SIEMENS

Data sheet

6AG4131-3GH32-3DA4

SIMATIC IPC627E (Box PC), UHD Graphics onboard; DP/DVI-D; 3x Gigbit Ethernet (IE/PN); 6x USB V3.1 Gen.2; 1x serial (COM 1); RAID controller onboard; Watchdog, temperature and fan monitoring; Core i7-8700 (6C/12T, 3.2(4.6) GHz, 12 MB cache, VT-d, AMT); RAID1 2x SSD 2.5" SATA 960 GB in removable frame; 32 GB DDR4-2666 (2x16); 110/230 V AC industrial power supply unit with NAMUR; power supply cable Europe; Windows 10 Enterprise 2019 LTSC, 64-bit, MUI (en, de, fr, it, es) For Core i7; SIMATIC IPC DiagMonitor and Image&Partition Creator supplied; without expansion (HW); 5x PCIe (1 x16, 1 x4, 3 x1);

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	Celeron G4900 (2C/2T, 3.1 GHz, 2 MB cache; VT-d); Core i3-8100 (4C/4T, 3.6 GHz, 6 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d, AMT)
Chipset	Intel C246
Graphic	
Graphics controller	Intel UHD Graphics 630 (Core i); Intel UHD Graphics 610 (Celeron)
Drives	
Hard disk	2.5" SATA ≥ 320 GB
SSD	Yes; SSD M.2 NVMe 512 GB; SSD 2.5" SATA 480 / 960 GB; RAID1 2x SSD 2.5" SATA 480 / 960 GB in removable drive bay
Memory	
Type of memory	DDR4-2666 DIMM
Main memory	4 / 8 / 16 / 32 / 64 GB
Capacity of main memory, max.	64 Gbyte
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max.	512 kbyte; 128 KB can be stored in the buffer time
Hardware configuration	
Slots	
• free slots	2x PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); 3x PCI & 2x PCIe (x16, x4); 5x PCIe (1x16, 2x4, 2x1); with card retainer
 Number of PCI slots 	5; Optional
Number of PCI slots	5; Optional
Interfaces	
Number of industrial Ethernet interfaces	3; 3x Ethernet (RJ45)
USB port	6x USB 3.1 Gen. 2 (2x type C)
Connection for keyboard/mouse	USB / USB
serial interface	1x COM
Video interfaces	
Graphics interface	2x DisplayPort; 1x DVI-D
Industrial Ethernet	0.5% (0.145)
Industrial Ethernet interface	3x Ethernet (RJ45)
— 100 Mbps	Yes
— 1000 Mbps	Yes
Integrated Functions	
Monitoring functions	

Tanana and an analita dia a	V	
Temperature monitoring	Yes	
Watchdog Status LEDs	Yes	
Status LEDs Fan	1x power, 3x user Yes	
Monitoring function via network	Optional	
EMC	Optional	
Interference immunity against discharge of static electricity		
Interference immunity against discharge of static	±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc.	
electricity	to IEC 61000-4-2	
Interference immunity against high-frequency electromagnetic fields		
 Interference immunity against high frequency radiation 	10 V/m for 80 2 700 MHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2.7 to 6 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz to 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	
late for a second it is a signal as black 200-	symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric	
 Interference immunity on signal cables >30m Interference immunity on signal cables < 30m 	±2 kV acc. to IEC 61000-4-5, surge, length > 30 m	
• Interference infinitinity 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	
Standards, approvals, certificates		
CE mark	Yes	
UL approval	Yes	
cULus	Yes	
RCM (formerly C-TICK)	Yes	
KC approval	Yes	
EAC (formerly Gost-R)	Yes	
FCC	Yes	
EMC	CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005	
Marine approval		
American Bureau of Shipping (ABS)	Yes	
Det Norske Veritas (DNV)	Yes	
Nippon Kaiji Kyokai (Class NK)	Yes	
Ambient conditions		
Ambient temperature during operation		
Ambient temperature during operation	+5 °C up to 55 °C	
Ambient temperature during storage/transportation	20.90	
• min.	-20 °C	
max. Palative humidity	60 °C	
Relative humidity • Relative humidity	Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to	
• Relative numbers	80% at 25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation)	
Vibrations		
Vibration resistance during operation acc. to IEC 60068-2-6	tested according to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to 500 Hz 9.8 m/s² (1 g)	
Shock testing	Tooled to DIN IFO 00000 0.00 F0 1-2 /F> 00 400 1	
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 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI	
without operating system	Yes; Optional	
pre-installed operating system	Voc. Windows 10 Enterprise 2010 LTCD or 2010 LTCC 0.4 htt 1411	
Windows 10 Enterprise	Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI	
Software		
SIMATIC Software	Optional package with SIMATIC WinCC	
Dimensions		

Width Height Depth 314 mm

93 mm; For variant 5x PCI(e): 155 mm

301 mm; incl. mounting rail

last modified:

2/20/2023 🖸