin, configuration as drop point, with echo, termination off
CX5020-N031-0004	RS422 interface, D-sub socket, 9-pin, configuration as full duplex end point, termination on
CX5020-B110	EtherCAT slave interface, EtherCAT IN and OUT (2 x RJ45)
CX5020-M310	PROFIBUS master interface, D-sub socket, 9-pin
CX5020-B310	PROFIBUS slave interface, D-sub socket, 9-pin
CX5020-M510	CANopen master interface, D-sub plug, 9-pin
CX5020-B510	CANopen slave interface, D-sub plug, 9-pin

CX5020-M930	PROFINET RT, controller interface, Ethernet (2 x RJ45 switch)
CX5020-B930	PROFINET RT, device interface, Ethernet (2 x RJ45 switched)

Accessories

Accessories	
CX1900-0010	formatting a CompactFlash® card (bootable), FAT16 (only with the order of a CompactFlash® card)
CX1900-0012	formatting a Compact Flash card (bootable), NTFS (only with the order of a Compact Flash card)
CX1900-0022	128 MB CompactFlash® card, extended temperature specification
CX1900-0024	1 GB CompactFlash® card, extended temperature specification
CX1900-0026	2 GB CompactFlash® card, extended temperature specification
CX1900-0028	4 GB CompactFlash® card, extended temperature specification
CX1900-0030	8 GB CompactFlash® card, extended temperature specification
CX1900-0032	16 GB CompactFlash® card, extended temperature specification