Ethernet and USB connection

DVI connection

Optional interfaces e. g. RS232, PROFIBUS, CANopen

ⓘ CX5240 | Embedded PC with Intel® Atom™ processor

The CX5240 has an Intel® Atom™ multi-core processor with a clock rate of 1.6 GHz. This makes genuine multi-core technology possible in the Embedded PC segment. The hardware interfaces in this new series are oriented and implemented identically to those of the existing CX5000 series. Two independent, Gigabit-capable Ethernet interfaces as well as four USB 3.0 and a DVI-D interface are available. A multitude of further connection options and gateway functions is created by an option interface, which can be pre-equipped ex factory, as well as the I/O level, which can optionally consist of either E-bus or K-bus terminals.

Like the CX5000, the CX5200 series has a compact design. In addition, the multi-pin terminal on the left-hand side enables the connection of a system or fieldbus module of the CX2000 family.

The CX5240 is characterised by low power consumption and fanless design.

Depending on the installed TwinCAT runtime environment, the CX5240 can be used for implementing PLC or PLC/Motion Control projects with or without visualisation. The execution of Motion Control applications with interpolating axis movements is also possible.

The extended operating temperature range from -25 to +60 °C enables the use in climatically demanding environments.

Technical data	CX5240
Processor	Intel® Atom™ E3950, 1.6 GHz, 4 cores (TC3: 50)
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)
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	Microsoft Windows 10 IoT Enterprise, Long Term Servicing Branch (LTSB), 64 bit
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 loss	typ. 18 W, max. 50 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
TC3 performance class	Performance Plus (50); please see here for an overview of all the TwinCAT 3 performance classes

Ordering information	no operating system	Windows 10 IoT Enterprise LTSB 64 bit	no TwinCAT	TwinCAT 3 runtime (XAR)
CX5240-0100	x	–	x	–
CX5240-0150	–	x	x	–
CX5240-0155	–	x	–	x

Accessories	
CX2900-0108	logo strips for CX51x0 and CX52x0, transparent for individual labelling, package contents 20 units
CX1900-0102	spare battery suitable for CX10x0, CX50x0, CX51x0, CX90x0, CX20xx – lithium button cell type CR2032, 3V/225 mAh – follow polarity when installing

Optional interfaces	
CX5240-B110	EtherCAT slave interface, EtherCAT IN and OUT (2 x RJ45)
CX5240-B310	PROFIBUS slave interface, D-sub socket, 9-pin
CX5240-B510	CANopen slave interface, D-sub plug, 9-pin
CX5240-B930	PROFINET RT, device interface, Ethernet (2 x RJ45 switched)
CX5240-B931	PROFINET IRT, device interface, Ethernet (2 x RJ45 switched), in combination with TwinCAT 3 only
CX5240-B950	EtherNet/IP slave interface, Ethernet (2 x RJ45 switched)
CX5240-M310	PROFIBUS master interface, D-sub socket, 9-pin
CX5240-M510	CANopen master interface, D-sub plug, 9-pin
CX5240-M930	PROFINET RT, controller interface, Ethernet (2 x RJ45)
CX5240-N010	DVI-D interface, additional DVI-D port for clone or extended desktop operation
CX5240-N011	DisplayPort interface, additional DisplayPort for clone or extended desktop operation
CX5240-N030	RS232 interface, D-sub plug, 9-pin*
CX5240-N031	RS485 interface, D-sub socket, 9-pin, configuration as an end point, without echo, termination on*
CX5240-N031-0001	RS485 interface, D-sub socket, 9-pin, configuration as an end point, with echo, termination on
CX5240-N031-0002	RS485 interface, D-sub socket, 9-pin, configuration as drop point, without echo, termination off
CX5240-N031-0003	RS485 interface, D-sub socket, 9-pin, configuration as drop point, with echo, termination off
CX5240-N031-0004	RS422 interface, D-sub socket, 9-pin, configuration as full duplex end point, termination on

i **Product announcement**	estimated market release 4th quarter 2019

*Not available for Microsoft Windows 10 IoT Enterprise (LTSB).