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Data sheet 6AG4142-5BC20-1AB0

	SIMATIC IPC BX-39A; Intel(R) UHD graphic onboard; 4x USB 3.2; Ethernet (10/100/1000); PCIe (optional) Intel Xeon W-11555MLE (1.9/4.4 GHz, 6C/12T); DIN-rail mounting; 16 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; without option 1; USB restore stick with D&D and software image (if selected) 24 V DC industrial power supply (NAU, isolated, bridging time);
General information	
Product type designation	SIMATIC IPC BX-39A
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
Rated value (DC)	24 V
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® UHD Graphics 16 EUs (for Intel® Celeron® 6600HLE and Intel® Xeon® W-11155MLE) / Intel® UHD Graphics 32 EUs (for Intel® Xeon® W-11555MLE and Intel® Xeon® W-11865MLE)
Drives	
Hard disk	M.2 SSD ≥ 240 GB
SSD	Yes; ≥ 240 GB optional, RAID1 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 (DP1.4-capable): maximum 4096 × 2304 / 60 Hz / 36 bit
Industrial Ethernet	
● Industrial Ethernet interface	4x Ethernet (RJ45)
— 100 Mbps	Yes
— 1000 Mbps	Yes
Interrupts/diagnostics/status information	
Bus diagnostics	Yes
Integrated Functions	
Monitoring functions	

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● Temperature monitoring	Yes
● Watchdog	Yes
● Status LEDs	1x power, 3x user
● Fan	No
● 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 ... 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
UKCA mark	Yes
CSA approval	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 preparation
BIS	Yes
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
Marine approval	
● Germanischer Lloyd (GL)	Yes
● American Bureau of Shipping (ABS)	Yes
● Bureau Veritas (BV)	Yes
● Det Norske Veritas (DNV)	Yes
● Korean Register of Shipping (KRS)	Yes
● Lloyds Register of Shipping (LRS)	Yes
● Nippon Kaiji Kyokai (Class NK)	Yes
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: temperature 30 °C, relative humidity 85%; permissible range: 0 to 31 °C: 5 - 80%; decreasing linearly to 5 - 25% at 55 °C; storage: temperature 25 °C - 55 °C,

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	relative humidity 95%
● 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
● Windows 11	No; in preparation
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

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