SIEMENS

Data sheet

6AG4142-3BB20-1BB0

SIMATIC IPC BX-39A; Intel(R) UHD graphic onboard; 4x USB 3.2; Ethernet (10/100/1000); PCIe (optional) Intel Xeon W-11155MLE (1.8/3.1 GHz, 4C/8T); DINrail mounting; 8 GB; 1st mass storage: M.2 SSD 512 GB Eco; without 2nd mass storage: Windows 10 IoT Enterprise 2021 LTSC for Celeron Xeon W-11155MLE, Xeon W-11555MLE; with 1 x Com (RS232/485/422); USB restore stick with D&D and software image (if selected) 24 V DC industrial power supply (NAU, isolated, bridging time);

Installation type/mounting		
Mounting	DIN rail, wall mounting, portrait mounting	
Design	Box PC, built-in unit	
Supply voltage		
Type of supply voltage	24 V DC	
Mains buffering		
Mains/voltage failure stored energy time	20 ms	
Processor		
Processor type	Intel® Celeron 6600HLE (2.1 GHz, 2C/2T) Intel® Xeon W-11155MLE (1.8/3.1 GHz, 4C/8T) Intel® Xeon W-11555MLE (1.9/4.4 GHz, 6C/12T) Intel® Xeon W-11865MLE (1.5/4.5 GHz, 8C/16T)	
Chipset	Intel® RM590E	
Graphic		
Graphics controller	Intel HD graphics controller	
Drives		
Hard disk	M.2 SSD ≥ 240 GB	
SSD	Yes; ≥ 240 GB optional	
Memory		
Type of memory	DDR4-3200 SO-DIMM	
Main memory	4 / 8 / 16 / 32 GB; ECC optional	
Capacity of main memory, max.	32 Gbyte	
Data areas and their retentivity		
Retentive data area (incl. timers, counters, flags), max.	512 kbyte; 128 KB can be stored in the buffer time; optional	
Hardware configuration		
Slots		
• free slots	2x PCIe; optional: 1x PCIe (x4); 2x PCIe (x1, x4), with card retainer	
 Number of PCI slots 	2; Optional	
Number of compact flash slots	0	
Interfaces		
Number of industrial Ethernet interfaces	4; 4x Gigabit Ethernet (IE/PN)	
USB port	4x USB 3.2 Gen2	
Connection for keyboard/mouse	USB / USB	
serial interface	1x / 2x (optional) COM (RS 232 / 485 / 422; selectable)	
Video interfaces		
Graphics interface	2x DisplayPort	
Industrial Ethernet	4.9	
Industrial Ethernet interface	4x Ethernet (RJ45)	
— 100 Mbps	Yes	
— 1000 Mbps	Yes	
Interrupts/diagnostics/status information		
Bus diagnostics	Yes	
Integrated Functions		
Monitoring functions		
Temperature monitoring	Yes	
Watchdog	Yes	
Status LEDs	1x power, 3x user	
• Fan	No	
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Monitoring function via network	Optional
EMC	
Interference immunity against discharge of static electricity	
Interference immunity against discharge of static	±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC
electricity	61000-4-2
Interference immunity against high-frequency electromagnetic fields	
Interference immunity against high frequency radiation	10 V/m for 80 2 700 MHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2.7 to 6 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz to 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 61000-4-4, burst; ±2 kV acc. to IEC 61000-4-5, surge
Interference immunity on signal cables < 30m	±1 kV acc. to IEC 61000-4-4, Burst
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	IEC 61000-6-3, IEC 61000-6-4, CAN/CSA CISPR 32 Class B, FCC Class A
Degree and class of protection	
IP degree of protection	IP20
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes; UL 61010-2-201 Second Edition, File E85972
• UL 508	No
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
FCC	Yes
BSMI	No; in preperation
EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, CAN/CSA CISPR 32 Class B, EN 55032 Class B, FCC Class A, KN32
Use in hazardous areas	
ATEX Zone 2	No; in preperation
• IECEx Zone 2	No; in preperation
• cULus Class I Zone 2, Division 2	No; in preperation
Marine approval	
Germanischer Lloyd (GL)	No; in preperation
 American Bureau of Shipping (ABS) 	No; in preperation
Bureau Veritas (BV)	No; in preperation
 Det Norske Veritas (DNV) 	No; in preperation
 Korean Register of Shipping (KRS) 	No; in preperation
 Lloyds Register of Shipping (LRS) 	No; in preperation
Nippon Kaiji Kyokai (Class NK)	No; in preperation
Ambient conditions	
Ambient temperature during operation	
• min.	0 °C
• max.	55 °C
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Altitude during operation relating to sea level	
 Installation altitude above sea level, max. 	3 000 m
Relative humidity	
Relative humidity	Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% at 25 $^{\circ}$ C (no condensation), Storage: 5% to 95% at 25 $^{\circ}$ C (no condensation)
Operation, max.	85 %
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 500 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	
pre-installed operating system	Windows 10 IoT Enterprise 2021 LTSC, Industrial OS
without operating system	Yes; Optional
pre-installed operating system	
Windows 7	No
 Windows 10 Enterprise 	Yes; Windows 10 IoT Enterprise 2021 LTSC
Software	
SIMATIC Software	Optional package with SIMATIC WinCC
Mechanics/material	
Enclosure material (front)	Continuous-cast aluminum
Dimensions	
Width	262 mm
Height	139.7 mm
Depth	62.6 mm

10/26/2023

last modified: