Data sheet 6ES7647-6PD10-0AA0

No longer available SIMATIC IPC827C (Box PC), HD graphics onboard, 2x10/100/1000 Mbps Ethernet RJ45; 4xUSB V2.0 (high current); 1x serial (COM 1); RAID controller onboard; CompactFlash drive No. 1 on front; Watchdog, temp./fan monitoring Core I3-330E (2C/4T, 2.13 GHz, HT, VT, 3 MB cache) 2 GB DDR3 1066 DIMM; AC 110/230V industrial power supply unit with NAMUR; Power supply cable Europe 3x PCI, 1x PCIE (X4), 1x PCIE (X16) Free 250 GB HDD SATA Windows XP Prof. SP3 MUI (de, en, fr, es, it) without expansion (software)

Installation type/mounting	
Mounting	Wall mounting, portrait mounting
Design	Box PC, built-in unit
Supply voltage	
Type of supply voltage	100/240 V AC (autorange); 24 V DC
Line frequency	
 Rated value 50 Hz 	Yes
 Rated value 60 Hz 	Yes
Mains buffering	
 Mains/voltage failure stored energy time 	20 ms
Processor	
Processor type	Core i7-610E (2C/4T, 2.53 GHz, TB, HT, VT, AMT, 4MB cache); Core i3-330E (2C/4T, 2.13 GHz, HT, VT, 3MB cache); Celeron P4505 (2C/2T, 1.86 GHz, VT, 2MB cache);
Chipset	Intel QM57 Express Chipset
Graphic	
Graphics controller	Intel HD graphics controller
Drives	
Optical drives	DVD±R±RW combi-drive, optional
Hard disk	3.5" SATA ≥ 250 GB, optional ≥ 500 GB; RAID1 2x 2.5" SATA ≥ 320 GB; all internal drives are vibration-damped
SSD	Yes; ≥ 240 GB optional
Memory	
Type of memory	DDR3-1066 DIMM
Main memory	1 / 2 / 4 / 8 GB; ECC optional
Capacity of main memory, max.	8 Gbyte
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max.	2 Mbyte; 128 KB can be stored in the buffer time; optional
Hardware configuration	
Slots	
• free slots	3x PCI, 1x PCIe (x4), 1x PCIe (x16); with card retainer
 Number of PCI slots 	3
 Number of PCI slots 	2
 Number of compact flash slots 	1
Interfaces	
PROFIBUS/MPI	Optionally onboard, isolated, max. 12 Mbit/s, compatible with CP 5611-A2
Number of industrial Ethernet interfaces	2; onboard
Number of PROFINET interfaces	3; Optional
USB port	4x USB 2.0 high speed/high current
Connection for keyboard/mouse	USB / USB
serial interface	COM1: 1x V.24 (RS 232)
parallel interface	optional LPT1
Video interfaces	
Graphics interface	DVI-I: VGA / DVI combined

Industrial Ethernet	
Industrial Ethernet interface	onboard, 2x 10 / 100 / 1 000 Mbit, RJ45
— 100 Mbps	Yes
— 1000 Mbps	Yes
Protocols	
Protocols (Ethernet)	
• TCP/IP	Yes
Interrupts/diagnostics/status information	
Bus diagnostics	Yes
Integrated Functions	
Monitoring functions	Vac
Temperature monitoring	Yes
Watchdog	Yes
Status LEDs	Yes
• Fan	Yes
Monitoring function via network	Optional
EMC	
Interference immunity against discharge of static electricity	
 Interference immunity against discharge of static electricity 	±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2
Interference immunity against high-frequency electromagneti	10.1201.1001.2
Interference immunity against high-frequency Interference immunity against high frequency	10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-
radiation	4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10
- unanimotive -	kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6
Interference immunity to cable-borne interference	
Interference immunity on supply cables	±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge
, ,,,	symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric
 Interference immunity on signal cables >30m 	±2 kV acc. to IEC 61000-4-5, surge, length > 30 m
 Interference immunity on signal cables < 30m 	±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC
	61000-4-4; burst; length > 3 m
Interference immunity against voltage surge	
 asymmetric interference 	±2 kV acc. to IEC 61000-4-5, surge asymmetric
symmetric interference	±1 kV acc. to IEC 61000-4-5, surge symmetric
Interference immunity to magnetic fields	
 Interference immunity to magnetic fields at 50 Hz 	100 A/m; to IEC 61000-4-8
Emission of conducted and non-conducted interference	
 Interference emission via line/AC current cables 	EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A
Degree and class of protection	
IP degree of protection	IP20
IP (at the front)	IP20
IP (rear)	IP20
	11 20
Standards, approvals, certificates	V
CE mark	Yes
UL approval	Yes
• UL 508	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
FCC	Yes
EMC	CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005
Ambient conditions	
Ambient conditions	
Ambient conditions Ambient temperature during operation	
	+5 °C up to 55 °C
Ambient temperature during operation	+5 °C up to 55 °C
Ambient temperature during operation • Ambient temperature during operation Ambient temperature during storage/transportation	+5 °C up to 55 °C -20 °C
Ambient temperature during operation • Ambient temperature during operation Ambient temperature during storage/transportation • min.	-20 °C
Ambient temperature during operation • Ambient temperature during operation Ambient temperature during storage/transportation • min. • max.	
Ambient temperature during operation • Ambient temperature during operation Ambient temperature during storage/transportation • min. • max. Relative humidity	-20 °C 60 °C
Ambient temperature during operation • Ambient temperature during operation Ambient temperature during storage/transportation • min. • max.	-20 °C

 Vibration resistance during operation acc. to IEC 60068-2-6 	tested to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm, 58 Hz to 200 Hz: 9.8 m/s 2 (1 g)	
Shock testing		
 Shock load during operation 	Tested to DIN IEC 60068-2-29: 50 m/s² (5 g), 30 ms, 100 shocks	
Operating systems		
pre-installed operating system	Windows XP Prof. SP3, MUI; Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 2009 English on 8 GB CompactFlash; without operating system	
without operating system	Yes	
pre-installed operating system		
 Windows XP Professional 	Yes	
Windows 7	Yes; Ultimate 32 bit or 64 bit	
Software		
SIMATIC Software	Optional package with SIMATIC WinCC or WinAC RTX	
Dimensions		
Width	312 mm	
Height	153 mm; With DVD drive: 174 mm	
Depth	301 mm; incl. mounting rail	

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