SIEMENS

Data sheet 6ES7647-8CF33-2AB3

SIMATIC IPC227G 2x display ports; 3x 10/100/1000 Mbps Ethernet; 4x USB3.0, 2x M.2 expansion slot; 24 V DC industrial power supply Atom X6414RE (4-core) with TPM; 16 GB RAM; 2x COM; 256 GB Eco SSD; without hardware extension; Windows 10 Enterprise 2019 LTSC, 64-bit; MUI (en,de,fr,it,es); vertical mounting;

Installation type/mounting		
Mounting	DIN rail, wall mounting, portrait mounting	
Design	Box PC, built-in unit	
Supply voltage		
Type of supply voltage	24 V DC	
Mains buffering		
Mains/voltage failure stored energy time	20 ms	
Processor		
Processor type	Intel Atom X6211E / X6413E / X6414RE	
Chipset	SoC	
Graphic		
Graphics controller	Integrated	
Drives		
SSD	Yes; 256 Eco	
Memory		
Type of memory	DDR4 SO-DIMM	
Main memory	2 / 4 / 8 / 16 Gbyte; inband ECC optional	
Capacity of main memory, max.	16 Gbyte	
Hardware configuration		
Slots		
• free slots	2x M.2	
Interfaces		
Number of industrial Ethernet interfaces	3; 3x Ethernet (RJ45)	
Connection for keyboard/mouse	USB / USB	
serial interface	without / 1x / 2x COM (RS 232 / 485 / 422; selectable)	
Video interfaces		
 Graphics interface 	2x DisplayPort	
Industrial Ethernet		
 Industrial Ethernet interface 	3x Ethernet (RJ45)	
— 100 Mbps	Yes	
— 1000 Mbps	Yes	
Integrated Functions		
Monitoring functions		
 Temperature monitoring 	Yes	
 Watchdog 	Yes	
Status LEDs	1x power, 3x user	
• Fan	No	
 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 - 1 000 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 (5 kHz/100 kHz) acc. to IEC 61000-4-4; burst; length < 30 m; ±2 kV (5 kHz/100 kHz) acc. to IEC 61000-4-4; burst; length > 30 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	IP40
Standards, approvals, certificates	
CE mark	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
FCC	Yes
EMC	CE, EN 61000-6-4:2007, EN 61000-6-2:2005
Dust protection	Protection against foreign bodies > 1 mm
Ambient conditions	
Ambient temperature during operation	
Ambient temperature during operation	0 °C to 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 85 % at 30 $^{\circ}$ C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 $^{\circ}$ C (no condensation)
Vibrations	
 Vibration resistance during operation acc. to IEC 60068-2-6 	tested according to IEC 60068-2-6: 5 Hz to 8.4 Hz: 3.5 mm, 8.4 Hz to 200 Hz: 9.8m/s^2 (1 g) (except DIN Rail) 10 Hz to 58 Hz: 0.0375 mm, 58 Hz to 500 Hz: 4.9 m/s 2 (0.5 g) (DIN Rail)
Shock testing	
 Shock load during operation 	Tested according to IEC 60068-2-27: 150 m/s², 11 ms
Operating systems	
pre-installed operating system	Windows 10 IoT Enterprise 2019 LTSC, 64 bit, MUI
without operating system	Yes; Optional
pre-installed operating system	
• Windows 10	Yes
 Windows 10 Enterprise 	Yes; Windows 10 IoT Enterprise 2019 LTSC, 64 bit, MUI
Dimensions	
Width	191 mm
Height	100 mm
Depth	64 mm

last modified: 10/12/2021 🖸