

Product type designation

CP 1604

COMMUNICATION PROCESSOR CP 1604 PC/104 PLUS CARD (32 BIT; 33/66MHZ; 3.3/5V) WITH ASIC ERTEC 400 FOR CONNECTING TO PROFINET IO WITH 4-PORT-REAL-TIME-SWITCH VIA DEVELOPMENT KIT DK-16XX PN IO; NCM PC



Transmission rate

Transfer rate	100
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Interfaces

Number of electrical connections

- at the 1st interface / acc. to Industrial Ethernet
- for power supply

4
1

Type of electrical connection

- at the 1st interface / acc. to Industrial Ethernet
- for power supply

RJ45 port via connection board
4-pole terminal block through power supply board

Supply voltage, current consumption, power loss

Type of voltage / of the supply voltage	DC
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Type of voltage supply / optional external supply	Yes
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Supply voltage

- 1 / from backplane bus
- external
- Note

5 V
5 V
optional external power supply and external supply voltage
alternatively via power supply board (optional accessory)

Relative symmetrical tolerance / at DC	
• at 5 V	5 %
Consumed current	
• 1 / from backplane bus / at DC / maximum	0.8 A
• from external supply voltage / at DC / at 24 V / maximum	0.3 A
Power loss [W]	4 W
Power loss [W] / in switch mode / maximum	4.1 W

Permitted ambient conditions

Ambient temperature	
• during operation	5 ... 60 °C
• during storage	-20 ... +60 °C
• during transport	-20 ... +60 °C
Relative humidity / at 25 °C / without condensation / during operation / maximum	95 %
Protection class IP	IP00

Design, dimensions and weight

Module format	PC/104-Plus
Width	90 mm
Height	24 mm
Depth	95 mm
Net weight	110 g
Mounting type	Screw mounting
Number of plug-in cards of same design / plug-in / per PC station	1
Number of units / Note	-

Performance data

Performance data / PROFINET communication / as PN IO-Controller

Software / for PROFINET IO communication / required	No
Number of PN IO devices / on PROFINET IO controller / usable / total	128
Number of PN IO IRT devices / on PROFINET IO controller / usable	64
Amount of data	
• as user data for input variables / as PROFINET IO controller / maximum	8192 byte
• as user data for input variables / as PROFINET IO controller / maximum	8192 byte
• as user data for input variables per PN IO device / as PROFINET IO controller / maximum	1430 byte
• as user data for output variables per PN IO device / as PROFINET IO controller / maximum	1430 byte

Performance data / PROFINET communication / as PN IO-Device

Amount of data	
• as user data for input variables / as PROFINET IO device / maximum	1430 byte
• as user data for input variables / as PROFINET IO device / maximum	1430 byte
• as user data for input variables / for each sub-module as PROFINET IO device	254 byte
• as user data for input variables / for each sub-module as PROFINET IO device	254 byte
• as user data for the consistency area for each sub-module	254 byte
Number of submodules / per PROFINET IO-Device	64

Product functions / management, configuration

Product function / MIB support	Yes
Protocol / is supported	
• SNMP v1	Yes
• DCP	Yes
• LLDP	Yes
Configuration software / required	Included in scope of supply
Identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 – higher-level designation/location designation	Yes
• I&M2 - installation date	Yes
• I&M3 - comment	Yes
• I&M4 - signature	Yes
• I&M4 - OEM data	Yes

Product functions / Diagnosis

Product function	
• Web-based diagnostics	Yes
• Port diagnostics	Yes

Product functions / switch

Product feature / Switch	Yes
Product function / switch-managed	No
Product function / with IRT / PROFINET IO switch	Yes

Product functions / Redundancy

Software / for redundancy function / required	No
Product function	
• Ring redundancy	Yes
• Redundancy manager	Yes

Protocol / is supported / Media Redundancy Protocol (MRP)	Yes
Standards, specifications, approvals	
Standard	
• for EMC • for safety / from CSA and UL • for emitted interference • for interference immunity	2004/108/EC CAN/CSA C22.2 & UL 60950-1 EN 61000-6-3, EN 61000-6-4 EN 61000-6-1, EN 61000-6-2
Certificate of suitability	
• CE marking • C-Tick	Yes Yes
Accessories	
accessories	optional: Connection board for CP 1604, power supply board for CP 1604, HARDNET-IE DK (development kit)
Further Information / Internet Links	
Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center • to website: Image database • to website: CAx Download Manager • to website: Industry Online Support	http://www.siemens.com/snst http://www.siemens.com/simatic-net http://www.siemens.com/industrial-controls/mall http://www.siemens.com/industry/infocenter http://automation.siemens.com/bilddb http://www.siemens.com/cax https://support.industry.siemens.com
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