

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"> <li>Mains/voltage failure stored energy time</li> </ul>	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"> <li>free slots</li> <li>Number of PCI slots</li> </ul>	1x Arduino, 1x mPCIe 0
Interfaces	
Number of industrial Ethernet interfaces	2
Number of PROFINET interfaces	0
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"> <li>Industrial Ethernet interface                             <ul style="list-style-type: none"> <li>— 100 Mbps</li> <li>— 1000 Mbps</li> </ul> </li> </ul>	2x Ethernet (RJ45) Yes No
Integrated Functions	
Monitoring functions	
<ul style="list-style-type: none"> <li>Temperature monitoring</li> <li>Watchdog</li> <li>Status LEDs</li> <li>Fan</li> </ul>	No Yes Yes No
EMC	
Interference immunity against discharge of static electricity	
<ul style="list-style-type: none"> <li>Interference immunity against discharge of static electricity</li> </ul>	±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"> <li>Interference immunity against high frequency radiation</li> </ul>	10 V/m for 80 - 1 000 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
<b>Interference immunity to cable-borne interference</b>	
<ul style="list-style-type: none"> <li>Interference immunity on supply cables</li> </ul>	±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
<ul style="list-style-type: none"> <li>Interference immunity on signal cables &gt;30m</li> </ul>	±2 kV acc. to IEC 61000-4-5, surge, length > 30 m
<ul style="list-style-type: none"> <li>Interference immunity on signal cables &lt; 30m</li> </ul>	±2 kV in accordance with IEC 61000-4-4, burst, length > 30 m
<b>Interference immunity against voltage surge</b>	
<ul style="list-style-type: none"> <li>asymmetric interference</li> </ul>	±2 kV acc. to IEC 61000-4-5, surge asymmetric
<ul style="list-style-type: none"> <li>symmetric interference</li> </ul>	±1 kV acc. to IEC 61000-4-5, surge symmetric
<b>Interference immunity to magnetic fields</b>	
<ul style="list-style-type: none"> <li>Interference immunity to magnetic fields at 50 Hz</li> </ul>	100 A/m; to IEC 61000-4-8
<b>Emission of conducted and non-conducted interference</b>	
<ul style="list-style-type: none"> <li>Interference emission via line/AC current cables</li> </ul>	EN 61000-6-4:2007 +A1:2011
<b>Degree and class of protection</b>	
IP degree of protection	IP20
IP (at the front)	IP20
<b>Standards, approvals, certificates</b>	
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
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
<ul style="list-style-type: none"> <li>Ambient temperature during operation</li> </ul>	0 °C to 50 °C
<b>Relative humidity</b>	
<ul style="list-style-type: none"> <li>Relative humidity</li> </ul>	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)
<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 IEC 60068-2-6: 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 200 Hz: 9.8 m/s <sup>2</sup>
<b>Shock testing</b>	
<ul style="list-style-type: none"> <li>Shock load during operation</li> </ul>	Tested according to IEC 60068-2-27: 150 m/s <sup>2</sup> , 11 ms
<b>Operating systems</b>	
pre-installed operating system	No
without operating system	Yes
<b>Dimensions</b>	
Width	144 mm
Height	90 mm
Depth	53 mm
<b>last modified:</b>	5/31/2021 