SIEMENS

SIMATIC IPC827C (BOX PC), HD GRAFIK ONBOARD, 2X10/100/1000 MBIT/S ETHERNET RJ45; 4 X USB V2.0 (HIGH CURRENT); 1 X SERIAL (COM1); RAID-CONTROLLER ON BOARD; COMPACT FLASH DRIVE NO.1 FRONT SIDE; WATCHDOG, TEMP.-/FAN- MONITORING;

Figure similar

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 in total (incl. times, 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
USB port	4x USB 2.0 high speed/high current
Connection for keyboard/mouse	USB / USB
serial interface	COM1: 1 x V.24 (RS232)
parallel interface	optional LPT1

Video interfaces

• Graphics interface	DVI-I: VGA / DVI combined

Industrial Ethernet

• Industrial Ethernet interface	Onboard, 2x 10 / 100 / 1000 Mbit, RJ45
— 100 Mbps	Yes
— 1000 Mbps	Yes

Interrupts/diagnostics/status information

Bus diagnostics	Yes

Integrated Functions

Monitoring functions

• Temperature	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 electromagnetic fields	
• Interference immunity against high frequency radiation	10 V/m for 80 - 1000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 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 (at the front)	IP20
IP (rear)	IP20

Standards, approvals, certificates	
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
• EN 61000-6-2	Yes

Ambient conditions	
Ambient temperature during operation	
• Ambient temperature during operation	+5 °C up to 55 °C
• min.	5 °C
• max.	55 °C

Ambient temperature during storage/transportation	
● min.	-20 °C
● max.	60 °C
Relative humidity	
● Relative humidity	Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% at 25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation)
Vibrations	
● Vibration load in operation	Tested to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm, 58 Hz to 200 Hz: 9.8 m/s² (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	
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
pre-installed operating system	Yes
without operating system	Yes
pre-installed operating system	
● Windows XP Professional	Yes
● Windows 7	Yes; Ultimate 32 bits or 64 bits
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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