SIEMENS

Data sheet 6GK1160-4AA01

product type designation

CP 1604

Communications processor CP 1604 PC/104 plus card (32-bit; 33/66 MHz; 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 / according to Industrial Ethernet 	4
• for power supply	1
type of electrical connection	
 at the 1st interface / according 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 power 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
fastening method	Screw mounting

product features, product functions, product components / gene	oral
number of plug-in cards of same design / plug-in / per PC station	1
number of units / note	
performance data / PROFINET communication / as PN IO control	ller
software / for PROFINET IO communication / required	No
number of PN IO devices / on PROFINET IO controller /	128
operable / total	120
number of PN IO IRT devices / on PROFINET IO controller /	64
operable	
data volume	
 as user data for input variables / as PROFINET IO controller / maximum 	8192 byte
 as user data for output 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	
data volume	
as user data for input variables / as PROFINET IO device / maximum	1430 byte
as user data for output 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 output 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
Jan	moduced in coope of cupply
identification & maintenance function	moladed in ecope of eappry
	Yes
identification & maintenance function	
identification & maintenance function • I&M0 - device-specific information	Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation	Yes Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date	Yes Yes Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment	Yes Yes Yes Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature	Yes Yes Yes Yes Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data	Yes Yes Yes Yes Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data product functions / diagnostics	Yes Yes Yes Yes Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data product functions / diagnostics product function	Yes Yes Yes Yes Yes Yes Yes Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data product functions / diagnostics product function • web-based diagnostics	Yes Yes Yes Yes Yes Yes Yes Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data product functions / diagnostics product function • web-based diagnostics • port diagnostics	Yes Yes Yes Yes Yes Yes Yes Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data product functions / diagnostics product function • web-based diagnostics • port diagnostics product functions / switch	Yes Yes Yes Yes Yes Yes Yes Yes Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data product functions / diagnostics product function • web-based diagnostics • port diagnostics product functions / switch product feature / switch	Yes Yes Yes Yes Yes Yes Yes Yes Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data product functions / diagnostics product function • web-based diagnostics • port diagnostics product functions / switch product feature / switch product function / switch-managed	Yes Yes Yes Yes Yes Yes Yes Yes You Yes Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data product functions / diagnostics product function • web-based diagnostics • port diagnostics product functions / switch product feature / switch product function / switch-managed product function / with IRT / PROFINET IO switch product functions / redundancy	Yes Yes Yes Yes Yes Yes Yes Yes You Yes Yes Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data product functions / diagnostics product function • web-based diagnostics • port diagnostics product functions / switch product feature / switch product function / switch-managed product function / with IRT / PROFINET IO switch product functions / redundancy software / for redundancy function / required	Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data product functions / diagnostics product function • web-based diagnostics • port diagnostics product functions / switch product feature / switch product function / switch-managed product function / with IRT / PROFINET IO switch product functions / redundancy software / for redundancy function / required product function	Yes Yes Yes Yes Yes Yes Yes Yes Yes No Yes No
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data product functions / diagnostics product function • web-based diagnostics • port diagnostics product functions / switch product feature / switch product function / switch-managed product function / with IRT / PROFINET IO switch product functions / redundancy software / for redundancy function / required product function • ring redundancy	Yes Yes Yes Yes Yes Yes Yes Yes Yes No Yes No Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data product functions / diagnostics product function • web-based diagnostics • port diagnostics product functions / switch product feature / switch product function / with IRT / PROFINET IO switch product functions / redundancy software / for redundancy function / required product function • ring redundancy • redundancy manager	Yes Yes Yes Yes Yes Yes Yes Yes Yes Y
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data product functions / diagnostics product function • web-based diagnostics • port diagnostics product functions / switch product function / switch product function / switch product function / with IRT / PROFINET IO switch product functions / redundancy software / for redundancy function / required product function • ring redundancy • redundancy manager protocol / is supported / Media Redundancy Protocol (MRP)	Yes Yes Yes Yes Yes Yes Yes Yes Yes No Yes No Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data product functions / diagnostics product function • web-based diagnostics • port diagnostics product functions / switch product function / switch product function / switch-managed product function / with IRT / PROFINET IO switch product functions / redundancy software / for redundancy function / required product function • ring redundancy • redundancy manager protocol / is supported / Media Redundancy Protocol (MRP) standards, specifications, approvals	Yes Yes Yes Yes Yes Yes Yes Yes Yes Y
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data product functions / diagnostics product function • web-based diagnostics • port diagnostics product functions / switch product function / switch product function / switch-managed product function / with IRT / PROFINET IO switch product functions / redundancy software / for redundancy function / required product function • ring redundancy • redundancy manager protocol / is supported / Media Redundancy Protocol (MRP) standards, specifications, approvals standard	Yes Yes Yes Yes Yes Yes Yes Yes Yes Y
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation • I&M2 - installation date • I&M3 - comment • I&M4 - signature • I&M4 - OEM data product functions / diagnostics product function • web-based diagnostics • port diagnostics product functions / switch product function / switch product function / switch-managed product function / with IRT / PROFINET IO switch product functions / redundancy software / for redundancy function / required product function • ring redundancy • redundancy manager protocol / is supported / Media Redundancy Protocol (MRP) standards, specifications, approvals	Yes Yes Yes Yes Yes Yes Yes Yes Yes Y

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 web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool
• 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	
security information	Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates. For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit http://www.siemens.com/industrialsecurity. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit http://support.automation.siemens.com. (V3.4)

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