SIEMENS

Data sheet

6AG4131-3GC10-1AA0

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); SSD 2.5" SATA 480 GB internal; 8 GB DDR4-2666 (2x4); 24 V DC industrial power supply Windows 10 Enterprise 2016 LTSB, 64 bit, MUI (en, de, fr, it, es) For Core i7; without expansion (software); without expansion (HW); 2x PCI

•	all mounting, portrait mounting
	all mounting, portrait mounting
	3, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
Design	ox PC, built-in unit
Supply voltage	
Type of supply voltage 10	00/240 V AC (autorange); 24 V DC
Line frequency	
Rated value 50 Hz Ye	es
Rated value 60 Hz Ye	es
Mains buffering	
Mains/voltage failure stored energy time) ms
Processor	
GH	eleron G4900 (2C/2T, 3.1 GHz, 2 MB cache; VT-d); Core i3-8100 (4C/4T, 3.6 Hz, 6 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, IT-d, AMT)
Chipset	tel C246
Graphic	
Graphics controller Int	tel UHD Graphics 630 (Core i); Intel UHD Graphics 610 (Celeron)
Drives	
Hard disk 2.5	5" SATA ≥ 320 GB
	es; SSD M.2 NVMe 512 GB; SSD 2.5" SATA 480 / 960 GB; RAID1 2x SSD 5" SATA 480 / 960 GB in removable drive bay
Memory	
Type of memory DE	DR4-2666 DIMM
Main memory 4 /	/ 8 / 16 / 32 / 64 GB
Capacity of main memory, max.	Gbyte
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max. 51	2 kbyte; 128 KB can be stored in the buffer time
Hardware configuration	
Slots	
	PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); 3x PCI & 2x PCIe 16, x4); 5x PCIe (1x16, 2x4, 2x1); with card retainer
Number of PCI slots5;	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 US	SB / USB
serial interface 1x	COM
Video interfaces	
• Graphics interface 2x	DisplayPort; 1x DVI-D
Industrial Ethernet	
• Industrial Ethernet interface 3x	Ethernet (RJ45)
— 100 Mbps Ye	es
— 1000 Mbps Ye	es
Integrated Functions	
Monitoring functions	
Temperature monitoring Ye	es
Watchdog Ye	es

Status LEDs	1x power, 3x user
• Fan	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. to IEC
electricity	61000-4-2
Interference immunity against high-frequency electromagnetic field	ds
 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 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	Sure, longur - O III
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	
• 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	20 0 (no condensation), clorage. 370 to 9370 at 23 0 (no condensation)
Vibration Vibration resistance during operation acc. to IEC 60068-	tested according to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to
2-6 Shock testing	500 Hz 9.8 m/s ² (1 g)
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	
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	314 mm
Height	93 mm; For variant 5x PCI(e): 155 mm
Depth	301 mm; incl. mounting rail

last modified:

6/25/2021