SIEMENS

Data sheet	6GK1160-4AA01

Product type designation	CP 1604
	Communications processor CP 1604 PC/104 plus card (32 bit; 33/66M Hz; 3.3/5 V) with ASIC ERTEC 400 for connection to PROFINET IO with 4-port real-time switch via Development kit DK-16XX PN IO; NCM PC

Transfer rate	
Transfer rate	100 Mbit/s

Interfaces	
Number of electrical connections	
• at the 1st interface / acc. to Industrial Ethernet	4
• for power supply	1
Type of electrical connection	
• at the 1st interface / acc. to Industrial Ethernet	RJ45 port via connection board
• for power supply	4-pole terminal block through power supply board

Supply voltage, current consumption, power loss	
Type of voltage / of the supply voltage	DC
Type of voltage supply / optional external supply	Yes
Supply voltage	
• 1 / from backplane bus	5 V
• external	5 V
• Note	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

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 weights

Module format	PC/104-Plus
Width	90 mm
Height	24 mm
Depth	95 mm
Net weight	110 g
Mounting type	Screw mounting

Product features, product functions, product components / general

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, engineering

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 / Diagnostics

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	2004/108/EC
● for safety / from CSA and UL	CAN/CSA C22.2 & UL 60950-1
● for emitted interference	EN 61000-6-3, EN 61000-6-4
● for interference immunity	EN 61000-6-1, EN 61000-6-2
Certificate of suitability	
● CE marking	Yes
● C-Tick	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	http://www.siemens.com/snst
● to website: Industrial communication	http://www.siemens.com/simatic-net
● to website: Industry Mall	http://www.siemens.com/industrial-controls/mall
● to website: Information and Download Center	http://www.siemens.com/industry/infocenter
● to website: Image database	http://automation.siemens.com/bilddb
● to website: CAx Download Manager	http://www.siemens.com/cax
● to website: Industry Online Support	https://support.industry.siemens.com

Security information

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