

SIMATIC IOT2040, 2x 10/100 Mbit/s Ethernet RJ45; 1x USB2.0, 1x USB client; SD CARD slot; 24 V DC industrial power supply



| Installation type/mounting | |
|--|----------------------------|
| Design | IoT Gateway, built-in unit |
| Supply voltage | |
| Type of supply voltage | 24 V DC (9 ... 36 V) |
| Mains buffering | |
| <ul style="list-style-type: none"> Mains/voltage failure stored energy time | 5 ms |
| Processor | |
| Processor type | Intel Quark X1020 |
| Drives | |
| Hard disk | 1x microSD card slot |
| Memory | |
| Type of memory | DDR3-SDRAM |
| Main memory | 1 GB |
| Capacity of main memory, max. | 1 Gbyte |
| Hardware configuration | |
| Slots | |
| <ul style="list-style-type: none"> free slots | 1x Arduino, 1x mPCIe |

| Interfaces | |
|---|--|
| Number of industrial Ethernet interfaces | 2 |
| USB port | 1x USB 2.0, 1x USB client |
| Connection for keyboard/mouse | USB / USB |
| serial interface | 2x COM ports (RS 232, RS 485) |
| Industrial Ethernet | |
| <ul style="list-style-type: none"> • Industrial Ethernet interface <li style="padding-left: 20px;">— 100 Mbps <li style="padding-left: 20px;">— 1000 Mbps | 2 x Ethernet (RJ45) Yes No |
| Integrated Functions | |
| Monitoring functions | |
| <ul style="list-style-type: none"> • Temperature monitoring • Watchdog • Status LEDs • Fan | No Yes Yes No |
| EMC | |
| Interference immunity against discharge of static electricity | |
| <ul style="list-style-type: none"> • Interference immunity against discharge of static electricity | ±4 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 | |
| <ul style="list-style-type: none"> • Interference immunity against high frequency radiation | 10 V/m for 80 - 1000 MHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 1 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 150 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 |
| Interference immunity to cable-borne interference | |
| <ul style="list-style-type: none"> • Interference immunity on supply cables • Interference immunity on signal cables >30m • Interference immunity on signal cables < 30m | ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±2 kV in accordance with IEC 61000-4-4, burst, length > 30 m |
| Interference immunity against voltage surge | |
| <ul style="list-style-type: none"> • asymmetric interference • symmetric interference | ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric |
| Interference immunity to magnetic fields | |
| <ul style="list-style-type: none"> • Interference immunity to magnetic fields at 50 Hz | 100 A/m; to IEC 61000-4-8 |
| Emission of conducted and non-conducted interference | |
| <ul style="list-style-type: none"> • Interference emission via line/AC current cables | EN 61000-6-4:2007 +A1:2011 |
| Degree and class of protection | |
| IP (at the front) | IP20 |
| Standards, approvals, certificates | |

| | |
|-------------|--|
| Approval | CE (industry), UL, cULus |
| CE mark | Yes |
| UL approval | Yes |
| cULus | Yes |
| KC approval | Yes |
| EMC | CE, EN 61000-6-4:2007 +A1:2011, EN 61000-6-2:2005, EN 61000-6-3:2007 +A1:2011, EN 61000-6-1:2007 |

Ambient conditions

Ambient temperature during operation

- Ambient temperature during operation 0 °C to 50 °C
- min. 0 °C
- max. 50 °C

Relative humidity

- Relative humidity Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 % to 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no condensation)

Vibrations

- Vibration resistance during operation acc. to IEC 60068-2-6 Tested according to IEC 60068-2-6: 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 200 Hz: 9.8 m/s²

Shock testing

- Shock load during operation Tested according to IEC 60068-2-27: 150 m/s², 11 ms

Operating systems

| | |
|--------------------------|-----|
| without operating system | Yes |
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Dimensions

| | |
|--------|--------|
| Width | 144 mm |
| Height | 90 mm |
| Depth | 53 mm |

last modified: 03/15/2018