

X20CP148x and X20CP348x

1 General information

Based on state-of-the-art Intel Celeron processor technology, the X20 CPUs cover a wide spectrum of demands. They can be implemented in solutions ranging from standard applications to those requiring the highest levels of performance.

The x86 100MHz-compatible X20CP1483 is the entry-level X20 CPU. With an optimum price/performance ratio, it has the same basic features as all of the larger CPUs.

USB and Ethernet are included in every CPU. In addition, every CPU has a POWERLINK connection for real-time communication.

In addition, there are up to three multi-purpose slots for additional interface modules.

- Intel Celeron 650/400/266 Performance with additional I/O processor
- Entry-level CPU is Intel x86 100MHz-compatible with additional I/O processor
- Ethernet, POWERLINK V1/V2 and USB onboard
- Modular expansion of interfaces
- CompactFlash as removable application memory
- Fan-free or exchangeable fan
- Extremely compact

2 Oder data - X20CP148x



Model number	Short description
CPUs	
X20CP1483	X20 CPU, x86 100 MHz Intel compatible, 32 MB DRAM, 128 kB SRAM, exchangeable application memory: CompactFlash, 1 insert slot for X20 interface modules, 2 USB interfaces, 1 RS232 interface, 1 Ethernet interface 10/100 Base-T, 1 POWERLINK V1/V2 interface, incl. power supply module, TB12 terminal block and slot covers, X20AC0SR1 X20 end plate right included, order program memory separately.
X20CP1483-1	X20 CPU, x86 100 MHz Intel compatible, 64 MB DRAM, 128 kB SRAM, exchangeable application memory: CompactFlash, 1 insert slot for X20 interface modules, 2 USB interfaces, 1 RS232 interface, 1 Ethernet interface 10/100 Base-T, 1 POWERLINK V1/V2 interface, incl. power supply module, TB12 terminal block and slot covers, X20AC0SR1 X20 end plate right included, order program memory separately.
X20CP1484	X20 CPU, Celeron 266 compatible, 32 MB DRAM, 1 MB SRAM, exchangeable application memory: CompactFlash, 1 insert slot for X20 interface modules, 2 USB interfaces, 1 RS232 interface, 1 Ethernet interface 10/100 Base-T, 1 POWERLINK V1/V2 interface, incl. power supply module, TB12 terminal block and slot covers, X20AC0SR1 X20 end plate right included, order program memory separately.
X20CP1484-1	X20 CPU, Celeron 266 compatible, 64 MB DRAM, 1 MB SRAM, exchangeable application memory: CompactFlash, 1 insert slot for X20 interface modules, 2 USB interfaces, 1 RS232 interface, 1 Ethernet interface 10/100 Base-T, 1 POWERLINK V1/V2 interface, incl. power supply module, TB12 terminal block and slot covers, X20AC0SR1 X20 end plate right included, order program memory separately.
X20CP1485	X20 CPU, Celeron 400, 32 MB DRAM, 1 MB SRAM, exchangeable application memory: CompactFlash, 1 insert slot for X20 interface modules, 2 USB interfaces, 1 RS232 interface, 1 Ethernet interface 10/100 Base-T, 1 POWERLINK V1/V2 interface, incl. power supply module, TB12 terminal block and slot covers, X20AC0SR1 X20 end plate right included, order program memory separately.
X20CP1485-1	X20 CPU, Celeron 400, 64 MB DRAM, 1 MB SRAM, exchangeable application memory: CompactFlash, 1 insert slot for X20 interface modules, 2 USB interfaces, 1 RS232 interface, 1 Ethernet interface 10/100 Base-T, 1 POWERLINK V1/V2 interface, incl. power supply module, TB12 terminal block and slot covers, X20AC0SR1 X20 end plate right included, order program memory separately.
X20CP1486	X20 CPU, Celeron 650, 64 MB DRAM, 1 MB SRAM, exchangeable application memory: CompactFlash, 1 insert slot for X20 interface modules, 2 USB interfaces, 1 RS232 interface, 1 Ethernet interface 10/100 Base-T, 1 POWERLINK V1/V2 interface, incl. power supply module, TB12 terminal block and slot covers, X20AC0SR1 X20 end plate right included, order program memory separately.
Required accessories	
CompactFlash	
0CFCRD.0128E.01	Compact Flash 128MB WD extended Temp.
0CFCRD.0512E.01	Compact Flash 512MB WD extended Temp.
5CFCRD.0064-03	CompactFlash 64 MB Western Digital (SLC)
5CFCRD.0128-03	CompactFlash 128 MB Western Digital (SLC)
5CFCRD.016G-06	CompactFlash 16 GB B&R (SLC)
5CFCRD.0256-03	CompactFlash 256 MB Western Digital (SLC)
5CFCRD.0512-03	CompactFlash 512 MB Western Digital (SLC)
5CFCRD.1024-03	CompactFlash 1 GB Western Digital (SLC)
5CFCRD.1024-06	CompactFlash 1 GB B&R (SLC)
5CFCRD.2048-03	CompactFlash 2 GB Western Digital (SLC)
5CFCRD.2048-06	CompactFlash 2 GB B&R (SLC)
5CFCRD.4096-03	CompactFlash 4 GB Western Digital (SLC)
5CFCRD.4096-06	CompactFlash 4 GB B&R (SLC)
5CFCRD.8192-03	CompactFlash 8 GB Western Digital (SLC)
5CFCRD.8192-06	CompactFlash 8 GB B&R (SLC)
Optional accessories	
Batteries	
0AC201.91	Lithium batteries 4 pieces, 3 V / 950 mAh button cell Hereby we declare that the Lithium cells contained in this shipment qualify as „partly regulated“. Handle with care. If the package is damaged, inspect cells, repack intact cells and protect cells against short circuits. For emergency information, call RENATA SA at + 41 61 319 28 27
4A0006.00-000	Lithium battery, 3 V / 950 mAh, button cell
X20 CPU exchangeable fan	
X20AC0EF1	X20 CPU exchangeable fan

Table 1: X20CP1483, X20CP1483-1, X20CP1484, X20CP1484-1, X20CP1485, X20CP1485-1, X20CP1486 - Order data

3 Technical data - X20CP148x

Product ID	X20CP1483	X20CP1483-1	X20CP1484	X20CP1484-1	X20CP1485	X20CP1485-1	X20CP1486				
Short description											
Interfaces	1x RS232, 1x Ethernet, 1x POWERLINK V1/V2, 2x USB, 1x X2X Link										
System module	CPU										
General information											
Cooling	Fan-free						Fanless with derating (see operational conditions) Exchangeable fans for entire temperature range Fan is monitored				
B&R ID code	0xA239	0xAEC5	0x23A5	0xAABE	0x1F18	0xA2AB	0x2164				
Status indicators	CPU function, overtemperature, Ethernet, POWERLINK, CompactFlash, battery										
Diagnostics	Yes, using status LED and software status										
Battery	Yes, with status LED										
CPU function	Yes, with status LED										
CompactFlash	Yes, with status LED										
Ethernet	Yes, with status LED										
POWERLINK	Yes, with status LED										
Overtemperature	Yes, with status LED										
Fan diagnostics	-						Yes, with software status				
ACOPOS capability	Yes										
Visual Components capability	Yes										
Power consumption - Without memory card, interface module and USB	6.0 W		10.5 W				13.5 W				
Internal power consumption of the X2X Link and I/O supply ¹⁾											
Bus	1.42 W										
I/O internal	0.6 W										
Additional power dissipation caused by the actuators (resistive) [W]	-										
Electrical isolation											
IF1 - IF2	Yes										
IF1 - IF3	Yes										
IF1 - IF4	No										
IF1 - IF5	No										
IF1 - IF6	Yes										
IF2 - IF4	Yes										
IF2 - IF5	Yes										
IF3 - IF4	Yes										
IF3 - IF5	Yes										
IF4 - IF5	No										
IF4 - IF6	Yes										
IF5 - IF6	Yes										
PLC - IF1	No										

Table 3: X20CP1483, X20CP1483-1, X20CP1484, X20CP1484-1, X20CP1485, X20CP1485-1, X20CP1486 - Technical data

- 1) The specified values are maximum values. The exact calculation is available for download as a data sheet with the other module documentation on the B&R homepage.
- 2) In parallel operation, only 75% of the rated power can be assumed. Please ensure that all parallel operating power supplies are switched on and off simultaneously.
- 3) Can be configured in Automation Studio
- 4) Minus the configured remanent variables