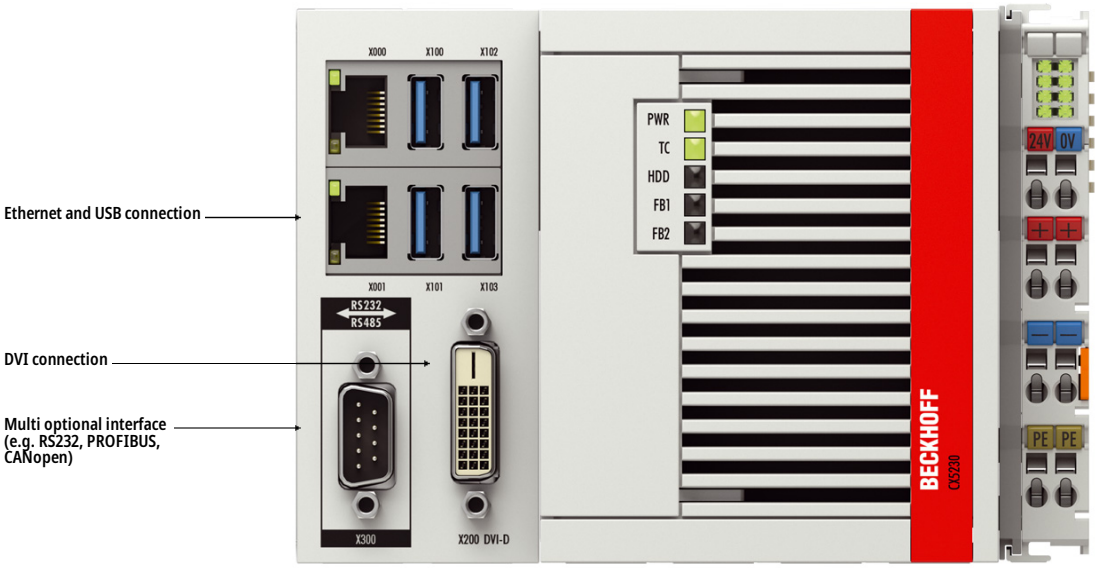
CX5230 | Embedded PC with Intel Atom® processor



Product status: Regular delivery

The CX5230 is an Embedded PC based on the Intel Atom® x5-E3930 processors with a clock speed of 1.3 GHz (dual-core) and 4 GB DDR4-RAM. The basic equipment includes two independent, Gigabit-capable Ethernet interfaces as well as four USB 3.0 and one DVI-D interface. A wide range of additional connection options or gateway functions are available thanks to the optional interface and I/O level, which can consist of either E-bus or K-bus terminals and can be fitted ex factory. In addition, a system module or fieldbus module from the CX2000 series can be plugged in via the high-pole connection on the left-hand side of the device. Although the total number of plug-in modules of the type CX2500-xx is limited to one with the CX5200 series, it is possible in this way, for example, to implement two further Gigabit-Ethernet interfaces or four further USB interfaces or a further fieldbus interface. Furthermore, the CX5230 is characterized by an internally electrically isolated power supply unit with UPS-OCT capability, built-in 1s-UPS, low power consumption and fanless cooling.

Depending on the installed TwinCAT runtime environment, the CX5230 can be used for the implementation of PLC or PLC /Motion Control projects (with or without visualization). The execution of Motion Control applications with interpolating axis motions is also possible. The extended operating temperature range of -25...+60°C allows use in climatically demanding applications.

Product information

Technical Data

Technical data	CX5230
Processor	Intel Atom® x5-E3930, 1.3 GHz, 2 cores (TC3: 40)
Number of cores	2
Flash memory	slot for CFast card and microSD card, cards not included

Main memory	4 GB DDR4 RAM (internal, not expandable)
Persistent memory	integrated 1-second UPS (1 MB on CFast card)
Interfaces	2 x RJ45 10/100/1000 Mbit/s, 1 x DVI-D, 4 x USB 3.0, 1 x optional interface
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 2019 LTSC, 64 bit, Entry Level, TwinCAT/BSD
Control software	TwinCAT 3 runtime (XAR)
I/O connection	E-bus or K-bus, automatic recognition
Power supply	24 V DC (-15 %/+20 %), electrically isolated and UPS OCT-capable
Max. power consumption	20 W
Max. power consumption (with loading UPS)	27 W
Dimensions (W x H x D)	142 mm x 100 mm x 92 mm
Weight	approx. 1195 g
Operating/storage temperature	-25...+60 °C/-40...+85 °C
Relative humidity	95 %, no condensation
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 class	IP 20
Approvals/markings	CE, UL
TwinCAT 3 platform level	Performance (40); please see here for an overview of all the TwinCAT 3 platform level

Ordering Information

Ordering information	
CX5230-0100	no operating system, no TwinCAT
CX5230-0170	Windows 10 IoT Enterprise 2019 LTSC 64 bit, no TwinCAT
CX5230-0175	Windows 10 IoT Enterprise 2019 LTSC 64 bit, TwinCAT 3 runtime (XAR)
CX5230-0185	TwinCAT/BSD, TwinCAT 3 runtime (XAR)

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

Optional interfaces	
CX5230-N010	DVI-D interface, additional DVI-D port for clone or extended display mode. Is not supported by TwinCAT/BSD.

CX5230-N011	DisplayPort interface, additional DisplayPort for clone or extended display mode. Is not supported by TwinCAT/BSD.
CX5230-N020	audio interface, 3 x 3.5 mm jack sockets, Line In, Mic In, Line Out or 5.1 Surround
CX5230-N030	RS232 interface, D-sub plug, 9-pin (RXD, TXD, RTS, CTS)
CX5230-N031	RS485 interface, D-sub socket, 9-pin, configuration as an end point, without echo, termination on
CX5230-N031-0001	RS485 interface, D-sub socket, 9-pin, configuration as an end point, with echo, termination on
CX5230-N031-0002	RS485 interface, D-sub socket, 9-pin, configuration as drop point, without echo, termination off
CX5230-N031-0003	RS485 interface, D-sub socket, 9-pin, configuration as drop point, with echo, termination off
CX5230-N031-0004	RS422 interface, D-sub socket, 9-pin, configuration as full duplex end point, termination on
CX5230-M112	2 x EtherCAT master interface
CX5230-B110	EtherCAT slave interface, EtherCAT IN and OUT (2 x RJ45)
CX5230-M310	PROFIBUS master interface, D-sub socket, 9-pin
CX5230-B310	PROFIBUS slave interface, D-sub socket, 9-pin
CX5230-M510	CANopen master interface, D-sub plug, 9-pin
CX5230-B510	CANopen slave interface, D-sub plug, 9-pin
CX5230-M930	PROFINET RT, controller interface, Ethernet (2 x RJ45 switch)
CX5230-B930	PROFINET RT, device interface, Ethernet (2 x RJ45 switched)
CX5230-B950	EtherNet/IP adapter interface, Ethernet (2 x RJ45 switched) Availability: on request

Accessories

Accessories	
CX1900-0102	Spare battery suitable for CX10x0, CX81x0, CX50x0, CX51x0, CX52x0, CX90x0, CX20xx – lithium button cell type CR2032, 3V/225 mAh – follow polarity when installing
CX1900-0122	512 MB microSD card
CX1900-0124	1 GB microSD card
CX1900-0126	2 GB microSD card
CX1900-0128	4 GB microSD card
CX1900-0130	8 GB microSD card
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
CX2900-0101	Housing locking clips
CX2900-0102	Cover for left-side module bus connector, 5 pieces

CX2900-0108	logo strips for CX51x0 and CX52x0, transparent for individual labelling, package contents 20 units