

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

6GK1161-6AA01

PC COMMUNICATION PROCESSOR

Used with the applicable SCALANCE industrial networks configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens official manufacturer document: 6GK1161-6AA01.pdf

Product type designation

CP 1616
COMMUNICATION PROCESSOR CP 1616 PCI-CARD (32 BIT;
33/66MHZ; 3.3/5V) WITH ASIC ERTEC 400 FOR CONNECT. TO
PROFINET IO WITH 4-PORT-REAL-TIME-SWITCH (RJ45)VIA
DEVELOPMENT KIT DK-16XX PN IO; NCM PC



Transmission 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
• for power supply	Low-voltage socket for hollow plug 3.5 mm (-) / 1.3 mm (+)
Supply voltage, current consumption, power loss	
Type of voltage / of the supply voltage	DC
Supply voltage	
• 1 / from backplane bus	5 V
• external	6 ... 9 V
Relative symmetrical tolerance / at DC	
• at 5 V	5 %
• at 12 V	5 %

Consumed current	
• 1 / from backplane bus / at DC / maximum	0.8 A
• from external supply voltage / at DC / at 6 V / maximum	0.65 A
• from external supply voltage / at DC / at 9 V / maximum	0.45 A
Power loss [W]	4 W
Power loss [W] / in switch mode / maximum	4.1 W

Permitted ambient conditions

Ambient temperature	
• during operation	5 ... 70 °C
• during storage	-40 ... +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	PCI
Width	18 mm
Height	107 mm
Depth	167 mm
Net weight	110 g
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	89/336/EEC 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
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
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)

last modified:

06/05/2017 