

SIMATIC IPC427D (Microbox PC), HD graphic onboard,
2x10/100/1000 Mbit/s Ethernet RJ45, 4xUSB V3.0 (high current),
PCIe (optional), 24 V DC power supply

Installation type/mounting

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| Mounting | DIN rail, wall mounting, portrait mounting |
| Design | Box PC, built-in unit |

Supply voltage

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| Type of supply voltage | 24 V DC |
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Processor

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| Processor type | Celeron 827E (1C/1T, 1.40 GHz, 1.5 MB Cache); Core i3-3217UE (2C/4T, 1.60 GHz, 3 MB Cache); Core i7-3517UE (2C/4T, 1.70 (2.80) GHz, 4 MB Cache, iAMT) |
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Graphic

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| Graphics controller | Intel HD Graphics, Intel HD Graphics 4000 |
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Drives

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| Hard disk | 2.5" SATA ≥ 320 GB |
| SSD | Yes; 1x 80 GB, 1x 240 GB SSD, 1x 480 GB SSD |

Memory

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| Type of memory | DDR3 SO-DIMM |
| Main memory | 1 / 2 / 4 / 8 GB; ECC optional |
| Capacity of main memory, max. | 8 Gbyte |

Data areas and their retentivity

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| Retentive data area (incl. timers, counters, flags), max. | 512 kbyte; 128 KB can be stored in the buffer time; optional |
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Hardware configuration

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| Slots | |
| <ul style="list-style-type: none"> • free slots | 2x PCIe; optional: 1x PCIe (x4); 2x PCIe (x1, x4), with card retainer |
| <ul style="list-style-type: none"> • Number of PCI slots | 2; Optional |
| <ul style="list-style-type: none"> • Number of compact flash slots | 2; CFast |

Interfaces

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| PROFIBUS/MPI | onboard, isolated, max. 12 Mbit/s, CP 5611-compatible |
| Number of PROFINET interfaces | 1; 3 ports (incl. switch) |
| USB port | 4x USB 3.0 |
| Connection for keyboard/mouse | USB / USB |
| serial interface | COM1: 1x RS 232, COM2 (optional): 1x RS 232 |

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| Video interfaces | |
| • Graphics interface | 1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional) |
| Industrial Ethernet | |
| • Industrial Ethernet interface | Onboard, 2 x 10/100/1000 Mbit/s, RJ45, no plug-in card necessary |
| — 100 Mbps | Yes |
| — 1000 Mbps | Yes |
| Interrupts/diagnostics/status information | |
| Bus diagnostics | Yes |
| Integrated Functions | |
| Monitoring functions | |
| • Temperature monitoring | Yes |
| • Watchdog | Yes |
| • Status LEDs | 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 - 1000 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 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 (at the front) | IP20 |
| IP (rear) | IP20 |
| Standards, approvals, certificates | |

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| CE mark | Yes |
| UL approval | Yes |
| • UL 508 | Yes |
| cULus | Yes |
| RCM (formerly C-TICK) | Yes |
| KC approval | Yes |
| FCC | Yes |
| EMC | CE, EN 55022A, EN 61000-6-4, EN 61000-6-2 |
| Marine approval | |
| • 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 |
| Ambient conditions | |
| Ambient temperature during operation | |
| • Ambient temperature during operation | 0 °C to +55 °C |
| • min. | 0 °C |
| • max. | 55 °C |
| Ambient temperature during storage/transportation | |
| • min. | -40 °C |
| • max. | 70 °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 to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm, 58 Hz to 200 Hz: 9.8 m/s ² (1 g) |
| Shock testing | |
| • Shock load during operation | Tested to DIN IEC 60068-2-29: 50 m/s ² (5 g), 30 ms, 100 shocks |
| Operating systems | |
| Operating system | Windows 7 Ultimate (Multi-Language) 32-bit / 64-bit, Windows Embedded Standard 7 E/P 32-bit / 64-bit |
| pre-installed operating system | Yes |
| without operating system | Yes |
| pre-installed operating system | |
| • Windows 7 | Yes; Ultimate 32 bits or 64 bits |
| Software | |
| SIMATIC Software | Optionally with pre-installed software bundle SIMATIC WinCC RT Advanced / WinAC RTX |

Dimensions

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| Width | 262 mm |
| Height | 139.7 mm |
| Depth | 50.5 mm |
| last modified: | 05/20/2018 |