



# CX5330 | Embedded PC with Intel Atom® x6214RE



Image similar, may contain optional accessories

**i** **Product status:** regular delivery

The CX5330 is an embedded PC based around an x6214RE Intel Atom® processor with 1.4 GHz (dual-core) and 4 GB LPDDR4 RAM. The basic equipment includes two independent Gigabit-capable Ethernet interfaces as well as four USB 3.1 and one DisplayPort 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 E-bus or K-bus terminals and can be fitted ex factory. A system module or fieldbus module from the CX2000 series can be plugged in via the multi-pole connection on the left-hand side of the device. Although the total number of plug-in modules is limited to one, two additional Gigabit-Ethernet interfaces or four additional USB interfaces or another fieldbus interface can also be implemented in this way, for example. The CX5330 is characterized by an internally electrically isolated power supply unit, built-in 1-second UPS, and low overall power consumption and fanless cooling.

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

## Product information

### Technical data

| Technical data | CX5330                       |
|----------------|------------------------------|
| Processor      | Intel Atom® x6214RE, 1.4 GHz |

|                                           |                                                                                                       |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Number of cores                           | 2                                                                                                     |
| Flash memory                              | slot for CFast card and microSD card, cards not included                                              |
| Main memory                               | 4 GB LPDDR4 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 DisplayPort, 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 2021 LTSC, Windows 11 IoT Enterprise 2024 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                    | 16 W                                                                                                  |
| Max. power consumption (with loading UPS) | 32 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 (40); please see <a href="#">here</a> for an overview of all the TwinCAT 3 platform level |

## Ordering information

S = operating system options

0 = no operating system  
2 = Windows 11 IoT Enterprise 2024 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

**CX53x0-0xST**

### Ordering information

**CX5330-0100** CPU module, no operating system, no TwinCAT

|                    |                                                                                                                                                                                                    |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CX5330-0185</b> | CPU module, TwinCAT/BSD, TwinCAT 3 runtime (XAR), no licenses included                                                                                                                             |
| <b>CX5330-0190</b> | CPU module, Microsoft Windows 10 IoT Enterprise 2021 LTSC, 64 bit, no TwinCAT                                                                                                                      |
| <b>CX5330-0195</b> | CPU module, Microsoft Windows 10 IoT Enterprise 2021 LTSC, 64 bit, TwinCAT 3 runtime (XAR), no licenses included                                                                                   |
| <b>CX5330-0220</b> | CPU module, Microsoft Windows 11 IoT Enterprise 2024 LTSC, 64 bit, no TwinCAT<br>(product announcement   estimated market release 2 <sup>nd</sup> quarter 2025)                                    |
| <b>CX5330-0225</b> | CPU module, Microsoft Windows 11 IoT Enterprise 2024 LTSC, 64 bit, TwinCAT 3 runtime (XAR), no licenses included<br>(product announcement   estimated market release 2 <sup>nd</sup> quarter 2025) |

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                     |                                                                                                                                                                                               |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#"><u>CX5330-N010</u></a>      | DVI-D interface, additional DVI-D port for clone or extended display mode. Is not supported by TwinCAT/BSD.<br>(product announcement   estimated market release 2 <sup>nd</sup> quarter 2025) |
| <a href="#"><u>CX5330-N011</u></a>      | DisplayPort interface, additional DisplayPort for clone or extended display mode. Is not supported by TwinCAT/BSD.                                                                            |
| <a href="#"><u>CX5330-N020</u></a>      | audio interface, 3 x 3.5 mm jack sockets, Line In, Mic In, Line Out or 5.1 Surround<br>(product announcement   estimated market release 2 <sup>nd</sup> quarter 2025)                         |
| <a href="#"><u>CX5330-N030</u></a>      | RS232 interface, D-sub plug, 9-pin (RXD, TXD, RTS, CTS)                                                                                                                                       |
| <a href="#"><u>CX5330-N031</u></a>      | RS485 interface, D-sub socket, 9-pin, configuration as an end point, without echo, termination on                                                                                             |
| <a href="#"><u>CX5330-N031-0001</u></a> | RS485 interface, D-sub socket, 9-pin, configuration as an end point, with echo, termination on                                                                                                |
| <a href="#"><u>CX5330-N031-0002</u></a> | RS485 interface, D-sub socket, 9-pin, configuration as drop point, without echo, termination off                                                                                              |
| <a href="#"><u>CX5330-N031-0003</u></a> | RS485 interface, D-sub socket, 9-pin, configuration as drop point, with echo, termination off                                                                                                 |
| <a href="#"><u>CX5330-N031-0004</u></a> | RS422 interface, D-sub socket, 9-pin, configuration as full duplex end point, termination on                                                                                                  |
| <a href="#"><u>CX5330-M112</u></a>      | 2 x EtherCAT master interface                                                                                                                                                                 |
| <a href="#"><u>CX5330-B110</u></a>      | EtherCAT slave interface, EtherCAT IN and OUT (2 x RJ45)                                                                                                                                      |
| <a href="#"><u>CX5330-M310</u></a>      | PROFIBUS master interface, D-sub socket, 9-pin                                                                                                                                                |
| <a href="#"><u>CX5330-B310</u></a>      | PROFIBUS slave interface, D-sub socket, 9-pin                                                                                                                                                 |
| <a href="#"><u>CX5330-M510</u></a>      | CANopen master interface, D-sub plug, 9-pin                                                                                                                                                   |
| <a href="#"><u>CX5330-B510</u></a>      | CANopen slave interface, D-sub plug, 9-pin                                                                                                                                                    |

[CX5330-M910](#)

Ethernet (2 x RJ45 switch), expandable for real-time protocols, e.g. PROFINET, EtherNet/IP™, BACnet/IP

## Accessories

| Accessories                                         |                                                                                                                                                                           |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#"><u>CX1900-0132</u></a>                  | 16 GB microSD card                                                                                                                                                        |
| <a href="#"><u>CX2900-0026</u></a>                  | 20 GB CFast card, 3D flash, extended temperature range (only for Windows CE or TwinCAT/BSD operating systems)                                                             |
| <a href="#"><u>CX2900-0038</u></a>                  | 40 GB CFast card, 3D flash, extended temperature range                                                                                                                    |
| <a href="#"><u>CX2900-0040</u></a>                  | 80 GB CFast card, 3D flash, extended temperature range                                                                                                                    |
| <a href="#"><u>CX2900-0042</u></a>                  | 160 GB CFast card, 3D flash, extended temperature range                                                                                                                   |
| <a href="#"><u>CX2900-0044</u></a>                  | 320 GB CFast card, 3D flash, extended temperature range                                                                                                                   |
| <a href="#"><u>CX2900-0101</u></a>                  | Housing locking clips (black) for the CX52x0, CX53x0, CX56x0 and CX20xx series<br>10 locking pin sets (each set consisting of two pieces)                                 |
| <a href="#"><u>CX2900-0102</u></a>                  | Cover for left-side module bus connector, 5 pieces                                                                                                                        |
| <a href="#"><u>CX2900-0108</u></a>                  | Logo strips for CX5xxx, transparent for individual labeling, package contents 20 units                                                                                    |
| <a href="#"><u>C9900-Z468</u></a>                   | Adapter cable DisplayPort to DVI, 40 cm                                                                                                                                   |
| <a href="#"><u>C9900-K530,-K552,-K553,-K554</u></a> | 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                    |
| <a href="#"><u>C9900-K569,-K570,K577</u></a>        | 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 |
| <a href="#"><u>ZK1090-9191-0xxx</u></a>             | RJ45, plug, straight, male, 8-pin – RJ45, plug, straight, male, 8-pin                                                                                                     |
| <a href="#"><u>ZK1093-9191-0xxx</u></a>             | RJ45, plug, straight, male, 8-pin – RJ45, plug, straight, male, 8-pin                                                                                                     |
| <a href="#"><u>C9900-K780...K783,-K820</u></a>      | Display cable, shielded, PVC, fixed installation, black, DVI-D, plug, straight, male, 24 + 1-pin – DisplayPort, plug, straight, male, 20-pin                              |
| <a href="#"><u>BZ1xxx</u></a>                       | 100 contact labels, various colors, pre-printed                                                                                                                           |
| <a href="#"><u>BZ2xxx</u></a>                       | 100 contact labels, various colors, blank                                                                                                                                 |