SIEMENS

Data sheet

6AG4131-3GC20-1AA0

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; 16 GB DDR4-2666 (2x8); 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 | |
| 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 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 | |
| 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 | |
| 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 | |
| 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 | · · · |
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| Width | 314 mm |
|--------|--------------------------------------|
| Height | 93 mm; For variant 5x PCI(e): 155 mm |
| Depth | 301 mm; incl. mounting rail |

last modified:

12/21/2020