

CX5240 | Embedded PC with Intel Atom® x5-E3940

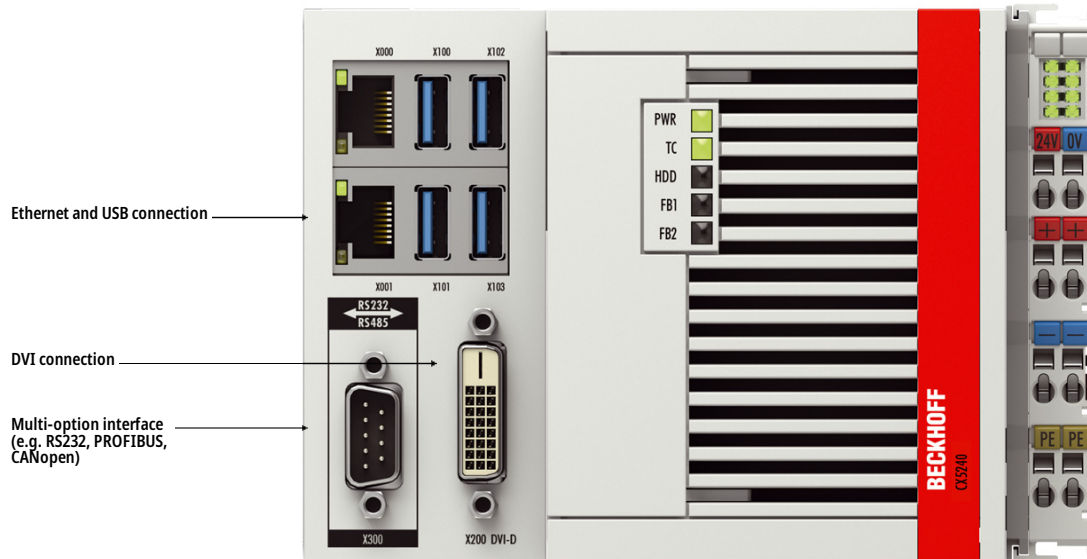


Image similar, may contain optional accessories

i **Product status:** regular delivery

The CX5240 is an Embedded PC based on the Intel Atom® x5-E3940 with a clock speed of 1.6 GHz (quad-core) and 8 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 CX5240 is characterized by an internally electrically isolated power supply unit, built-in 1-second UPS, low power consumption and fanless cooling.

Depending on the installed TwinCAT runtime environment, the CX5240 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 enables application in climatically demanding situations.

Product information

Technical data

Technical data	CX5240
Processor	Intel Atom® x5-E3940, 1.6 GHz

Number of cores	4
Flash memory	slot for CFast card and microSD card, cards not included
Main memory	8 GB DDR4 RAM (internal, not expandable)
1-second UPS	integrated (1 MB on CFast card)
Interfaces	2 x RJ45 10/100/1000/2500 Mbit/s, 1 x DVI-D, 4 x USB 3.1, 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 10 IoT Enterprise 2019 LTSC, 64 bit, Entry Level, Windows 10 IoT Enterprise 2021 LTSC, 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
Max. power consumption	18 W
Max. power consumption (with loading UPS)	34 W
Max. power consumption E-bus/K-bus	10 W (5 V/max. 2 A)
Weight	approx. 1195 g
Dimensions (W x H x D)	142 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
TwinCAT 3 platform level	Performance Plus (50); please see here for an overview of all the TwinCAT 3 platform level

Ordering information

S = operating system options

0 = no operating system

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

CX52x0-01ST

Ordering information

CX5240-0100	CPU module, no operating system, no TwinCAT
CX5240-0170	CPU module, Microsoft Windows 10 IoT Enterprise 2019 LTSC, 64 bit, no TwinCAT
CX5240-0175	CPU module, Microsoft Windows 10 IoT Enterprise 2019 LTSC, 64 bit, TwinCAT 3 runtime (XAR), no licenses included
CX5240-0185	CPU module, TwinCAT/BSD, TwinCAT 3 runtime (XAR), no licenses included
CX5240-0190	CPU module, Microsoft Windows 10 IoT Enterprise 2021 LTSC, 64 bit, no TwinCAT
CX5240-0195	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

Optional interfaces	
<u>CX5240-N010</u>	DVI-D interface, additional DVI-D port for clone or extended display mode. Is not supported by TwinCAT/BSD.
<u>CX5240-N011</u>	DisplayPort interface, additional DisplayPort for clone or extended display mode. Is not supported by TwinCAT/BSD.
<u>CX5240-N020</u>	audio interface, 3 x 3.5 mm jack sockets, Line In, Mic In, Line Out or 5.1 Surround
<u>CX5240-N030</u>	RS232 interface, D-sub plug, 9-pin (RXD, TXD, RTS, CTS)
<u>CX5240-N031</u>	RS485 interface, D-sub socket, 9-pin, configuration as an end point, without echo, termination on
<u>CX5240-N031-0001</u>	RS485 interface, D-sub socket, 9-pin, configuration as an end point, with echo, termination on
<u>CX5240-N031-0002</u>	RS485 interface, D-sub socket, 9-pin, configuration as drop point, without echo, termination off
<u>CX5240-N031-0003</u>	RS485 interface, D-sub socket, 9-pin, configuration as drop point, with echo, termination off
<u>CX5240-N031-0004</u>	RS422 interface, D-sub socket, 9-pin, configuration as full duplex end point, termination on
<u>CX5240-M112</u>	2 x EtherCAT master interface
<u>CX5240-B110</u>	EtherCAT slave interface, EtherCAT IN and OUT (2 x RJ45)
<u>CX5240-M310</u>	PROFIBUS master interface, D-sub socket, 9-pin
<u>CX5240-B310</u>	PROFIBUS slave interface, D-sub socket, 9-pin
<u>CX5240-M510</u>	CANopen master interface, D-sub plug, 9-pin
<u>CX5240-B510</u>	CANopen slave interface, D-sub plug, 9-pin
<u>CX5240-M930</u>	PROFINET RT, controller interface, Ethernet (2 x RJ45 switch)
<u>CX5240-B930</u>	PROFINET RT, device interface, Ethernet (2 x RJ45 switched)

Accessories

Accessories	
<u>CX1900-0124</u>	1 GB microSD card
<u>CX1900-0126</u>	2 GB microSD card
<u>CX1900-0132</u>	16 GB microSD card
<u>CX2900-0026</u>	20 GB CFast card, 3D flash, extended temperature range (only for Windows CE or TwinCAT/BSD operating systems)
<u>CX2900-0038</u>	40 GB CFast card, 3D flash, extended temperature range
<u>CX2900-0040</u>	80 GB CFast card, 3D flash, extended temperature range
<u>CX2900-0042</u>	160 GB CFast card, 3D flash, extended temperature range
<u>CX2900-0044</u>	320 GB CFast card, 3D flash, extended temperature range
<u>CX2900-0101</u>	Housing locking clips (black) for the CX52x0, CX53x0, CX56x0 and CX20xx series 10 locking pin sets (each set consisting of two pieces)
<u>CX2900-0102</u>	Cover for left-side module bus connector, 5 pieces
<u>CX2900-0108</u>	Logo strips for CX5xxx, transparent for individual labeling, package contents 20 units
<u>C9900-K530,-K552,-K553,-K554</u>	USB cable, shielded, PVC, 1 x 2 x 28AWG + 2C 20AWG, fixed installation, black, USB A, plug, straight, male, 4-pin – USB B, plug, straight, male, 4-pin
<u>C9900-K569,-K570,K577</u>	USB cable, shielded, PVC, 2 x 2 x AWG28 + 1 x 2 AWG28 + 1 x 2 x AWG24, fixed installation, black, USB A, plug, straight, male, 9-pin – USB B, plug, straight, male, 9-pin
<u>ZK1090-9191-0xxx</u>	RJ45, plug, straight, male, 8-pin – RJ45, plug, straight, male, 8-pin
<u>ZK1093-9191-0xxx</u>	RJ45, plug, straight, male, 8-pin – RJ45, plug, straight, male, 8-pin
<u>C9900-K527,-K549,-K550,-K568</u>	Display cable, shielded, PVC, fixed installation, black, DVI-D, plug, straight, male, 18 + 1-pin – DVI-D, plug, straight, male, 18 + 1-pin
<u>C9900-K528,-K529,-K534...K537,-K688</u>	Display cable, shielded, PVC, 14 x AWG24, fixed installation, black, DVI-D, plug, straight, male, 18 + 1-pin – DVI-D, plug, straight, male, 18 + 1-pin
<u>C9900-K780...K783,-K820</u>	Display cable, shielded, PVC, fixed installation, black, DVI-D, plug, straight, male, 24 + 1-pin – DisplayPort, plug, straight, male, 20-pin
<u>C9900-K543,-K544,-K507,-K555,-K651</u>	Display cable, shielded, PVC, fixed installation, black, DVI-D, plug, straight, male, 24 + 1-pin – M16, plug, straight, female, 19-pin
<u>BZ1xxx</u>	100 contact labels, various colors, pre-printed
<u>BZ2xxx</u>	100 contact labels, various colors, blank