


SIMATIC IPC827D (Box PC) HD graphic onboard, 2x Gigabit Ethernet (IE/PN) 4xUSB V3.0; 1x serial (COM 1); RAID controller onboard; Watchdog, temp./fan monitoring XEON E3-1268LV3 4C/8T, 2.3 (3.3) GHz, 8 MB cache VT-D, AMT); PROFINET (IRT, 3 ports, CP 1616-compatible); 2 MB buffered SRAM Solid-state drive 240 GB; 320 GB HDD SATA (2.5") 16 GB DDR3 1600 DIMM; 1x PCIE (X16); 1x PCIE (X4); 3x PCI without expansion (HW) Windows 10 Enterprise LTSB 2016, 64 bit, MUI (en, de, fr, it, es) for Xeon; without expansion (software) 24 V DC industrial Power supply

| 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   |  |
| <ul style="list-style-type: none"> <li>Rated value 50 Hz</li> <li>Rated value 60 Hz</li> </ul>                         | Yes<br>Yes   |
| Mains buffering  |  |
| <ul style="list-style-type: none"> <li>Mains/voltage failure stored energy time</li> </ul>                             | 20 ms  |
| Processor  |  |
| Processor type   | Celeron G1820TE (2C/2T, 2.2 GHz, 2 MB Cache); Core i3-4330TE (2C/4T, 2.4 GHz, 4 MB Cache); Xeon E3-1268L v3 (4C/8T, 2.3 (3.3) GHz, 8 MB Cache, AMT)  |
| Chipset  | Intel DH82C226 PCH   |
| Graphic  |  |
| Graphics controller  | Intel HD graphics controller P4600 GT2 (Xeon, Core i3); Intel HD graphics controller (Celeron)   |
| Drives   |  |
| Optical drives   | DVD±R±RW combi-drive, optional   |
| Hard disk  | 3.5" SATA ≥ 500 GB, optional: 3.5" SATA ≥ 1 TB; RAID1 2x 2.5" SATA ≥ 320 GB; solid-state drive (SSD) ≥ 240 GB; all hard disk drives within the enclosure are vibration-damped; RAID1 2x 2.5" SATA ≥ 320 GB byte in removable drive bay |
| SSD  | Yes; ≥ 240 GB optional   |
| Memory   |  |
| Type of memory   | DDR3-1600 DIMM   |
| Main memory  | 2 / 4 / 8 / 16 GB; ECC optional  |
| Capacity of main memory, max.  | 16 Gbyte   |
| Data areas and their retentivity   |  |
| Retentive data area (incl. timers, counters, flags), max.  | 2 Mbyte; 128 KB can be stored in the buffer time; optional   |
| Hardware configuration   |  |
| Slots  |  |
| <ul style="list-style-type: none"> <li>free slots</li> <li>Number of PCI slots</li> <li>Number of PCI slots</li> </ul> | 3x PCI, 1x PCIe (x4), 1x PCIe (x16); with card retainer<br>3<br>2  |
| Interfaces   |  |
| PROFIBUS/MPI   | Optionally onboard, isolated, max. 12 Mbit/s, compatible with CP 5622  |
| Number of industrial Ethernet interfaces   | 2; 2x RJ45 (independent)   |
| Number of PROFINET interfaces  | 3; Optional  |
| USB port   | 4x USB 3.0   |
| Connection for keyboard/mouse  | USB / USB  |
| serial interface   | 1x COM1 (RS 232), optional: 1x COM2 (RS 232)   |
| parallel interface   | optional LPT1  |
| Video interfaces   |  |
| <ul style="list-style-type: none"> <li>Graphics interface</li> </ul>   | 1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)   |
| Industrial Ethernet  |  |
| <ul style="list-style-type: none"> <li>Industrial Ethernet interface</li> </ul>  | Onboard, 2x 10 / 100 / 1000 Mbit, RJ45   |

|  |  |
|--|--|
| — 100 Mbps   | Yes  |
| — 1000 Mbps  | Yes  |
| <b>Interrupts/diagnostics/status information</b>                           |  |
| Bus diagnostics  | Yes  |
| <b>Integrated Functions</b>  |  |
| <b>Monitoring functions</b>  |  |
| • Temperature monitoring   | Yes  |
| • Watchdog   | Yes  |
| • Status LEDs  | Yes  |
| • Fan  | Yes  |
| • Monitoring function via network  | Optional   |
| <b>EMC</b>   |  |
| <b>Interference immunity against discharge of static electricity</b>       |  |
| • 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   |
| <b>Interference immunity against high-frequency electromagnetic fields</b> |  |
| • 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 |
| <b>Interference immunity to cable-borne interference</b>                   |  |
| • 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   |
| <b>Interference immunity against voltage surge</b>                         |  |
| • asymmetric interference  | ±2 kV acc. to IEC 61000-4-5, surge asymmetric  |
| • symmetric interference   | ±1 kV acc. to IEC 61000-4-5, surge symmetric   |
| <b>Interference immunity to magnetic fields</b>                            |  |
| • Interference immunity to magnetic fields at 50 Hz                        | 100 A/m; to IEC 61000-4-8  |
| <b>Emission of conducted and non-conducted interference</b>                |  |
| • Interference emission via line/AC current cables                         | EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A  |
| <b>Degree and class of protection</b>                                      |  |
| IP (at the front)  | IP20   |
| IP (rear)  | IP20   |
| <b>Standards, approvals, certificates</b>                                  |  |
| 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  |
| <b>Marine approval</b>   |  |
| • Germanischer Lloyd (GL)  | Yes  |
| • American Bureau of Shipping (ABS)  | Yes  |
| • Bureau Veritas (BV)  | Yes  |
| • Det Norske Veritas (DNV)   | Yes  |
| • Lloyds Register of Shipping (LRS)  | Yes  |
| • Nippon Kaiji Kyokai (Class NK)   | Yes  |
| <b>Ambient conditions</b>  |  |
| <b>Ambient temperature during operation</b>                                |  |
| • min.   | 5 °C   |
| • max.   | 55 °C  |
| <b>Ambient temperature during storage/transportation</b>                   |  |
| • min.   | -20 °C   |
| • max.   | 60 °C  |
| <b>Relative humidity</b>   |  |
| • 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)                                   |
| <b>Vibrations</b>  |  |

|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Vibration resistance during operation acc. to IEC 60068-2-6</li> </ul> | tested according to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to 500 Hz 9.8 m/s <sup>2</sup> (1 g)                              |
| <b>Shock testing</b>  |  |
| <ul style="list-style-type: none"> <li>• Shock load during operation</li> </ul>                                 | Tested to DIN IEC 60068-2-29: 50 m/s <sup>2</sup> (5 g), 30 ms, 100 shocks   |
| <b>Operating systems</b>  |  |
| pre-installed operating system  | Windows 7 Ultimate, 32-bit/64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI |
| without operating system  | Yes  |
| pre-installed operating system  |  |
| <ul style="list-style-type: none"> <li>• Windows 7</li> <li>• Windows 10 Enterprise</li> </ul>                  | Yes; Ultimate 32 bit or 64 bit<br>Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  |
| <b>Software</b>   |  |
| SIMATIC Software  | Optional package with SIMATIC WinCC or WinAC RTX   |
| <b>Dimensions</b>   |  |
| Width   | 312 mm   |
| Height  | 155 mm; With DVD drive: 179 mm   |
| Depth   | 301 mm; incl. mounting rail  |
| <b>last modified:</b>   | 6/25/2021   |