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Show actual product details

Data sheet 6ES7647-0AA00-1YA2

SIMATIC IOT2040, 2x 10/100 MBit/s Ethernet RJ45; 1x USB2.0, 1x USB-Client; SD-CARD-Slot; DC 24V Industrial power supply



Installation type/mounting	
Design	IoT Gateway, built-in unit
Supply voltage	
Type of supply voltage	24 V
Mains buffering	
• 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
Hardware configuration	
Slots	
• free slots	1x Arduino, 1x mPCIe

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Interfaces	
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	
• Industrial Ethernet interface	2 x Ethernet (RJ45)
— 100 Mbps	Yes
— 1000 Mbps	No

Integrated Functions	
Monitoring functions	
• Temperature monitoring	No
• Watchdog	Yes
• Status LEDs	Yes
• Fan	No

EMC	
Interference immunity against discharge of static electricity	
• 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	
• 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	
• 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	±2 kV in accordance with IEC 61000-4-4, burst, length > 30 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 61000-6-4:2007 +A1:2011

Degree and class of protection	
IP (at the front)	IP20

Standards, approvals, certificates	
Approval	CE (industry), UL, cULus
CE mark	Yes

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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 load in operation	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

Dimensions

Width	144 mm
Height	90 mm
Depth	53 mm

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